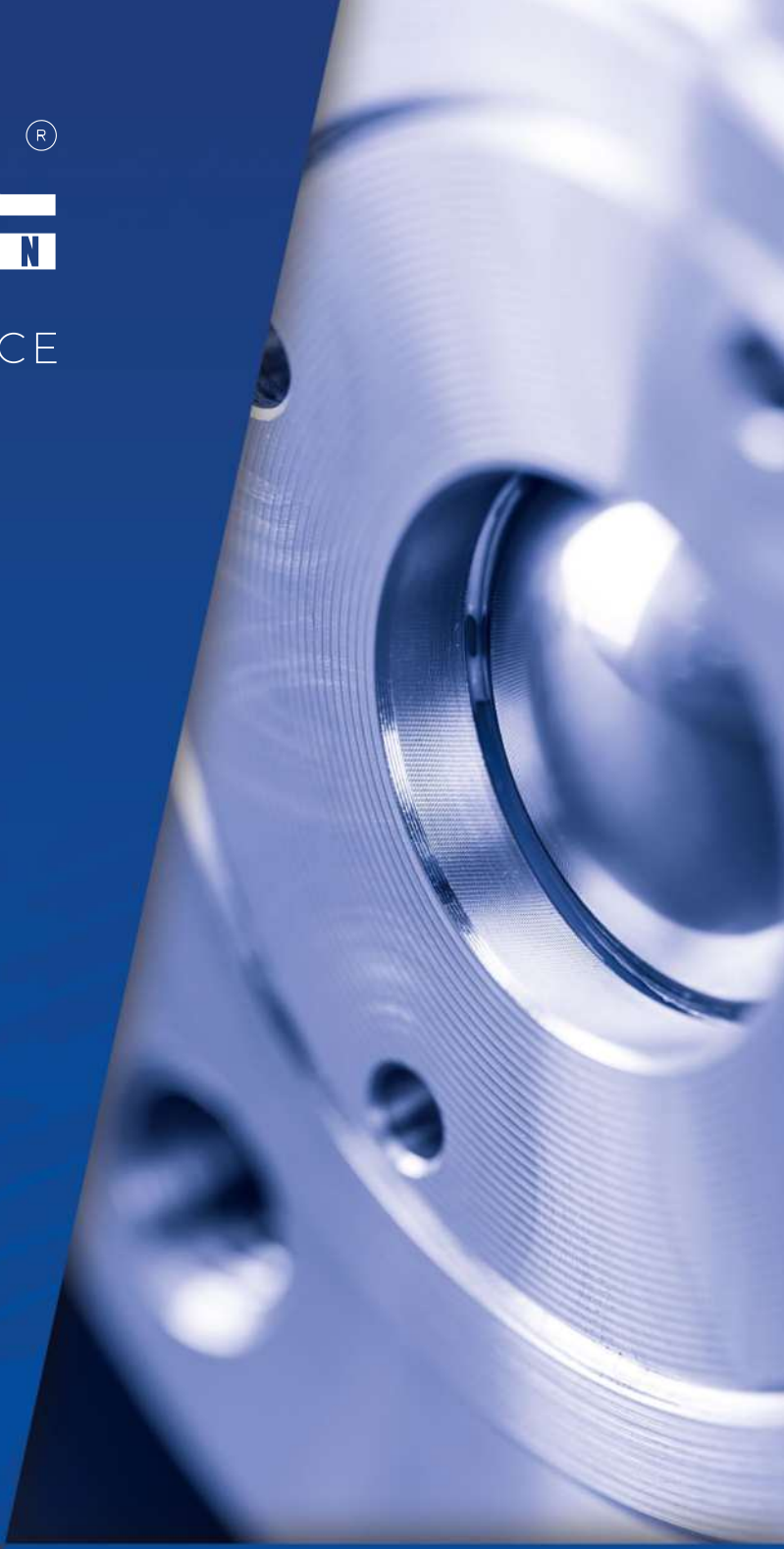
OMAL AUTOMATION

EMPOWERED PERFORMANCE

# GENERAL CATALOGUE






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I dati e le caratteristiche di questo catalogo potrebbero essere variati anche senza preavviso e, pertanto, non sono vincolanti ai fini della fornitura.
*Data and specifications here contained may be changed without notice and according to our latest improvements.*

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# VISION AND MISSION

PAS

SENSO D
SENS



SSIONE
PASSION
DEL DOVERE
E OF DUTY
RISPETTO
RESPECT



Il giusto equilibrio tra uomo e ambiente migliora la qualità della vita, garantendo un mondo migliore alle generazioni future.

Garantiamo un mondo migliore ai nostri figli.
Grazie ai nostri prodotti proteggiamo l'ambiente che ci circonda e miglioriamo concretamente la qualità della vita rendendo più sicuri ed affidabili gli impianti.

*The right balance between human and environment improves the quality of life, ensuring a better world to future generations.*

*We ensure a better world to our children.*
*Thanks to our products we take care of the environment and we improve the quality of life making safer and more reliable plants.*

PASSIONE
SENSO DEL DOVERE
RISPETTO

PASSION
SENSE OF DUTY
RESPECT

# CERTIFICAZIONI AZIENDALI
## *COMPANY CERTIFICATES*

DNV·GL

### MANAGEMENT SYSTEM CERTIFICATE

Certificato no./Certificate No.: 109786-2012-AE-ITA-ACCREDIA
Data prima emissione/Initial date: 23 gennaio 2012
Validità:/Valid: 23 gennaio 2018 - 23 gennaio 2021

Si certifica che il sistema di gestione di/This is to certify that the management system of

**OMAL S.p.A.**

Sede Legale: Via Ponte Nuovo, 11/1 - 25050 Rodengo Saiano (BS) - Italy

È conforme ai requisiti della norma per il Sistema di Gestione Ambientale/
Has been found to conform to the Environmental Management System standard:

**UNI EN ISO 14001:2015 (ISO 14001:2015)**

Valutato secondo le prescrizioni del Regolamento Tecnico RT-09/
Evaluated according to the requirements of Technical Regulations RT-09

Questa certificazione è valida per il seguente campo applicativo:

**Progettazione e produzione di attuatori pneumatici, elettrici, valvole pneumatiche coassiali ed a flusso avviato, valvole a sfera ed a farfalla manuali ed automatizzate attraverso processi di lavorazioni meccaniche, stampaggio plastica, assemblaggio, collaudo, imballaggio e spedizione**

**(Settore EA: 18)**

This certificate is valid for the following scope:

**Design and manufacturing of pneumatic actuators, electric actuators, pneumatic coaxial and angle seat valves, manual and automatized ball and butterfly valves by machining, plastic moulding, assembly, testing, packaging and shipping**

**(EA Sector: 18)**

Luogo e Data/Place and date:
**Vimercate (MB), 11 gennaio 2018**

Per l'Organismo di Certificazione/
For the Certification Body

**Zeno Beltrami**
Management Representative

La validità del presente Certificato è subordinata al rispetto delle condizioni contenute nel Contratto di Certificazione/
Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
DNV GL Business Assurance Italia S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy. TEL.039 68 99 905. www.dnvgl.it/assurance

DNV·GL

### MANAGEMENT SYSTEM CERTIFICATE

Certificate No: 236889-2017-AQ-ITA-ACCREDIA
Initial certification date: 14 July 1992
Valid: 10 June 2020 - 09 June 2023

This is to certify that the management system of

**OMAL S.p.A. - Sede Legale e Operativa**
Via Ponte Nuovo, 11/1 - 25050 Rodengo Saiano (BS) - Italy
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Quality Management System standard:
**ISO 9001:2015**

This certificate is valid for the following scope:
**Design and e production of pneumatic actuators, electric actuators, ball valves 2-way and 3-way, butterfly valves, Angle seat valves, pneumatic valves coaxial through assembly (IAF 18)**

Place and date:
**Vimercate (MB), 21 July 2020**

For the issuing office:
**DNV GL - Business Assurance**
**Via Energy Park, 14, - 20871 Vimercate (MB) - Italy**

**Zeno Beltrami**
Management Representative

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.
ACCREDITED UNIT: DNV GL Business Assurance Italia S.r.l., Via Energy Park, 14 - 20871 Vimercate (MB) - Italy. TEL:+39 68 99 905. www.dnvgl.it

DNV·GL

### GREEN HOUSE GAS INVENTORY (GHGI) VERIFICATION STATEMENT

Attestato No.: 284683-2019-E-ITA-RvA
Data prima emissione: 28 febbraio 2019
Validità: 28 febbraio 2019 - 28 febbraio 2020

DNV Business Assurance ha verificato, in conformità alla norma ISO 14064-3, che definisce specifiche e fornisce una guida per la verifica delle asserzioni riguardanti i gas a effetto serra (di seguito GHG), l'asserzione GHG emessa in data 21 Febbraio 2019 emessa da

**OMAL S.p.A.**

Via Ponte Nuovo, 11 - 25050 Rodengo-Saiano (BS) - Italia

riportati nel documento interno intitolato "Report CFO OMAL SpA_2018_Rev. 01", relativa all'inventario dei gas serra dei 2 siti del Gruppo elencati in allegato a questa dichiarazione.

DNV GL afferma che gli indicatori di gas serra riportati nel documento di cui sopra forniscono una rappresentazione affidabile ed equilibrata dell'inventario dei gas serra entro i confini di seguito definiti e calcolati in conformità con lo standard aziendale "Report CFO OMAL SpA_2018_Rev. 01", con i risultati seguenti (valori arrotondati al kg):

| EMISSIONI GHG 2018 | t CO2-eq | | | | | | |
|---|---|---|---|---|---|---|---|
| TOTALI | $CO_2$ | $CH_4$ | $N_2O$ | HFC | PFC | $SF_6$ | TOT. GHG |
| 1. TOTALE EMISSIONI DIRETTE ( SCOPE 1) | 189,11 | 2,13 | 0,64 | 0,00 | 0,00 | 0,00 | 191,88 |
| 1.1 DA COMBUSTIONE | 125,68 | 1,15 | 0,00 | 0,00 | 0,00 | 0,00 | 126,83 |
| 1.2 DA MACCHINE AZIENDALI E MOV. INTERNA | 63,43 | 0,98 | 0,64 | 0,00 | 0,00 | 0,00 | 65,03 |
| 2. EMISSIONI INDIRETTE ENERGETICHE (SCOPE 2) | 217,94 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 217,94 |
| 2.1 DA CONSUMO DI ENERGIA ELETTRICA | 217,94 | N.D. | N.D. | N.D. | N.D. | N.D. | 217,94 |
| 3. TOTALE ALTRE EMISSIONI INDIRETTE ( SCOPE 3) | 10028,61 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 10028,61 |
| 3.1 PERDITE E TRASFORMAZIONE ENERGIA ELETTRICA | 15,51 | N.D. | N.D. | N.D. | N.D. | N.D. | 15,51 |
| 3.2 PRODUZIONE COMBUSTIBILI | 51,00 | N.D. | N.D. | N.D. | N.D. | N.D. | 51,00 |
| 3.3 PRODUZIONE E TRASPORTO ACCIAIO | 3137,95 | N.D. | N.D. | N.D. | N.D. | N.D. | 3137,95 |
| 3.4 PRODUZIONE E TRASPORTO ALLUMINIO | 1100,99 | N.D. | N.D. | N.D. | N.D. | N.D. | 1100,99 |
| 3.6 PRODUZIONE E TRASPORTO BRONZO | 93,14 | N.D. | N.D. | N.D. | N.D. | N.D. | 93,14 |
| 3.7 PRODUZIONE E TRASPORTO OTTONE | 5101,08 | N.D. | N.D. | N.D. | N.D. | N.D. | 5101,08 |
| 3.8 PRODUZIONE E TRASPORTO PLASTICA | 185,04 | N.D. | N.D. | N.D. | N.D. | N.D. | 185,04 |
| 3.9 PRODUZIONE E TRASPORTO MATERIALI PER IMBALLAGGIO | 94,61 | N.D. | N.D. | N.D. | N.D. | N.D. | 94,61 |
| 3.10 PRODUZIONE E TRASPORTO MATERIALI AUSILIARI | 9,91 | N.D. | N.D. | N.D. | N.D. | N.D. | 9,91 |
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| 3.12 TRATTAMENTO DEI RIFIUTI E LORO CONFERIMENTO AI CER | 26,72 | N.D. | N.D. | N.D. | N.D. | N.D. | 26,72 |
| 3.13 DISTRIBUZIONE SU GOMMA DEI PRODOTTI FINITI | 147,58 | N.D. | N.D. | N.D. | N.D. | N.D. | 147,58 |
| 3.14 DISTRIBUZIONE VIA NAVE DEI PRODOTTI FINITI | 12,73 | N.D. | N.D. | N.D. | N.D. | N.D. | 12,73 |
| 3.15 FINE VITA DEGLI IMBALLAGGI DEI PRODOTTI DISTRIBUITI | 49,18 | N.D. | N.D. | N.D. | N.D. | N.D. | 49,18 |
| EMISSIONI GHG TOTALI | 10405,66 | 2,13 | 0,64 | 0,00 | 0,00 | 0,00 | 10438,43 |

Luogo e Data:
**Vimercate (MB), 28 febbraio 2019**

Per l'Organismo di Certificazione

**Zeno Beltrami**
Management Representative

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

TÜV SÜD Industrie Service

### CERTIFICATE

**TÜV SÜD-DG-0364.2016.002**

Manufacturer: **OMAL S.p.A.**
**Via Ponte Nuovo 11**
**IT – 25050 Rodengo Saiano (BS)**

Plant(s): **Via Ponte Nuovo 11**
**IT – 25050 Rodengo Saiano (BS)**
**Via Brognolo 12**
**I - 25050 Passirano (BS)**

Inspection according: **AD 2000-Merkblatt HP 0 / A4**

The company

- has facilities permitting manufacturing and inspection in compliance with the current technical standards,
- operates a quality system which guarantees that manufacturing and inspection of the products stated in our report are in conformity with the technical rules and standards,
- employs qualified supervisory and inspection personnel.

The company has the welding suitability for manufacturing pressure equipment according above mentioned standards.
Independently of this certificate the requirements of the respectively selected module have to be considered within the framework of manufacturing pressure equipment according to Pressure Equipment Directive 2014/68/EU.

Report no.: R-722206448-19

Valid until: September 2022

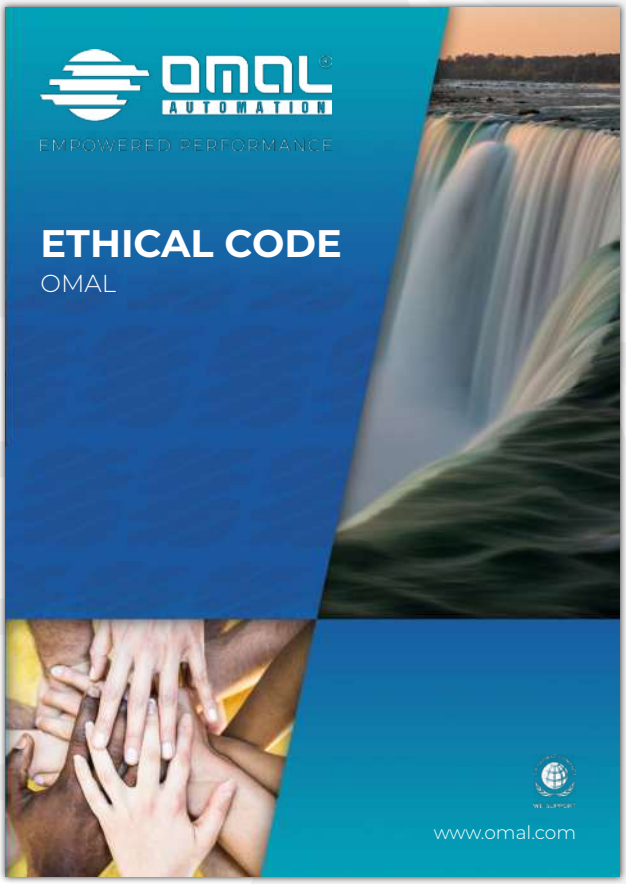
Munich, November 26, 2019

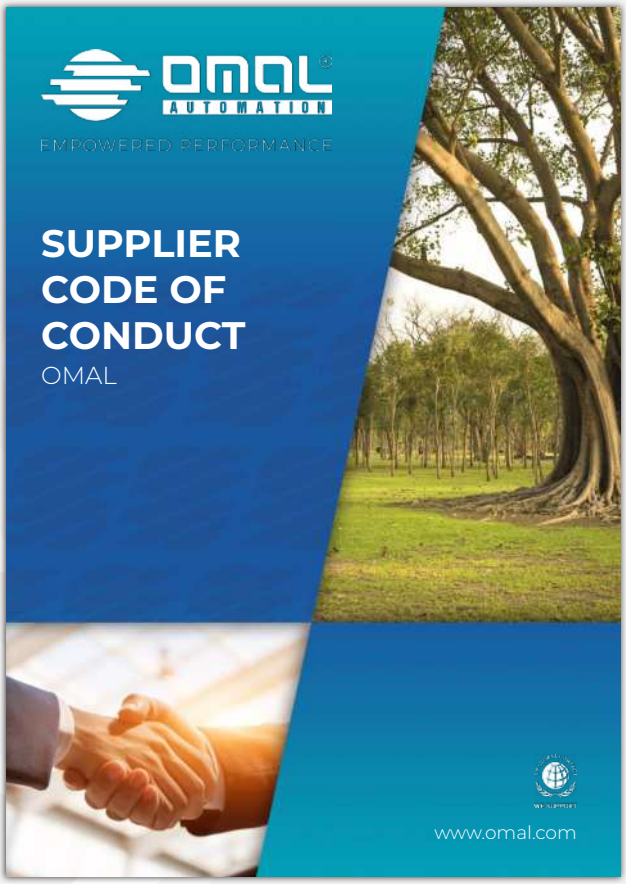
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Material and Welding Technology
Klaus Schlotterer

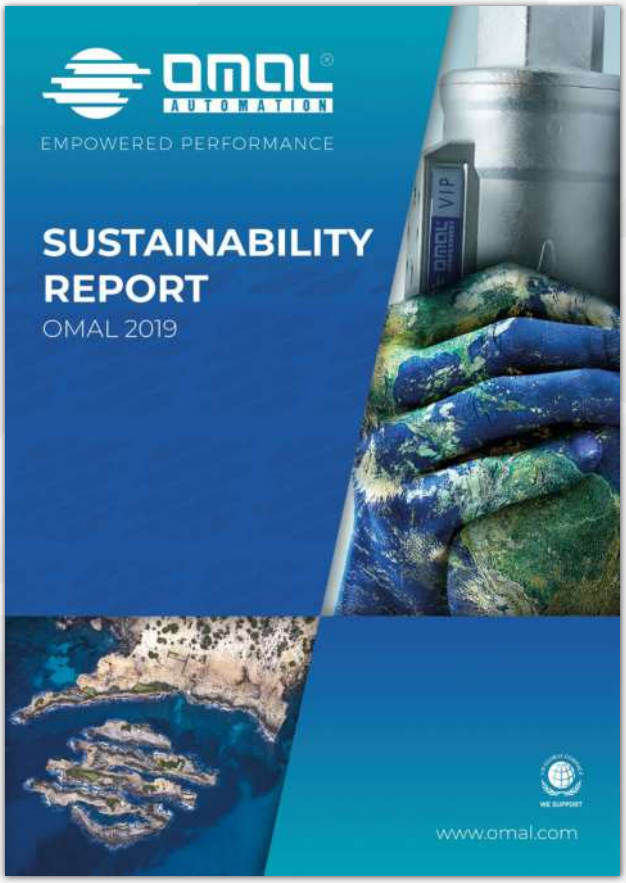
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TÜV SÜD Industrie Service GmbH, Westendstr. 199, 80686 Munich, Germany

# RESPONSABILITÀ SOCIALE
## *SOCIAL RESPONSIBILITY*




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AGCM Autorità Garante della Concorrenza e del Mercato
Rating di legalità ★★+

THE PROCUREMENT AWARD PRIZE WINNER 2017
Sustainable & Ethical Procurement Category

THE PROCUREMENT AWARD PRIZE WINNER 2017
Cross-Function & Team Procurement Category





1.

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# *BALL VALVES*

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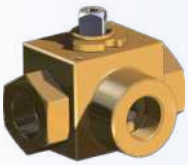
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1.1

# MAGNUM & THOR

# TABELLA DI CODIFICA PER MAGNUM E THOR
# *CODIFICATION TABLE FOR MAGNUM AND THOR*

## 1° blocco: Tipologia della valvola *1st part: Valve's type*

| V | M1 | 04 | F | 00 |
|---|---|---|---|---|
| 1° | 2°-3° | 4°-5° | 6° | 7°-8° |

### 1° CIFRA: Tipo di azionamento
### *1° FIGURE: Drive Type*

| | |
|---|---|
| **D** | Doppio effetto anodizzato *Double acting, anodized* |
| **E** | Elettrico ON-OFF *Electrical ON-OFF* |
| **F** | Doppio effetto verniciato *Double acting, painting* |
| **G** | Doppio effetto nichelato *Double acting, nickel plated* |
| **I** | Doppio effetto inox *Inox double acting* |
| **K** | Con Leva ( INOX ) *With lever ( INOX )* |
| **L** | Con Leva ( std ) *With lever ( std )* |
| **M** | Elettrico modulante *Electrical modulating* |
| **R** | Con riduttore *With gear box* |
| **S** | Semplice effetto anodizzato *Spring return, anodized* |
| **T** | Semplice effetto verniciato *Spring return, painting* |
| **U** | Semplice effetto nichelato *Spring return, nickel plated* |
| **V** | Valvola asse libero *Free shaft valve* |
| **X** | Semplice effetto inox *Inox spring return* |

### 2°e 3° CIFRA: Famiglia di appartenenza
### *2°& 3° FIGURE: Valve's family*

| | |
|---|---|
| **M1** | SERIE WAFER |
| **M4** | SERIE SPLIT WAFER |
| **M5** | SERIE SPLIT WAFER TRE VIE "L" *SPLIT WAFER 3 WAY "L" PORT* |
| **M6** | SERIE SPLIT WAFER TRE VIE "T" *SPLIT WAFER 3 WAY "T" PORT* |
| **T1** | SERIE SPLIT BODY |
| **T2** | SERIE SPLIT BODY TRE VIE "L" *SPLIT BODY 3 WAY "L" PORT* |
| **T3** | SERIE SPLIT BODY TRE VIE "T" *SPLIT BODY 3 WAY "T" PORT* |

### 4° e 5° CIFRA Misura della valvola
### *4° & 5° FIGURE: Valve's size*

| | | | |
|---|---|---|---|
| **04** | DN 15 | **35** | DN 20Passaggio ridotto *Reduced bore* |
| **05** | DN 20 | **36** | DN 25Passaggio ridotto *Reduced bore* |
| **06** | DN 25 | **37** | DN 32 Passaggio ridotto *Reduced bore* |
| **07** | DN 32 | **38** | DN 40 Passaggio ridotto *Reduced bore* |
| **08** | DN 40 | **39** | DN 50 Passaggio ridotto *Reduced bore* |
| **09** | DN 50 | **40** | DN 65 Passaggio ridotto *Reduced bore* |
| **10** | DN 65 | **41** | DN 80 Passaggio ridotto *Reduced bore* |
| **11** | DN 80 | **42** | DN 100 Passaggio ridotto *Reduced bore* |
| **12** | DN 100 | **43** | DN 125 Passaggio ridotto *Reduced bore* |
| **13** | DN 125 | **44** | DN 150 Passaggio ridotto *Reduced bore* |
| **14** | DN 150 | **45** | DN 200 Passaggio ridotto *Reduced bore* |
| **15** | DN 200 | **46** | DN 250 Passaggio ridotto *Reduced bore* |
| | | **74** | DN150x100 Doppio passaggio ridotto *Double reduced bore* |

### 6° CIFRA: Pressione nominale
### *6° FIGURE: Nominal pressure*

| | | | |
|---|---|---|---|
| **E** | PN 16 | **N** | PN63-100 |
| **F** | PN 16-40 | **S** | PN16-40 Sfera non contenuta *Protuding ball* |
| **H** | PN 25 | **1** | ANSI 150 |
| **I** | PN 25-40 | **2** | ANSI 300 |
| **J** | PN 40 | **4** | ANSI 600 |
| **K** | PN 63 | **5** | ANSI 900 |
| **L** | PN 100 | **9** | ANSI 900-1500 |

### 7° e 8° CIFRA: Normative attacchi
### *7° & 8° FIGURE: Connecting norms*

| | |
|---|---|
| **00** | EN 1092-1 TYPE B1 (STD) PN METRICO *EN 1092-1 TYPE B1 (STD) PN METRIC* |
| **01** | ANSI filettate unc *Threaded UNC ANSI* |
| **02** | ANSI filettate metriche *Metric threaded ANSI* |
| **03** | Fori passanti *Throught holes* |
| **04** | ANSI fori passanti *Passing throught holes ANSI* |
| **05** | ANSI fori passanti *ANSI throught holes* RTJ ASME B16,5 |
| **06** | Flangiatura fondo reattore con tiranti UNC<br>*Flange bottom tank with UNC stud bolt* |
| **07** | Finitura flangia *Flange finish RF 125 AARH* |
| **08** | Flangiatura fondo reattore con tiranti metrici<br>*Flange bottom tank with metric stud bolt* |
| **09** | Finitura flangia *Flange finish FORM "C" DIN 2526* |
| **0A** | EN1092-1 TYPE A |
| **0B** | EN1092-1 TYPE B2 |
| **0C** | EN1092-1 TYPE C |
| **0D** | EN1092-1 TYPE D |
| **0E** | EN1092-1 TYPE E |
| **0F** | EN1092-1 TYPE F |
| **0G** | EN1092-1 TYPE G |
| **0H** | EN1092-1 TYPE H |
| **N6** | Finitura flangia N6 (fori passanti Split Body, UNC Split Wafer)<br>*Flange finish N6 (throught holes Split Body, UNC Split Wafer)* |

7° cifra: per valvole certificate EN14432, inserire la lettere "T"
*7° figure: for valves certified EN14432, enter the letters "T"*

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# 2° blocco: Materiali ferrosi *2nd part: Metallic parts*

| CA | B | 0 | B | 0 |
|---|---|---|---|---|
| 9°-10° | 11° | 12° | 13° | 14° |

| 9° -10° CIFRA: Materiale del corpo valvole<br>*9° & 10° FIGURE: Body material* | |
|---|---|
| **AA** | A182 F304 / A479 Tp.304 |
| **AB** | A182 F316 / A479 Tp.316 |
| **AC** | A182 F304L / A479 Tp.304L |
| **AD** | A182 F316L / A479 Tp.316L |
| **AE** | A351 CF8M |
| **AF** | A351 CF8 |
| **AG** | A351 CF3M |
| **AI** | DUPLEX |
| **AO** | A182 F321 / A479 Tp.321 |
| **AP** | A182 F321 |
| **AQ** | A182 F316L |
| **AS** | A182 F316 |
| **CA** | A105 |
| **CB** | A350 LF2 |
| **CC** | A216 WCB |
| **IA** | INCOLOY 825 |
| **IB** | INCONEL 718 |
| **IC** | INCONEL 625 |

| 11° CIFRA: Materiale della sfera<br>*11° FIGURE: Ball material* | |
|---|---|
| **A** | A351 CF8M |
| **B** | A351 CF8 |
| **C** | A182 F316L / A479 Tp.316L |
| **D** | DUPLEX |
| **E** | A182 F316 / A479 Tp.316 |
| **F** | Forata monodirezionale *Drilled monodirectional* A351 CF8 |
| **G** | Forata monodirezionale *Drilled monodirectional* A351 CF8M |
| **H** | A105 |
| **I** | A479 Tp.321 |
| **M** | INCOLOY 825 |
| **N** | Forata monodirezionale *Drilled monodirectional* A182 F316 / A479 Tp.316 |
| **P** | INCONEL 625 |

| 12° CIFRA: Trattamenti della sfera<br>*12° FIGURE: Ball surface treatments* | |
|---|---|
| **0** | Nessun trattamento *No treatment* |
| **A** | Nichelatura *Nickeled* ENP 25 micron |
| **B** | Nichelatura *Nickeled* ENP 50 micron |
| **C** | Nichelatura *Nickeled* ENP 75 micron |

| 13° CIFRA: Materiale dello stelo<br>*13°FIGURE: Stem material* | |
|---|---|
| **A** | 17-4PH |
| **B** | F6A / 410 |
| **C** | DUPLEX |
| **D** | 17-4PH NACE |
| **E** | A479 Tp.316 |
| **F** | 17-4PH con dado +rondella inox *17-4PH with nut + inox washer* |
| **G** | A479 Tp.321 |
| **I** | INCONEL 718 |
| **L** | INCONEL 625 |

| 14° CIFRA: Materiale della viteria<br>*14° FIGURE: Bolting material codification* | |
|---|---|
| **0** | Nessuna vite *No screw* (WAFER) |
| **A** | A2-70 (SPLIT WAFER) |
| **B** | 8.8 zincate *galvanized* (SPLIT WAFER) |
| **D** | A193-B8 vite *screw* (SPLIT BODY) |
| **E** | A193-B8 / A194-GR.8 tirante+dado *bolt+nut* (SPLIT BODY) |
| **F** | A193-B7 vite *screw* (SPLIT BODY) |
| **G** | A193-B7 / A194-2H tirante+dado *bolt+nut* (SPLIT BODY) |
| **H** | A320-L7M vite *screw* (SPLIT BODY) |
| **I** | A320-L7M / A194-GR7M tirante+dado *bolt+nut* (SPLIT BODY) |
| **L** | A320-B8MA / A194-GR8MA (SPLIT BODY) |
| **M** | A193-B7M / A194-2HM (SPLIT BODY) |
| **N** | A320-B8MA (SPLIT BODY) |
| **P** | A193-B7M (SPLIT BODY) |

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# 3° blocco: Materiali delle tenute *3rd part: Seat materials*

| N | N | V |
|---|---|---|
| 15° | 16° | 17° |

| 15° CIFRA: Materiale della tenuta principale<br>*15° FIGURE: Seat material* | |
|---|---|
| **E** | PEEK SFERA + GRAFITE CORPO *PEEK BALL + GRAFITE BODY* |
| **J** | PTFE +15% Vetro *PTFE +15% Glass* |
| **K** | PTFE +25% C(SFERA)+GRAFITE (CORPO) *PTFE +25% C(BALL)+GRAFITE (BODY)* |
| **M** | DEVLON (SFERA) + GRAFITE (CORPO) *DEVLON(BALL)+GRAFITE (BODY)* |
| **N** | TFM1600 |
| **Q** | TFM1600 (SFERA) + GRAFITE (CORPO) *TFM1600 (BALL) + GRAFITE (BODY)* |
| **X** | TFM1600 PER XILENE (SFERA) + GRAFITE (CORPO)<br>*TFM1600 FOR XILENE (BALL) + GRAFITE (BODY)* |

| 16° CIFRA: Materiale della tenuta stelo<br>*16° FIGURE: Stem seal material* | |
|---|---|
| **N** | TFM1600 |
| **R** | TFM (pacco a V)+DEVLON (anello) *TFM (V pack)+DEVLON (ring)* |

| 17° CIFRA: Materiale O-ring stelo<br>*17° FIGURE: O-ring stem material* | |
|---|---|
| **A** | FKM 90Sh. AED |
| **F** | AFLAS |
| **H** | ELAST-O-LION 101 |
| **K** | KAFLON |
| **V** | FKM |

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# 4° blocco: Trattamenti *4th part: Surface treatments*

| 0 | 0B |
|---|---|
| 18° | 19°-20° |

| 18° CIFRA: Trattamento principale<br>*18° FIGURE: Standard surface treatment* | |
|---|---|
| **0** | Nessuna verniciatura *Without paint* |
| **C** | Camicia in acciaio Inox 304 *Steel jacket Steel 304* |
| **D** | Camicia in acciaio Inox 316 *Steel jacket Steel 316* |
| **E** | Camicia in acciaio al carbonio A105 *Steel jacket Carbon A105* |
| **X** | Valvola sgrassata *Degrased valve* |

| 19°-20° CIFRA: Tipologia del trattamento<br>*19°-20° FIGURE: Surface treatment type* | |
|---|---|
| **00** | Nessuna verniciatura *Without paint* |
| **0B** | Brunito *Blueing* |
| **0Z** | Zincato *Galvanized* |

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# 5° blocco: Versione azionamenti ATTUATORI PNEUMATICI
## *5th part: PNEUMATIC ACTUATORS drives version*

| A | A | B | A | 0 |
|---|---|---|---|---|
| 21° | 22° | 23° | 24° | 25° |

### 21° CIFRA: Kit di connessione con l'azionamento
### *21° FIGURES: Bracket connection drives*

| | |
|---|---|
| **A** | Acciaio verniciatura STD *Steel with standard painting* |
| **B** | Acciaio verniciatura HT *Steel with high temperature painting* |
| **C** | Inox std |
| **D** | Inox HT |
| **G** | Prolunga inox doppia tenuta *Stainless steel shaft extension with double seal* |
| **L** | Valvola con leva lucchettabile *Valve with locking lever* |
| **N** | Valvola con leva "dead man" *Valve with "dead man" lever* |
| **P** | Prolunga Inox 304 *Extension - Steel 304* |
| **Q** | Prolunga Inox con sniffer *Steel extension with sniffer* |

### 22° CIFRA: Famiglia di azionamento
### *22° FIGURE: Actuators group*

| | |
|---|---|
| **E** | Serie con volantino **VERSIONE NEW**<br>*Handwheel series **NEW VERSION*** |
| **F** | DIN ISO 5211 **VERSIONE NEW**<br>*DIN ISO 5211 **NEW VERSION*** |
| **G** | DIN ISO 5211 con riduttore standard **VERSIONE NEW**<br>*DIN ISO 5211 with standard gear box **NEW VERSION*** |
| **H** | Inox microfuso<br>*Inox precision casting* |
| **I** | Inox microfuso con riduttore<br>*Inox precision casting with gear box* |
| **K** | Inox microfuso pistone rovesciato<br>*Inox precision casting - reversed piston* |
| **V** | Serie con volantino **VERSIONE NEW - PISTONI ROVESCIATI**<br>*Handwheel series **NEW VERSION - REVERSED PISTONS*** |
| **W** | DIN ISO 5211 pistoni rovesciati **VERSIONE NEW**<br>*DIN ISO 5211 reversed piston **NEW VERSION*** |
| **X** | DIN ISO 5211 pistoni rovesciati + riduttore **VERSIONE NEW**<br>*DIN ISO 5211 reversed piston + gear box **NEW VERSION*** |
| **Y** | Esecuzione speciale<br>*Special execution* |

### 25° CIFRA: Altre esecuzioni speciali dell'azionamento
### *25° FIGURE: Actuator in special stroke executions*

| | |
|---|---|
| **0** | Nessuna opzione *No options* |
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **A** | Regolazione 10° *10° adjustment* |
| **B** | Regolazione 30° *30° adjustment* |
| **C** | Regolazione 60° *60° adjustment* |
| **D** | Regolazione 90° *90° adjustment* |
| **M** | STD a magazzino *STD in warehouse* |
| **J** | Dosatore *Two stage connector* |

### 24° CIFRA: Esecuzioni particolari dell'azionamento
### *24° FIGURE: Special executions drives*

| | |
|---|---|
| **A** | Esecuzione di serie *Standard executions* |
| **H** | Alta temperatura *High temperature* |
| **L** | Bassa temperatura *Low temperature* |
| **M** | Molle *Springs* 2,8 BAR (40 PSI) |
| **N** | Molle *Springs* 3,5 BAR (50 PSI) |
| **P** | Molle *Springs* 4,2 BAR (60 PSI) |
| **R** | Molle *Springs* 2,8 BAR (40 PSI) Alta temp. *High temp* |
| **S** | Molle *Springs* 3,5 BAR (50 PSI) Alta temp. *High temp* |
| **T** | Molle *Springs* 4,2 BAR (60 PSI) Alta temp. *High temp* |
| **V** | Molle *Springs* 2,8 BAR (40 PSI) Bassa temp *Low temp* |
| **W** | Molle *Springs* 3,5 BAR (50 PSI) Bassa temp *Low temp* |
| **X** | Molle *Springs* 4,2 BAR (60 PSI) Bassa temp *Low temp* |

### 23° CIFRA: Taglia di azionamento
### 23° FIGURES: Actuator size

| | |
|---|---|
| **A** | DA 08 |
| **B** | DN 32 - DAN15 |
| **C** | DN 40 - DAN30-SRN15 |
| **D** | DN 45 - DAN45 |
| **E** | DN 50 - DAN60-SRN30 |
| **G** | DN 60 - DAN106-SRN53 |
| **H** | DN 63 - DAN120-SRN60 |
| **I** | DN 72 - DAN180-SRN90 |
| **J** | DN 80 - DAN240-SRN120 |
| **K** | DN 90 - DAN360-SRN180 |
| **L** | DN 100 - DAN480-SRN240 |
| **M** | DN 115 - DAN720-SRN360 |
| **N** | DN 125 - DAN960-SRN480 |
| **Q** | DN 145 - DAN1440-SRN720 |
| **R** | DN 160 - DAN1920-SRN960 |
| **S** | DN 240 - DAN2880-SRN1440 |
| **V** | DN 208 - DA3840-SR1920 |
| **W** | DN 240 - DA5760-SR2880 |
| **X** | DN 290 - DA8000-SR4000 |

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# 5° blocco: Versione azionamenti ATTUATORI ELETTRICI
## *5th part: ELECTRIC ACTUATORS drives version*

| A | M | E | G | 0 |
|---|---|---|---|---|
| 21° | 22° | 23° | 24° | 25° |

**21° CIFRA: Kit di connessione con l'azionamento**
***21° FIGURES: Bracket connection drives***

| | |
|---|---|
| **A** | Acciaio verniciatura std *Steel with standard painting* |
| **B** | Acciaio verniciatura HT *Steel with high temperature painting* |
| **C** | Inox std |
| **D** | Inox HT |
| **G** | Prolunga inox doppia tenuta *Stainless steel shaft extension with double seal* |
| **L** | Valvola con leva lucchettabile *Valve with locking lever* |
| **N** | Valvola con leva "dead man" *Valve with "dead man" lever* |
| **P** | Prolunga Inox 304 *Extension - Steel 304* |
| **Q** | Prolunga Inox con sniffer *Steel extension with sniffer* |

**22° CIFRA: Tensione di alimentazione**
***22° FIGURE: Voltage drive***

| | |
|---|---|
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **B** | 24 V continua |
| **J** | 24 V monofase |
| **L** | 115 V monofase |
| **M** | 230 V monofase |
| **Y** | Esecuzione speciale *Special execution* |

**25° CIFRA: Altre esecuzioni speciali dell'azionamento**
***25° FIGURE: Actuator in special stroke executions***

| | |
|---|---|
| **0** | Nessuna opzione *No option* |
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **B** | Connettori a vite (V0) *Electrical connection by screw (V0)* |
| **C** | Precablati *Prewired* 2mt (C2) |
| **D** | Precablati *Prewired* 4mt (C4) |
| **E** | Precablati *Prewired* 8mt (C8) |
| **F** | Connettori a pipa (P0) *Pipe connections (P0)* |

**24° CIFRA: Esecuzioni particolari dell'azionamento**
***24° FIGURES: Special executions drives***

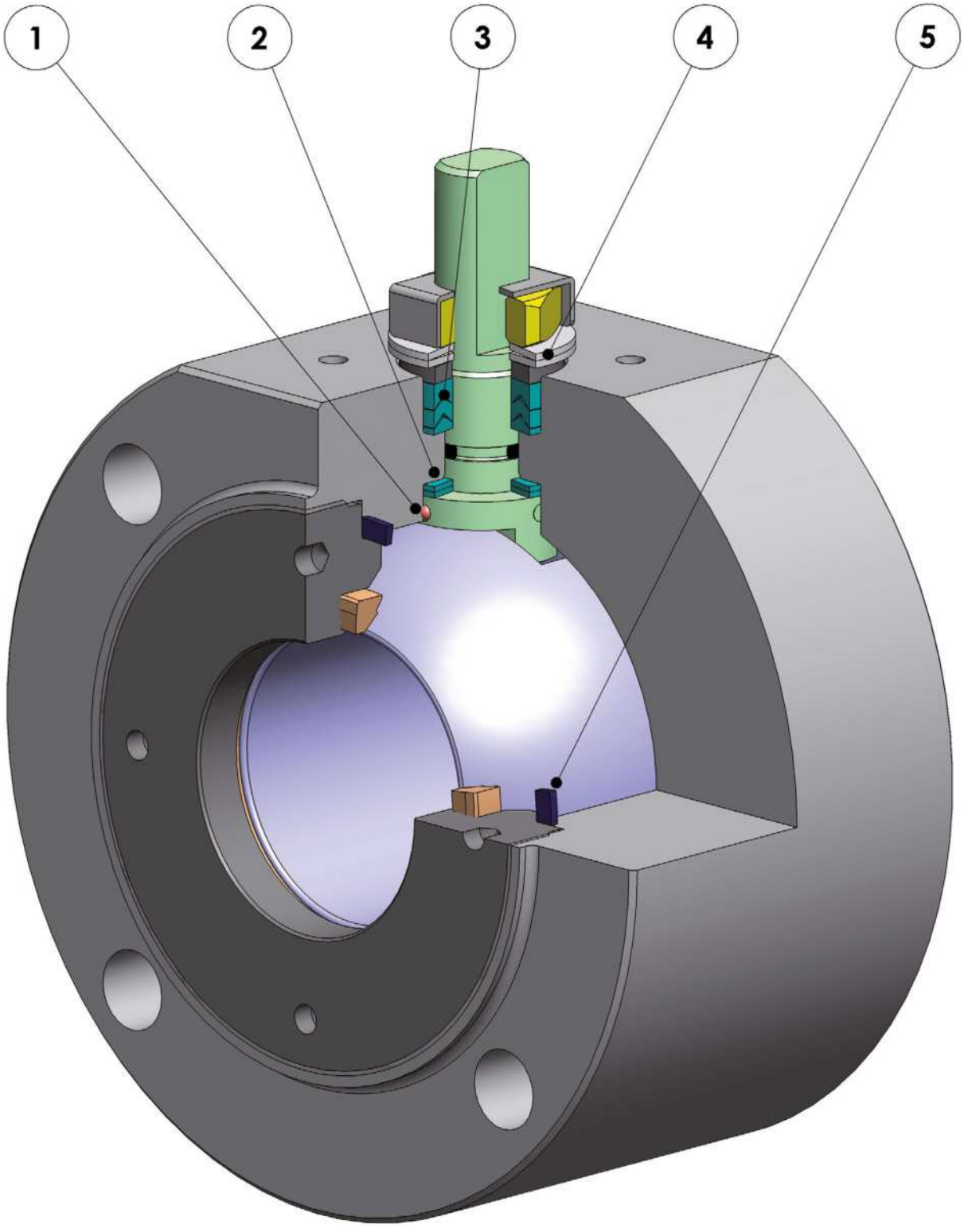
| | |
|---|---|
| **A** | STD linea AE *AE line* |
| **B** | STD linea AE con riduttore *AE line with gear box* |
| **C** | STD linea AE+*Kit alta temp. AE line+bracket for high temp.* |
| **G** | STD linea EA *EA line* |
| **H** | STD linea EA + riduttore *EA line with gear box* |
| **I** | STD linea EA+Kit alta temp. *EA line+bracket for high temp.* |
| **K** | STD linea EA IP67 *line EA IP67* |
| **L** | *STD* linea EA+riduttore IP67 *EA line with gear box IP67* |
| **M** | *STD* linea EA + Kit alta temp. IP67 *EA line bracket for high temp. IP67* |

**23° CIFRA: Coppia di azionamento in Nm**
***23° FIGURES: Torque drive***

| | |
|---|---|
| **B** | 10 Nm |
| **C** | 20 Nm |
| **D** | 40 Nm |
| **E** | 35 Nm |
| **F** | 50 Nm |
| **G** | 70 Nm |
| **H** | 100 Nm |
| **I** | 130 Nm |
| **K** | 240 Nm |
| **L** | 200 Nm |
| **N** | 400 Nm |
| **P** | 500 Nm |
| **R** | 600 Nm |
| **T** | 1000 Nm |
| **V** | 1500 Nm |
| **X** | 2000 Nm |

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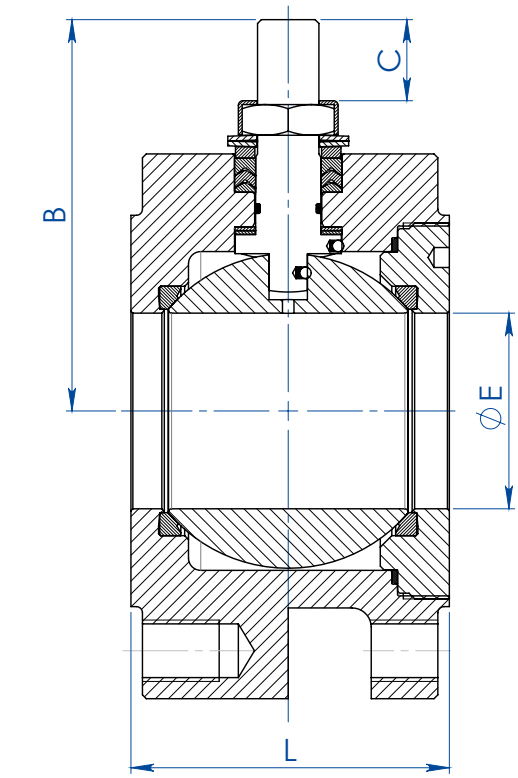
# MAGNUM WAFER

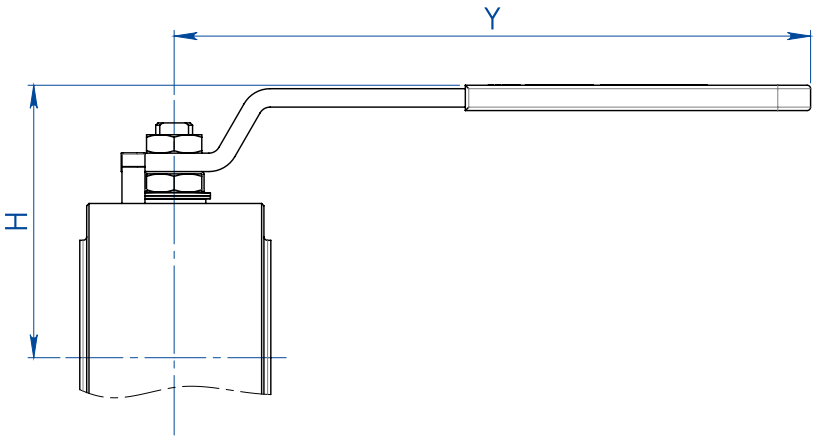


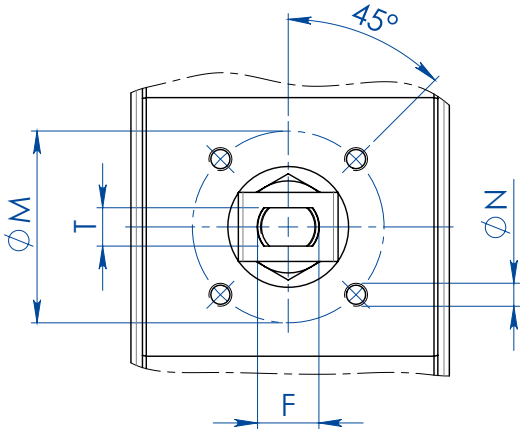
## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device (electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Breakaway Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "V" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite verso l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizioni tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less breakaway torque* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato PED<br>PED Certificate | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

# **MAGNUM WAFER** PN 16-40 ANSI 150-300



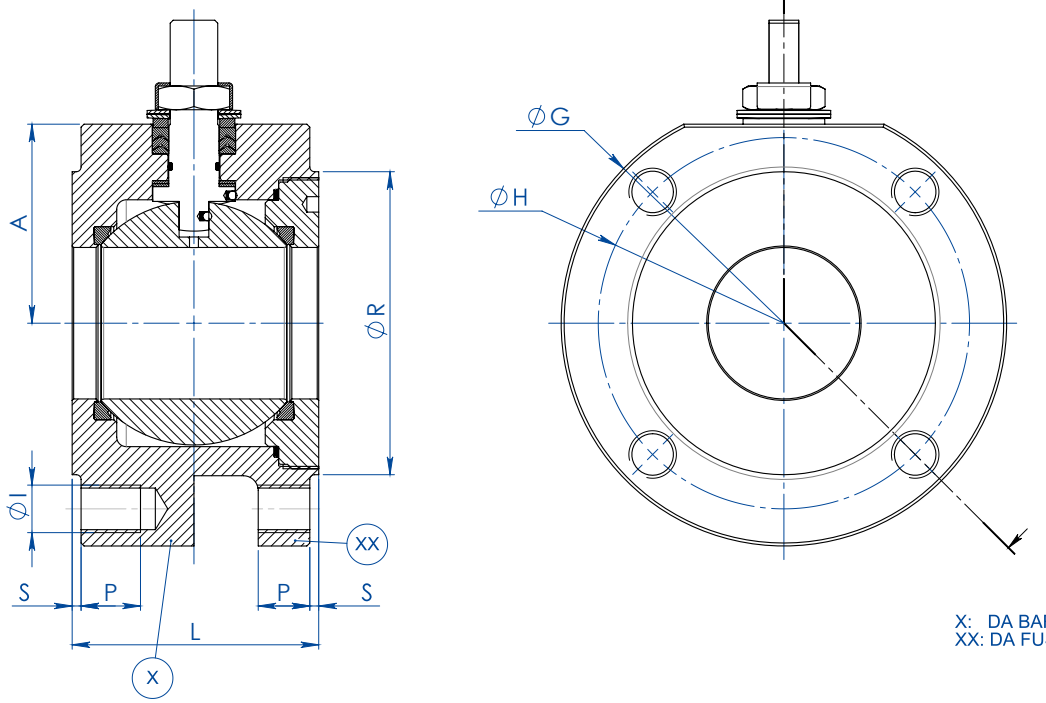




| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ØE** | **L** | **B** | **C** | **ATT.ISO** | **ØM** | **ØN** | **F/T** | **H** | **Y** | **KIT LEVA** *LEVER KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | |
| DN 15 | 1/2" | 13 | 36 | 52 | 10 | F03 | 36 | M5 | 10/6 | 71 | 140 | KLV58004 |
| DN 20 | 3/4" | 19 | 39 | 55 | 10 | F03 | 36 | M5 | 10/6 | 73 | 140 | KLV58004 |
| DN 25 | 1" | 25 | 43 | 68 | 15 | F04 | 42 | M5 | 12/8 | 87 | 150 | KLV58006 |
| DN 32 | 1" 1/4 | 32 | 51 o 54 | 73 | 15 | F04 | 42 | M5 | 12/8 | 91 | 150 | KLV58006 |
| DN 40 | 1" 1/2 | 38 | 63 | 93 | 21 | F05 | 50 | M6 | 16/10 | 108 | 275 | KLV58008 |
| DN 50 | 2" | 51 | 83 | 102 | 21 | F05 | 50 | M6 | 16/10 | 118 | 275 | KLV58008 |
| DN 65 | 2" 1/2 | 64 | 107 | 130,5 | 28 | F07 | 70 | M8 | 22/14 | 143 | 350 | KLV58010 |
| DN 80 | 3" | 76 | 120 | 137,5 | 28 | F07 | 70 | M8 | 22/14 | 150 | 350 | KLV58010 |
| DN 100 | 4" | 95 | 152 | 166 | 35 | F10 | 102 | M10 | 30/18 | 192 | 450 | KLV58012 |

TUTTE LE VALVOLE SONO A SFERA CONTENUTA TRANNE LA DN32 CON FACE TO FACE 51 mm
*ALL VALVES HAVE NO PROTUDING BALL EXCEPT DN32 (FACE TO FACE 51 mm)*

# MAGNUM WAFER PN 16-40 ANSI 150-300




X: DA BARRA (BAR STOCK EXECUTION)
XX: DA FUSIONE (CASTING EXECUTION)

## DIMENSIONI *DIMENSIONS* -PN-

| MISURA *SIZE* DN [mm] | [inch] | PN | A | ØG | ØR | S | ØH | N° FORI *HOLES N°* | ØI | P | L | Kg. (X) | Kg. (XX) | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16-40 | 32 | 90 | 45 | 1 | 65 | 4 | M12 | 14 | 36 | 1,4 | - | KGBV480040 |
| DN 20 | 3/4" | PN 16-40 | 35 | 100 | 58 | 2 | 75 | 4 | M12 | 14 | 39 | 1,8 | - | KGBV480050 |
| DN 25 | 1" | PN 16-40 | 42 | 110 | 68 | 2 | 85 | 4 | M12 | 16 | 43 | 2,5 | - | KGBV480060 |
| DN 32 | 1" 1/4 | PN 16-40 | 47 | 130 | 78 | 2 | 100 | 4 | M16 | 20 | 51* | 4,0 | - | KGBV480070 |
| DN 32 | 1" 1/4 | PN 16-40 | 47 | 130 | 78 | 2 | 100 | 4 | M16 | 20 | 54 | 4,3 | - | KGBV480070 |
| DN 40 | 1" 1/2 | PN 16-40 | 58 | 140 | 88 | 3 | 110 | 4 | M16 | 20 | 63 | 5,9 | - | KGBV480080 |
| DN 50 | 2" | PN 16-40 | 67 | 150 | 102 | 3 | 125 | 4 | M16 | 20 | 83 | 8,9 | 6,3 | KGBV480090 |
| DN 65 | 2" 1/2 | PN16 | 83 | 178 | 122 | 3 | 145 | 4 | M16 | 20 | 107 | 16,2 | 9,7 | KGBV480100 |
| DN 65 | 2" 1/2 | PN 25-40 | 83 | 178 | 122 | 3 | 145 | 8 | M16 | 20 | 107 | 16,1 | - | KGBV480100 |
| DN80 | 3" | PN 16-40 | 90 | 190 | 138 | 3 | 160 | 8 | M16 | 20 | 120 | 20,0 | 12,5 | KGBV480110 |
| DN 100 | 4" | PN16 | 101 | 220 | 160 | 3 | 180 | 8 | M16 | 20 | 152 | 34,0 | 20,3 | KGBV480120 |
| DN 100 | 4" | PN 25-40 | 105 | 235 | 162 | 3 | 190 | 8 | M20 | 25 | 152 | 39,1 | - | KGBV480120 |

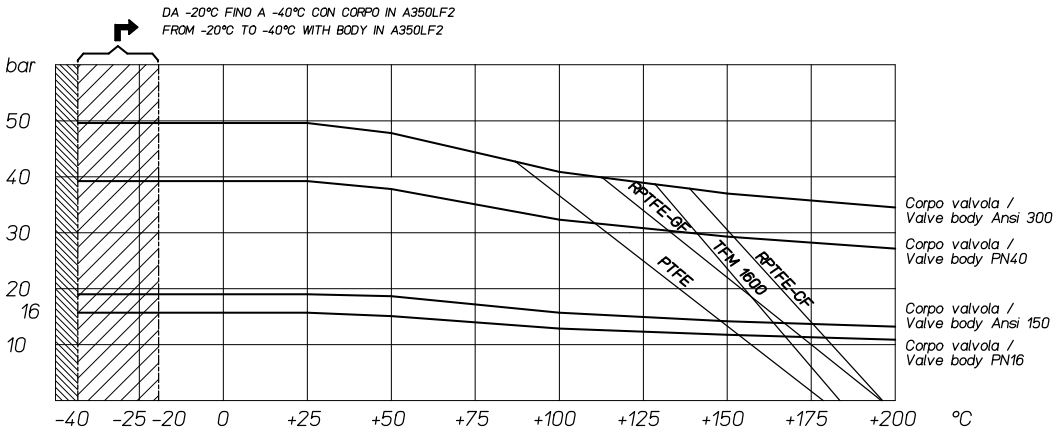
## DIMENSIONI *DIMENSIONS* -ANSI-

| MISURA *SIZE* DN [mm] | [inch] | ANSI | A | ØG | ØR | S | ØH | N° FORI *HOLES N°* | ØI | P | L | Kg. (X) | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | 32 | 90 | 45 | 1 | 60,3 | 4 | 1/2"UNC | 14 | 36 | 1,4 | KGBV480040 |
| DN 15 | 1/2" | ANSI 300 | 34 | 90 | 45 | 1 | 66,7 | 4 | 1/2"UNC | 14 | 36 | 1,4 | KGBV480040 |
| DN 20 | 3/4" | ANSI 150 | 35 | 100 | 52 | 1,6 | 69,8 | 4 | 1/2"UNC | 14 | 39 | 1,8 | KGBV480050 |
| DN 20 | 3/4" | ANSI 300 | 40 | 110 | 52 | 1,6 | 82,5 | 4 | 5/8"UNC | 15 | 39 | 2,1 | KGBV480050 |
| DN 25 | 1" | ANSI 150 | 42 | 110 | 60 | 1,6 | 79,4 | 4 | 1/2"UNC | 16 | 43 | 2,5 | KGBV480060 |
| DN 25 | 1" | ANSI 300 | 45 | 118 | 60 | 1,6 | 88,9 | 4 | 5/8"UNC | 16 | 43 | 2,9 | KGBV480060 |
| DN 32 | 1" 1/4 | ANSI 150 | 47 | 118 | 72 | 1,6 | 89 | 4 | 1/2"UNC | 20 | 54 | 3,8 | KGBV480070 |
| DN 32 | 1" 1/4 | ANSI 300 | 47 | 130 | 72 | 1,6 | 98,4 | 4 | 5/8"UNC | 20 | 54 | 4,3 | KGBV480070 |
| DN 40 | 1" 1/2 | ANSI 150 | 58 | 127 | 82 | 1,6 | 98,4 | 4 | 1/2"UNC | 20 | 63 | 5,1 | KGBV480080 |
| DN 40 | 1" 1/2 | ANSI 300 | 58 | 150 | 82 | 1,6 | 114,3 | 4 | 3/4"UNC | 25 | 63 | 7,0 | KGBV480080 |
| DN 50 | 2" | ANSI 150 | 67 | 150 | 102 | 1,6 | 120,6 | 4 | 5/8"UNC | 20 | 83 | 9,1 | KGBV480090 |
| DN 50 | 2" | ANSI 300 | 73 | 160 | 102 | 1,6 | 127,0 | 8 | 5/8"UNC | 20 | 83 | 10,4 | KGBV480090 |
| DN 65 | 2" 1/2 | ANSI 150 | 83 | 178 | 122 | 1,6 | 139,7 | 4 | 5/8"UNC | 20 | 107 | 16,4 | KGBV480100 |
| DN 65 | 2" 1/2 | ANSI 300 | 89 | 190 | 122 | 1,6 | 149,2 | 8 | 3/4"UNC | 25 | 107 | 18,6 | KGBV480100 |
| DN 80 | 3" | ANSI 150 | 90 | 190 | 135 | 1,6 | 152,5 | 4 | 5/8"UNC | 20 | 120 | 20,4 | KGBV480110 |
| DN 80 | 3" | ANSI 300 | 96 | 205 | 138 | 1,6 | 168,3 | 8 | 3/4"UNC | 25 | 120 | 24,0 | KGBV480110 |
| DN 100 | 4" | ANSI 150 | 101 | 220 | 160 | 1,6 | 190,5 | 8 | 5/8"UNC | 20 | 152 | 34,0 | KGBV480120 |
| DN 100 | 4" | ANSI 300 | 115 | 250 | 160 | 1,6 | 200,0 | 8 | 3/4"UNC | 25 | 152 | 46,4 | KGBV480120 |

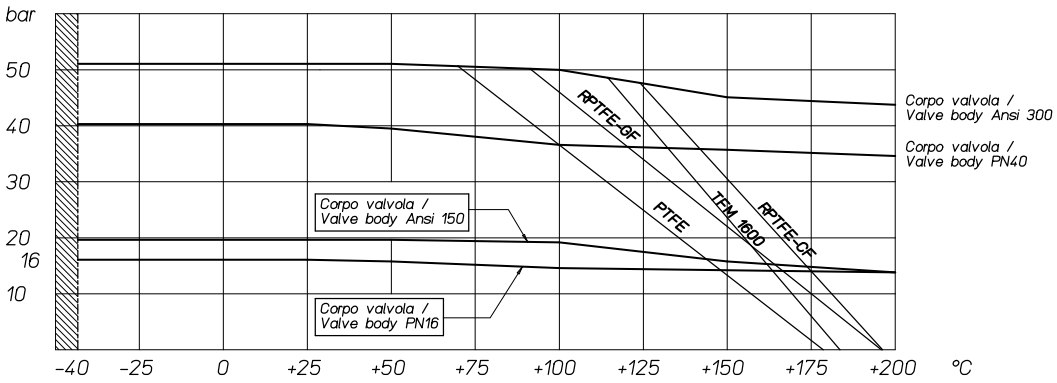
*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER PN 16-40 ANSI 150-300

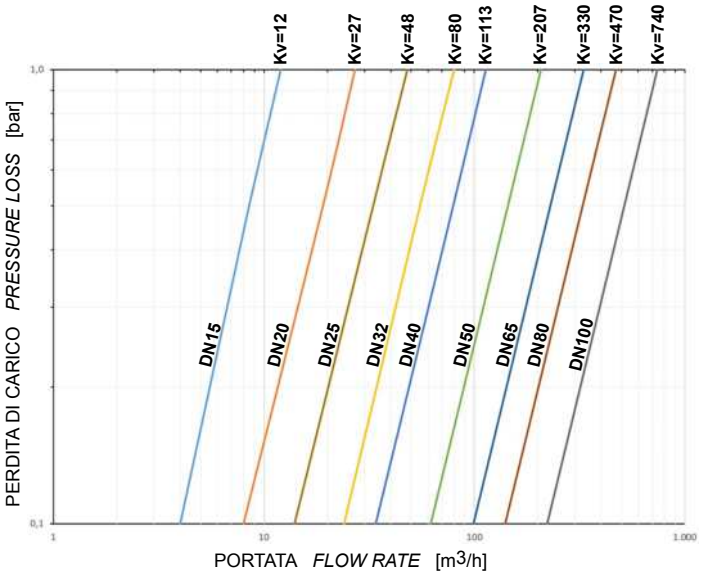
## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*




## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# MAGNUM WAFER PN 16-40 ANSI 150-300

| COPPIE DI SPUNTO IN Nm CON SEGGIO IN TFM 1600 E CON FLUIDO INTERCETTATO ACQUA (*)<br>*BREAKAWAY TORQUE IN Nm WITH TFM 1600 SEAT AND WATER INTERCEPTED FLUID (*)* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA *SIZE*** | DN 15 | DN 20 | DN 25 | DN 32 | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 |
| 0 bar | | | | | | | | | |
| PN16 bar | 8 | 13 | 18 | 27 | 37 | 61 | 80 | 120 | 215 |
| PN25 bar | 9,5 | 15 | 20 | 29 | 40 | 67 | 95 | 130 | 230 |
| PN40 bar | 11 | 17 | 21 | 31 | 41 | 75 | 110 | 165 | 280 |
| Ansi 150-20 bar | 9 | 14 | 19 | 28 | 38 | 65 | 90 | 128 | 220 |
| Ansi 300-50 bar | 12 | 19 | 21 | 32 | 42 | 80 | 120 | 170 | 290 |

*(*): qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto riportato in tabella*
*(*): If not lubricated fluids and/or fluids containing solid particles are intercepted, torques could be higher than those in the table.*

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4. Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied. Torque can drop on high frequency of operation.*

**Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.**
***The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.***

# MAGNUM WAFER PN 16-40 ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*



### ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat TFM 1600.
- Norme per flange d'attacco EN 1092-1;ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

### *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure Class: PN16-40; ANSI 150-300.*
- *Tightness Class*: EN12266-1 rate A.
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

### ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40 C° in LF2, per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Camicia di riscaldamento.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox; dadi e molle stelo inox. Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX A RICHIESTA.

### *FEATURES ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40 C°).*
- *For other flange types please contact our sales department.*
- *Heating jacket.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever . For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating,epoxy coating (for other coating please contact our sales department).*
- *ATEX marking and certificate ON REQUEST.*

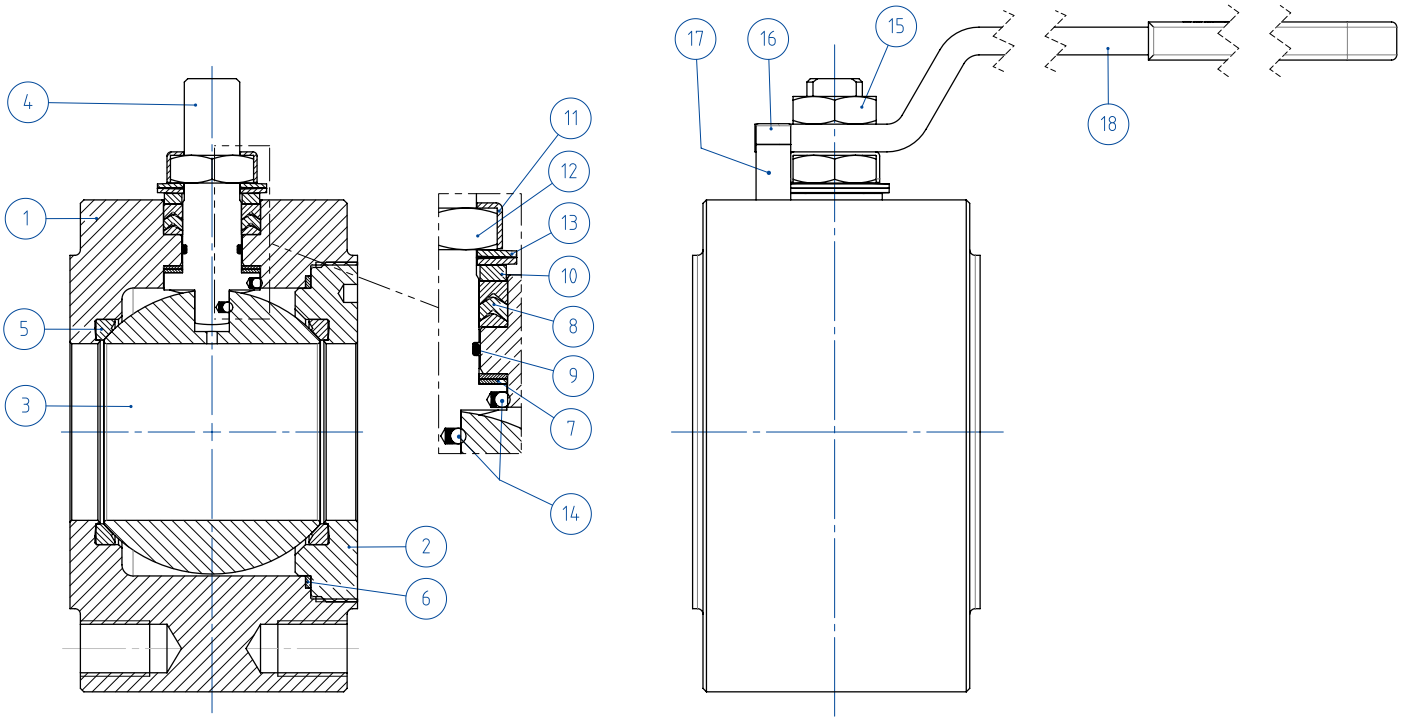
### CERTIFICAZIONI
- Conforme alla Direttiva Europea 2014/68/UE PED.
- Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0).
- TA-LUFT VDI 2440.
- FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla Direttiva Europea 2014/34/UE ATEX (certificato ATEX A RICHIESTA).

### *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED.*
- *Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0).*
- *TA-LUFT VDI 2440.*
- *FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to IEC 61508.*
- *In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).*

### NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

### *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS*<br>*MAGNUM WAFER PN16-40 ANSI 150-300*<br>ACCIAIO AL CARBONIO *CARBON STEEL* DA BARRA *FROM BAR* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Ghiera *Ring nut* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | ASTM A182F6A/A479 Tp.410 (**) | ASTM A182F6A/A479 Tp.410 (**) |
| 5* | Seggio *Seat* | TFM1600 (.) | TFM1600 (.) |
| 6* | Guarnizione corpo ghiera *Body-Ring nut gasket* | TFM1600 (.) | TFM1600 (.) |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | Acciaio al carbonio zincato Carbon steel galvanized (x) | Acciaio al carbonio zincato Carbon steel galvanized (x) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - Galvanized (x) | UNI 3740-1 6S ZINCATO - Galvanized (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - Galvanized (xx) | 50CrV4 ZINCATO - Galvanized (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - Galvanized (x) | UNI 3740-1 6S ZINCATO - Galvanized (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel Galvanized (x)* | Acciaio al carbonio zincato - *Carbon steel Galvanized (x)* |
| 18 | Leva *Lever* | Fe37 zincato - *Galvanized (x)* | Fe37 zincato - *Galvanized (x)* |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): A564 TP.630 (17-4PH)
(x): 304 s.s.
(xx): 301 s.s.

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -PN-
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

| MISURA *SIZE* | | PN | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 16-40 | V/LM104F00CAB0B0NNV00B | V/LM104F00CBB0B0NNV00B |
| DN 20 | 3/4" | PN 16-40 | V/LM105F00CAB0B0NNV00B | V/LM105F00CBB0B0NNV00B |
| DN 25 | 1" | PN 16-40 | V/LM106F00CAB0B0NNV00B | V/LM106F00CBB0B0NNV00B |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM107F00CAB0B0NNV00B | V/LM107F00CBB0B0NNV00B |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM107S00CAB0B0NNV00B* | V/LM107S00CBB0B0NNV00B* |
| DN 40 | 1" 1/2 | PN 16-40 | V/LM108F00CAB0B0NNV00B | V/LM108F00CBB0B0NNV00B |
| DN 50 | 2" | PN 16-40 | V/LM109F00CAB0B0NNV00B | V/LM109F00CBB0B0NNV00B |
| DN 65 | 2" 1/2 | PN16 | V/LM110E00CAB0B0NNV00B | V/LM110E00CBB0B0NNV00B |
| DN 65 | 2" 1/2 | PN 25-40 | V/LM110I00CAB0B0NNV00B | V/LM110I00CBB0B0NNV00B |
| DN 80 | 3" | PN 16-40 | V/LM111F00CAB0B0NNV00B | V/LM111F00CBB0B0NNV00B |
| DN 100 | 4" | PN16 | V/LM112E00CAB0B0NNV00B | V/LM112E00CBB0B0NNV00B |
| DN 100 | 4" | PN 25-40 | V/LM112I00CAB0B0NNV00B | V/LM112I00CBB0B0NNV00B |

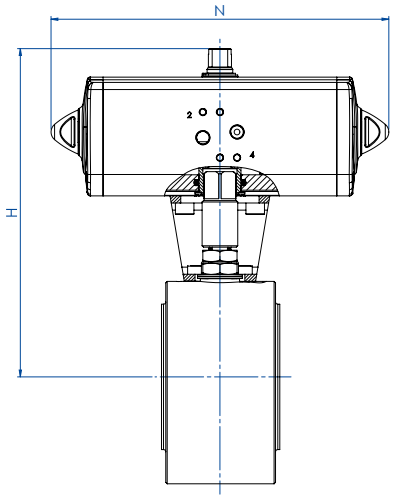
### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -ANSI-
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 150 | V/LM104101CAB0B0NNV00B | V/LM104101CBB0B0NNV00B |
| DN 15 | 1/2" | ANSI 300 | V/LM104201CAB0B0NNV00B | V/LM104201CBB0B0NNV00B |
| DN 20 | 3/4" | ANSI 150 | V/LM105101CAB0B0NNV00B | V/LM105101CBB0B0NNV00B |
| DN 20 | 3/4" | ANSI 300 | V/LM105201CAB0B0NNV00B | V/LM105201CBB0B0NNV00B |
| DN 25 | 1" | ANSI 150 | V/LM106101CAB0B0NNV00B | V/LM106101CBB0B0NNV00B |
| DN 25 | 1" | ANSI 300 | V/LM106201CAB0B0NNV00B | V/LM106201CBB0B0NNV00B |
| DN 32 | 1" 1/4 | ANSI 150 | V/LM107101CAB0B0NNV00B | V/LM107101CBB0B0NNV00B |
| DN 32 | 1" 1/4 | ANSI 300 | V/LM107201CAB0B0NNV00B | V/LM107201CBB0B0NNV00B |
| DN 40 | 1" 1/2 | ANSI 150 | V/LM108101CAB0B0NNV00B | V/LM108101CBB0B0NNV00B |
| DN 40 | 1" 1/2 | ANSI 300 | V/LM108201CAB0B0NNV00B | V/LM108201CBB0B0NNV00B |
| DN 50 | 2" | ANSI 150 | V/LM109101CAB0B0NNV00B | V/LM109101CBB0B0NNV00B |
| DN 50 | 2" | ANSI 300 | V/LM109201CAB0B0NNV00B | V/LM109201CBB0B0NNV00B |
| DN 65 | 2" 1/2 | ANSI 150 | V/LM110101CAB0B0NNV00B | V/LM110101CBB0B0NNV00B |
| DN 65 | 2" 1/2 | ANSI 300 | V/LM110201CAB0B0NNV00B | V/LM110201CBB0B0NNV00B |
| DN 80 | 3" | ANSI 150 | V/LM111101CAB0B0NNV00B | V/LM111101CBB0B0NNV00B |
| DN 80 | 3" | ANSI 300 | V/LM111201CAB0B0NNV00B | V/LM111201CBB0B0NNV00B |
| DN 100 | 4" | ANSI 150 | V/LM112101CAB0B0NNV00B | V/LM112101CBB0B0NNV00B |
| DN 100 | 4" | ANSI 300 | V/LM112201CAB0B0NNV00B | V/LM112201CBB0B0NNV00B |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DM104E00CAB0B0NNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 2,5 |
| DN 15 | 1/2" | PN 25-40 | DM104I00CAB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 2,8 |
| DN 20 | 3/4" | PN 16-40 | DM105F00CAB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,2 |
| DN 25 | 1" | PN 16-40 | DM106F00CAB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 4,1 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107F00CAB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107S00CAB0B0NNV00BAFDA0 * | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,8 |
| DN 40 | 1" 1/2 | PN 16-40 | DM108F00CAB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 8,2 |
| DN 50 | 2" | PN 16 | DM109E00CAB0B0NNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 12,2 |
| DN 50 | 2" | PN 25-40 | DM109I00CAB0B0NNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 12,3 |
| DN 65 | 2" 1/2 | PN 16 | DM110E00CAB0B0NNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 19,7 |
| DN 65 | 2" 1/2 | PN 25-40 | DM110I00CAB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 21,8 |
| DN 80 | 3" | PN 16 | DM111E00CAB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,7 |
| DN 80 | 3" | PN 25-40 | DM111I00CAB0B0NNV00BAFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,5 |
| DN 100 | 4" | PN 16 | DM112E00CAB0B0NNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 42,2 |
| DN 100 | 4" | PN 25-40 | DM112I00CAB0B0NNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 345,9 | 51,6 |

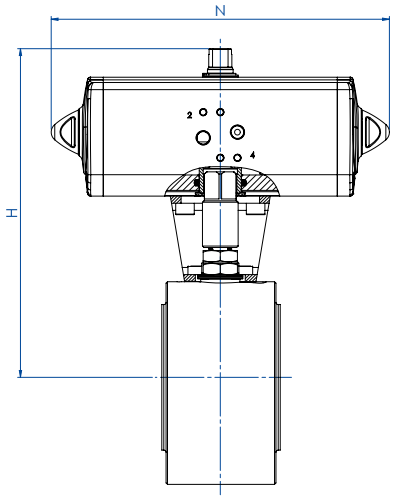
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DM104E00CBB0B0NNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 2,5 |
| DN 15 | 1/2" | PN 25-40 | DM104I00CBB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 2,8 |
| DN 20 | 3/4" | PN 16-40 | DM105F00CBB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,2 |
| DN 25 | 1" | PN 16-40 | DM106F00CBB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 4,1 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107F00CBB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107S00CBB0B0NNV00BAFDA0 * | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,8 |
| DN 40 | 1" 1/2 | PN 16-40 | DM108F00CBB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 8,2 |
| DN 50 | 2" | PN 16 | DM109E00CBB0B0NNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 12,2 |
| DN 50 | 2" | PN 25-40 | DM109I00CBB0B0NNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 12,3 |
| DN 65 | 2" 1/2 | PN 16 | DM110E00CBB0B0NNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 19,7 |
| DN 65 | 2" 1/2 | PN 25-40 | DM110I00CBB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 21,8 |
| DN 80 | 3" | PN 16 | DM111E00CBB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,7 |
| DN 80 | 3" | PN 25-40 | DM111I00CBB0B0NNV00BAFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,5 |
| DN 100 | 4" | PN 16 | DM112E00CBB0B0NNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 42,2 |
| DN 100 | 4" | PN 25-40 | DM112I00CBB0B0NNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 345,9 | 51,6 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

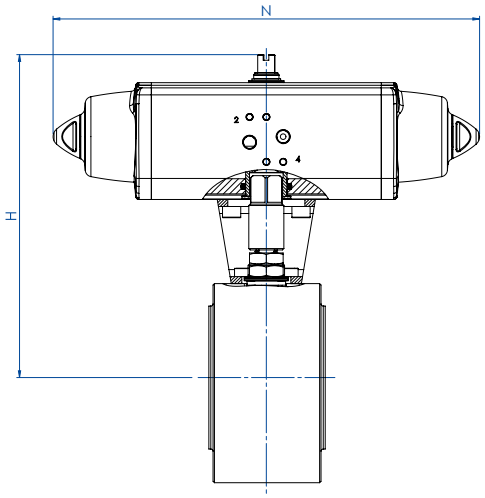
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DM104101CAB0B0NNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 2,5 |
| DN 15 | 1/2" | ANSI 300 | DM104201CAB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5313 | 174,2 | 163,2 | 2,8 |
| DN 20 | 3/4" | ANSI 150 | DM105101CAB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,2 |
| DN 20 | 3/4" | ANSI 300 | DM105201CAB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5314 | 174,2 | 169,2 | 3,5 |
| DN 25 | 1" | ANSI 150 | DM106101CAB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 4,1 |
| DN 25 | 1" | ANSI 300 | DM106201CAB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5249 | 174,2 | 184,2 | 5,5 |
| DN 32 | 1" 1/4 | ANSI 150 | DM107101CAB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,6 |
| DN 32 | 1" 1/4 | ANSI 300 | DM107201CAB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,1 |
| DN 40 | 1" 1/2 | ANSI 150 | DM108101CAB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 7,4 |
| DN 40 | 1" 1/2 | ANSI 300 | DM108201CAB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 9,3 |
| DN 50 | 2" | ANSI 150 | DM109101CAB0B0NNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 12,4 |
| DN 50 | 2" | ANSI 300 | DM109201CAB0B0NNV00BAFHA0 | DAN0120411S | KCNCCHD5267 | 244,1 | 240 | 13,8 |
| DN 65 | 2" 1/2 | ANSI 150 | DM110101CAB0B0NNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250 | 19,9 |
| DN 65 | 2" 1/2 | ANSI 300 | DM110201CAB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 24,9 |
| DN 80 | 3" | ANSI 150 | DM111101CAB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 30,3 |
| DN 80 | 3" | ANSI 300 | DM111201CAB0B0NNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 31,1 |
| DN 100 | 4" | ANSI 150 | DM112101CAB0B0NNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329 | 42,2 |
| DN 100 | 4" | ANSI 300 | DM112201CAB0B0NNV00BAFLA0 | DAN0480411S | KCNEFHD5323 | 387,6 | 359,9 | 62,8 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DM104101CBB0B0NNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 2,5 |
| DN 15 | 1/2" | ANSI 300 | DM104201CBB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5313 | 174,2 | 163,2 | 2,8 |
| DN 20 | 3/4" | ANSI 150 | DM105101CBB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,2 |
| DN 20 | 3/4" | ANSI 300 | DM105201CBB0B0NNV00BAFCA0 | DAN0030411S | KCNAAHD5314 | 174,2 | 169,2 | 3,5 |
| DN 25 | 1" | ANSI 150 | DM106101CBB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 4,1 |
| DN 25 | 1" | ANSI 300 | DM106201CBB0B0NNV00BAFCA0 | DAN0030411S | KCNBCHD5249 | 174,2 | 184,2 | 5,5 |
| DN 32 | 1" 1/4 | ANSI 150 | DM107101CBB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,6 |
| DN 32 | 1" 1/4 | ANSI 300 | DM107201CBB0B0NNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,1 |
| DN 40 | 1" 1/2 | ANSI 150 | DM108101CBB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 7,4 |
| DN 40 | 1" 1/2 | ANSI 300 | DM108201CBB0B0NNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 9,3 |
| DN 50 | 2" | ANSI 150 | DM109101CBB0B0NNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 12,4 |
| DN 50 | 2" | ANSI 300 | DM109201CBB0B0NNV00BAFHA0 | DAN0120411S | KCNCCHD5267 | 244,1 | 240,0 | 13,8 |
| DN 65 | 2" 1/2 | ANSI 150 | DM110101CBB0B0NNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 19,9 |
| DN 65 | 2" 1/2 | ANSI 300 | DM110201CBB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 24,9 |
| DN 80 | 3" | ANSI 150 | DM111101CBB0B0NNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 30,3 |
| DN 80 | 3" | ANSI 300 | DM111201CBB0B0NNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 31,1 |
| DN 100 | 4" | ANSI 150 | DM112101CBB0B0NNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 42,2 |
| DN 100 | 4" | ANSI 300 | DM112201CBB0B0NNV00BAFLA0 | DAN0480411S | KCNEFHD5323 | 387,6 | 359,9 | 62,8 |

# MAGNUM WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | SM104E00CAB0B0NNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,0 |
| DN 15 | 1/2" | PN 25-40 | SM104I00CAB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 4,0 |
| DN 20 | 3/4" | PN 16-40 | SM105F00CAB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,1 |
| DN 25 | 1" | PN 16-40 | SM106F00CAB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 5,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107F00CAB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107S00CAB0B0NNV00BAFGA0 * | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | PN 16-40 | SM108F00CAB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 10,3 |
| DN 50 | 2" | PN 16 | SM109E00CAB0B0NNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 15,5 |
| DN 50 | 2" | PN 25-40 | SM109I00CAB0B0NNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 16,8 |
| DN 65 | 2" 1/2 | PN 16 | SM110E00CAB0B0NNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 25,0 |
| DN 65 | 2" 1/2 | PN 25-40 | SM110I00CAB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 27,0 |
| DN 80 | 3" | PN 16 | SM111E00CAB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 31,0 |
| DN 80 | 3" | PN 25-40 | SM111I00CAB0B0NNV00BAFLA0 | SRN0240401S | KCNDEHD5330 | 520,5 | 318,0 | 34,0 |
| DN 100 | 4" | PN 16 | SM112E00CAB0B0NNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,0 |
| DN 100 | 4" | PN 25-40 | SM112I00CAB0B0NNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 379,0 | 59,5 |

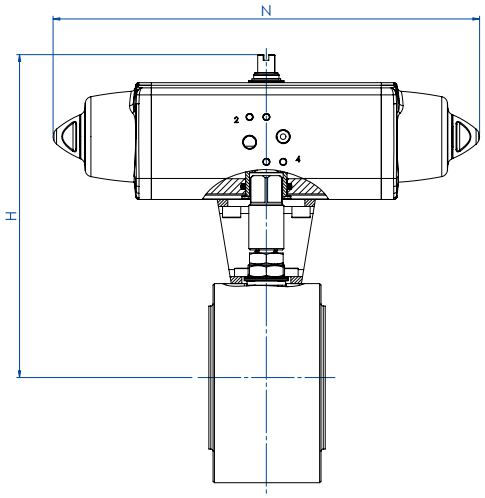
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | SM104E00CBB0B0NNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,0 |
| DN 15 | 1/2" | PN 25-40 | SM104I00CBB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 172,4 | 4,0 |
| DN 20 | 3/4" | PN 16-40 | SM105F00CBB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 175,4 | 4,1 |
| DN 25 | 1" | PN 16-40 | SM106F00CBB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 5,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107F00CBB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107S00CBB0B0NNV00BAFGA0 * | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | PN 16-40 | SM108F00CBB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 10,3 |
| DN 50 | 2" | PN 16 | SM109E00CBB0B0NNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 15,5 |
| DN 50 | 2" | PN 25-40 | SM109I00CBB0B0NNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 16,8 |
| DN 65 | 2" 1/2 | PN 16 | SM110E00CBB0B0NNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 25,0 |
| DN 65 | 2" 1/2 | PN 25-40 | SM110I00CBB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 27,0 |
| DN 80 | 3" | PN 16 | SM111E00CBB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 31,0 |
| DN 80 | 3" | PN 25-40 | SM111I00CBB0B0NNV00BAFLA0 | SRN0240401S | KCNDEHD5330 | 520,5 | 318,0 | 34,0 |
| DN 100 | 4" | PN 16 | SM112E00CBB0B0NNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,0 |
| DN 100 | 4" | PN 25-40 | SM112I00CBB0B0NNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 379,0 | 59,5 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

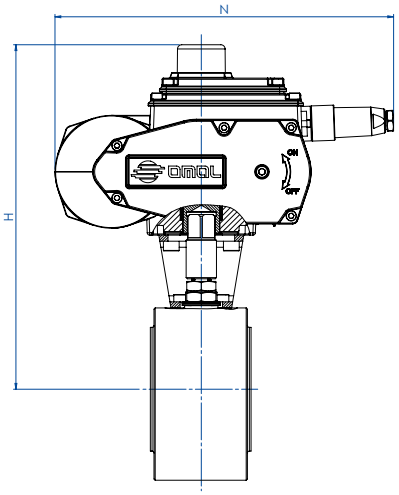
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | SM104101CAB0B0NNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 154,2 | 3,0 |
| DN 15 | 1/2" | ANSI 300 | SM104201CAB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,0 |
| DN 20 | 3/4" | ANSI 150 | SM105101CAB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,4 |
| DN 20 | 3/4" | ANSI 300 | SM105201CAB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 4,7 |
| DN 25 | 1" | ANSI 150 | SM106101CAB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 5,1 |
| DN 25 | 1" | ANSI 300 | SM106201CAB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 5,6 |
| DN 32 | 1" 1/4 | ANSI 150 | SM107101CAB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 300 | SM107201CAB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | ANSI 150 | SM108101CAB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 9,3 |
| DN 40 | 1" 1/2 | ANSI 300 | SM108201CAB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,2 |
| DN 50 | 2" | ANSI 150 | SM109101CAB0B0NNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,1 |
| DN 50 | 2" | ANSI 300 | SM109201CAB0B0NNV00BAFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 18,3 |
| DN 65 | 2" 1/2 | ANSI 150 | SM110101CAB0B0NNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | ANSI 300 | SM110201CAB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,2 |
| DN 80 | 3" | ANSI 150 | SM111101CAB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,4 |
| DN 80 | 3" | ANSI 300 | SM111201CAB0B0NNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 324,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM112101CAB0B0NNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,1 |
| DN 100 | 4" | ANSI 300 | SM112201CAB0B0NNV00BAFNA0 | SRN0480401S | KCNEFHD5334 | 648,2 | 393,0 | 72,4 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | SM104101CBB0B0NNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 154,2 | 3,0 |
| DN 15 | 1/2" | ANSI 300 | SM104201CBB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,0 |
| DN 20 | 3/4" | ANSI 150 | SM105101CBB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,4 |
| DN 20 | 3/4" | ANSI 300 | SM105201CBB0B0NNV00BAFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 4,7 |
| DN 25 | 1" | ANSI 150 | SM106101CBB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 5,1 |
| DN 25 | 1" | ANSI 300 | SM106201CBB0B0NNV00BAFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 5,6 |
| DN 32 | 1" 1/4 | ANSI 150 | SM107101CBB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 300 | SM107201CBB0B0NNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | ANSI 150 | SM108101CBB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 9,3 |
| DN 40 | 1" 1/2 | ANSI 300 | SM108201CBB0B0NNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,2 |
| DN 50 | 2" | ANSI 150 | SM109101CBB0B0NNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,1 |
| DN 50 | 2" | ANSI 300 | SM109201CBB0B0NNV00BAFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 18,3 |
| DN 65 | 2" 1/2 | ANSI 150 | SM110101CBB0B0NNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | ANSI 300 | SM110201CBB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,2 |
| DN 80 | 3" | ANSI 150 | SM111101CBB0B0NNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,4 |
| DN 80 | 3" | ANSI 300 | SM111201CBB0B0NNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 324,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM112101CBB0B0NNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,1 |
| DN 100 | 4" | ANSI 300 | SM112201CBB0B0NNV00BAFNA0 | SRN0480401S | KCNEFHD5334 | 648,2 | 393,0 | 72,4 |

# MAGNUM WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | EM104F00CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 20 | 3/4" | PN 16-40 | EM105F00CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 25 | 1" | PN 16-40 | EM106F00CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107F00CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,9 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107S00CAB0B0NNV00BAMGG0 * | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM108F00CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 9,5 |
| DN 50 | 2" | PN 16-40 | EM109F00CAB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,4 |
| DN 65 | 2" 1/2 | PN 16 | EM110E00CAB0B0NNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | EM110I00CAB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 24,0 |
| DN 80 | 3" | PN 16-40 | EM111F00CAB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,5 |
| DN 100 | 4" | PN 16 | EM112E00CAB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | PN 25-40 | EM112I00CAB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 352,5 | 49,5 |

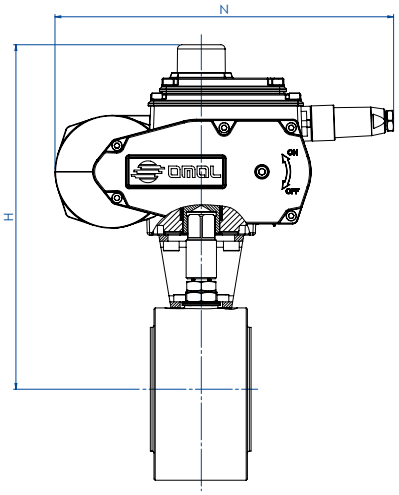
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | EM104F00CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 20 | 3/4" | PN 16-40 | EM105F00CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 25 | 1" | PN 16-40 | EM106F00CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107F00CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,9 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107S00CBB0B0NNV00BAMGG0 * | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM108F00CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 9,5 |
| DN 50 | 2" | PN 16-40 | EM109F00CBB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,4 |
| DN 65 | 2" 1/2 | PN 16 | EM110E00CBB0B0NNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | EM110I00CBB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 23,6 |
| DN 80 | 3" | PN 16-40 | EM111F00CBB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,5 |
| DN 100 | 4" | PN 16 | EM112E00CBB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | PN 25-40 | EM112I00CBB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 352,5 | 49,5 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | EM104101CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 15 | 1/2" | ANSI 300 | EM104201CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 5,0 |
| DN 20 | 3/4" | ANSI 150 | EM105101CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 20 | 3/4" | ANSI 300 | EM105201CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 5,7 |
| DN 25 | 1" | ANSI 150 | EM106101CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 25 | 1" | ANSI 300 | EM106201CAB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 6,5 |
| DN 32 | 1" 1/4 | ANSI 150 | EM107101CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,1 |
| DN 32 | 1" 1/4 | ANSI 300 | EM107201CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM108101CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 8,8 |
| DN 40 | 1" 1/2 | ANSI 300 | EM108201CAB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 10,8 |
| DN 50 | 2" | ANSI 150 | EM109101CAB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,6 |
| DN 50 | 2" | ANSI 300 | EM109201CAB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 17,9 |
| DN 65 | 2" 1/2 | ANSI 150 | EM110101CAB0B0NNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,0 |
| DN 65 | 2" 1/2 | ANSI 300 | EM110201CAB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 26,1 |
| DN 80 | 3" | ANSI 150 | EM111101CAB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,9 |
| DN 80 | 3" | ANSI 300 | EM111201CAB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 31,5 |
| DN 100 | 4" | ANSI 150 | EM112101CAB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | ANSI 300 | EM112201CAB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5338 | 256,5 | 352,5 | 57,0 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | EM104101CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 15 | 1/2" | ANSI 300 | EM104201CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 5,0 |
| DN 20 | 3/4" | ANSI 150 | EM105101CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 20 | 3/4" | ANSI 300 | EM105201CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 5,7 |
| DN 25 | 1" | ANSI 150 | EM106101CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 25 | 1" | ANSI 300 | EM106201CBB0B0NNV00BAMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 6,5 |
| DN 32 | 1" 1/4 | ANSI 150 | EM107101CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,1 |
| DN 32 | 1" 1/4 | ANSI 300 | EM107201CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM108101CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 8,8 |
| DN 40 | 1" 1/2 | ANSI 300 | EM108201CBB0B0NNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 10,8 |
| DN 50 | 2" | ANSI 150 | EM109101CBB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,6 |
| DN 50 | 2" | ANSI 300 | EM109201CBB0B0NNV00BAMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 17,9 |
| DN 65 | 2" 1/2 | ANSI 150 | EM110101CBB0B0NNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,0 |
| DN 65 | 2" 1/2 | ANSI 300 | EM110201CBB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 26,1 |
| DN 80 | 3" | ANSI 150 | EM111101CBB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,9 |
| DN 80 | 3" | ANSI 300 | EM111201CBB0B0NNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 31,5 |
| DN 100 | 4" | ANSI 150 | EM112101CBB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | ANSI 300 | EM112201CBB0B0NNV00BAMNA0 | AE160040 | KCNEEHV5338 | 256,5 | 352,5 | 57,0 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM WAFER PN 16-40 ANSI 150-300
# ACCIAIO INOX *STAINLESS STEEL*





### ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat: TFM 1600.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM; Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

### *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal: TFM 1600.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN16-40 - ANSI 150-300.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

### ESECUZIONI A RICHIESTA
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Camicia di riscaldamento.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox; dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

### *FEATURES ON REQUEST*
- *For other flange types please contact our sales department.*
- *Heating jacket.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever; stainless steel Stem nuts and springs.*
- *For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

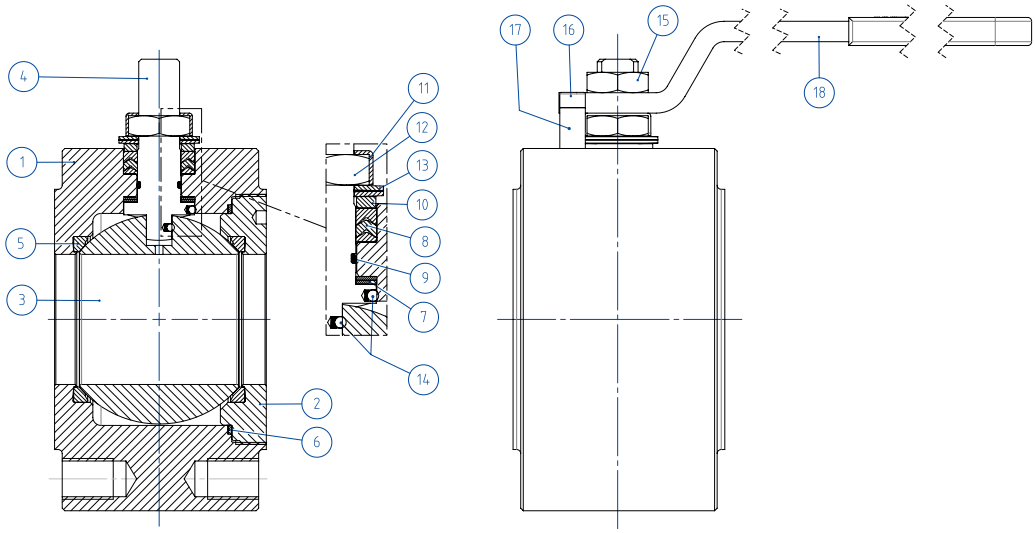
### CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

### *CERTIFICATIONS*
- *In compilance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

### NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

### *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* - DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (x)<br>(1.4401 / X5CrNiMo 17-12-2) |
| 2 | Ghiera *Ring nut* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M<br>(1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (.) |
| 6* | Guarnizione corpo ghiera *Body-Ring nut gasket* | TFM1600 (.) |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato<br>*Carbon steel galvanized (x)* |
| 18 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

| MATERIALI *MATERIALS* - DA FUSIONE *CASTING* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **CF8M *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 2 | Ghiera *Ring nut* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (.) |
| 6* | Guarnizione corpo ghiera *Body-Ring nut gasket* | TFM1600 (.) |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato *Carbon steel galvanized (x)* |
| 18 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*
(x): 304 s.s.
(xx): 301 s.s.
(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*





### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -PN-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

| MISURA *SIZE* | | PN | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | PN 16-40 | V/LM104F00ABA0A0NNV000 |
| DN 20 | 3/4" | PN 16-40 | V/LM105F00ABA0A0NNV000 |
| DN 25 | 1" | PN 16-40 | V/LM106F00ABA0A0NNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM107F00ABA0A0NNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM107S00ABA0A0NNV000 * |
| DN 40 | 1" 1/2 | PN 16-40 | V/LM108F00ABA0A0NNV000 |
| DN 50 | 2" | PN 16-40 | V/LM109F00ABA0A0NNV000 |
| DN 65 | 2" 1/2 | PN16 | V/LM110E00ABA0A0NNV000 |
| DN 65 | 2" 1/2 | PN 25-40 | V/LM110I00ABA0A0NNV000 |
| DN 80 | 3" | PN 16-40 | V/LM111F00ABA0A0NNV000 |
| DN 100 | 4" | PN16 | V/LM112E00ABA0A0NNV000 |
| DN 100 | 4" | PN 25-40 | V/LM112I00ABA0A0NNV000 |
| **MISURA** *SIZE* | | **PN** | **CF8M** |
| **DN [mm]** | **[inch]** | | |
| DN 50 | 2" | PN 16 | V/LM109E00AEA0A0NNV000 |
| DN 65 | 2" 1/2 | PN 16 | V/LM110E00AEA0A0NNV000 |
| DN 80 | 3" | PN 16 | V/LM111E00AEA0A0NNV000 |
| DN 100 | 4" | PN 16 | V/LM112E00AEA0A0NNV000 |

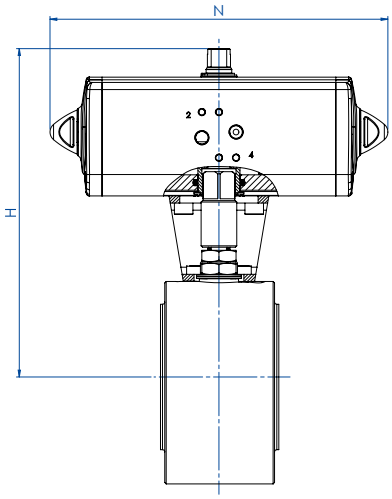
### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -ANSI-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | ANSI 150 | V/LM104101ABA0A0NNV000 |
| DN 15 | 1/2" | ANSI 300 | V/LM104201ABA0A0NNV000 |
| DN 20 | 3/4" | ANSI 150 | V/LM105101ABA0A0NNV000 |
| DN 20 | 3/4" | ANSI 300 | V/LM105201ABA0A0NNV000 |
| DN 25 | 1" | ANSI 150 | V/LM106101ABA0A0NNV000 |
| DN 25 | 1" | ANSI 300 | V/LM106201ABA0A0NNV000 |
| DN 32 | 1" 1/4 | ANSI 150 | V/LM107101ABA0A0NNV000 |
| DN 32 | 1" 1/4 | ANSI 300 | V/LM107201ABA0A0NNV000 |
| DN 40 | 1" 1/2 | ANSI 150 | V/LM108101ABA0A0NNV000 |
| DN 40 | 1" 1/2 | ANSI 300 | V/LM108201ABA0A0NNV000 |
| DN 50 | 2" | ANSI 150 | V/LM109101ABA0A0NNV000 |
| DN 50 | 2" | ANSI 300 | V/LM109201ABA0A0NNV000 |
| DN 65 | 2" 1/2 | ANSI 150 | V/LM110101ABA0A0NNV000 |
| DN 65 | 2" 1/2 | ANSI 300 | V/LM110201ABA0A0NNV000 |
| DN 80 | 3" | ANSI 150 | V/LM111101ABA0A0NNV000 |
| DN 80 | 3" | ANSI 300 | V/LM111201ABA0A0NNV000 |
| DN 100 | 4" | ANSI 150 | V/LM112101ABA0A0NNV000 |
| DN 100 | 4" | ANSI 300 | V/LM112201ABA0A0NNV000 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN 316 E CF8M ACCIAIO INOX -PN- *ITEM CODES IN 316 AND CF8M STAINLESS STEEL -PN-*

| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DM104E00ABA0A0NNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,1 | 154,2 | 2,5 |
| DN 15 | 1/2" | PN 25-40 | DM104I00ABA0A0NNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 161,2 | 2,7 |
| DN 20 | 3/4" | PN 16-40 | DM105F00ABA0A0NNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 164,2 | 3,2 |
| DN 25 | 1" | PN 16-40 | DM106F00ABA0A0NNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,3 | 181,2 | 3,9 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107F00ABA0A0NNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,0 |
| DN 32 | 1" 1/4 | PN 16-40 | DM107S00ABA0A0NNV000AFDA0 * | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,7 |
| DN 40 | 1" 1/2 | PN 16-40 | DM108F00ABA0A0NNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 7,9 |
| DN 50 | 2" | PN 16 | DM109E00ABA0A0NNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 11,9 |
| DN 50 | 2" | PN 25-40 | DM109I00ABA0A0NNV000AFHA0 | DAN0120411S | KCNCCHD5317 | 257,4 | 234,0 | 12,1 |
| DN 65 | 2" 1/2 | PN 16 | DM110E00ABA0A0NNV000AFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 19,3 |
| DN 65 | 2" 1/2 | PN 25-40 | DM110I00ABA0A0NNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 20,8 |
| DN 80 | 3" | PN 16 | DM111E00ABA0A0NNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,2 |
| DN 80 | 3" | PN 25-40 | DM111I00ABA0A0NNV000AFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,2 |
| DN 100 | 4" | PN 16 | DM112E00ABA0A0NNV000AFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 43,0 |
| DN 100 | 4" | PN 25-40 | DM112I00ABA0A0NNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,7 | 345,9 | 45,0 |
| **MISURA** *SIZE* | | **PN** | **CODICE ARTICOLO -CF8M-** *ITEM CODE -CF8M-* | **ATTUATORE** *ACTUATOR* | **KIT di montaggio** *Mounting KIT* | **N [mm]** | **H [mm]** | **Peso Kg** *Weight Kg* |
| **DN [mm]** | **[inch]** | | | | | | | |
| DN 50 | 2" | PN 16 | DM109E00AEA0A0NNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 9,3 |
| DN 65 | 2" 1/2 | PN 16 | DM110E00AEA0A0NNV000AFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 12,8 |
| DN 80 | 3" | PN 16 | DM111E00AEA0A0NNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 17,7 |
| DN 100 | 4" | PN 16 | DM112E00AEA0A0NNV000AFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 29,3 |

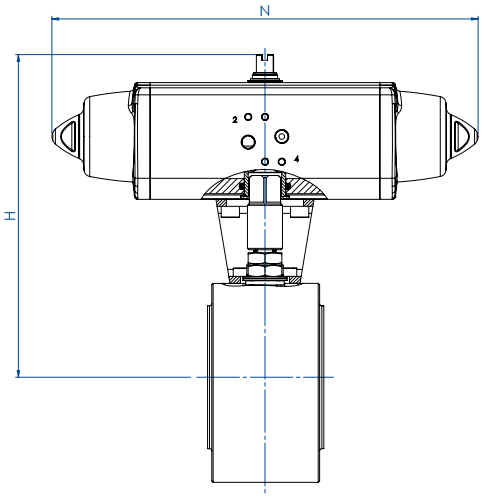
## CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DM104101ABA0A0NNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,1 | 154,2 | 2,5 |
| DN 15 | 1/2" | ANSI 300 | DM104201ABA0A0NNV000AFCA0 | DAN0030411S | KCNAAHD5313 | 174,3 | 163,2 | 2,7 |
| DN 20 | 3/4" | ANSI 150 | DM105101ABA0A0NNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 164,2 | 3,2 |
| DN 20 | 3/4" | ANSI 300 | DM105201ABA0A0NNV000AFCA0 | DAN0030411S | KCNAAHD5314 | 174,3 | 169,2 | 3,5 |
| DN 25 | 1" | ANSI 150 | DM106101ABA0A0NNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,3 | 181,2 | 3,9 |
| DN 25 | 1" | ANSI 300 | DM106201ABA0A0NNV000AFCA0 | DAN0030411S | KCNBCHD5249 | 174,3 | 184,2 | 4,2 |
| DN 32 | 1" 1/4 | ANSI 150 | DM107101ABA0A0NNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 5,7 |
| DN 32 | 1" 1/4 | ANSI 300 | DM107201ABA0A0NNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 6,2 |
| DN 40 | 1" 1/2 | ANSI 150 | DM108101ABA0A0NNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 7,2 |
| DN 40 | 1" 1/2 | ANSI 300 | DM108201ABA0A0NNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 9,1 |
| DN 50 | 2" | ANSI 150 | DM109101ABA0A0NNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 12,0 |
| DN 50 | 2" | ANSI 300 | DM109201ABA0A0NNV000AFHA0 | DAN0120411S | KCNCCHD5267 | 257,4 | 240,0 | 13,6 |
| DN 65 | 2" 1/2 | ANSI 150 | DM110101ABA0A0NNV000AFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 20,5 |
| DN 65 | 2" 1/2 | ANSI 300 | DM110201ABA0A0NNV000AFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 24,5 |
| DN 80 | 3" | ANSI 150 | DM111101ABA0A0NNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 26,5 |
| DN 80 | 3" | ANSI 300 | DM111201ABA0A0NNV000AFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 32,0 |
| DN 100 | 4" | ANSI 150 | DM112101ABA0A0NNV000AFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 43,0 |
| DN 100 | 4" | ANSI 300 | DM112201ABA0A0NNV000AFLA0 | DAN0480411S | KCNEFHD5323 | 387,7 | 359,9 | 58,0 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 E CF8M ACCIAIO INOX -PN- *ITEM CODES IN 316 AND CF8M STAINLESS STEEL -PN-*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16 | SM104E00ABA0A0NNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,3 | 161,2 | 3,0 |
| DN 15 | 1/2" | PN 25-40 | SM104I00ABA0A0NNV000AFEA0 | SRN0030402S | KCNACHD5324 | 259,0 | 172,4 | 4,0 |
| DN 20 | 3/4" | PN 16-40 | SM105F00ABA0A0NNV000AFEA0 | SRN0030402S | KCNACHD5324 | 259,0 | 175,4 | 4,1 |
| DN 25 | 1" | PN 16-40 | SM106F00ABA0A0NNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 259,0 | 192,4 | 5,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107F00ABA0A0NNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,3 | 210,3 | 8,0 |
| DN 32 | 1" 1/4 | PN 16-40 | SM107S00ABA0A0NNV000AFGA0 * | SRN0053401S | KCNBCHD5328 | 304,3 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | PN 16-40 | SM108F00ABA0A0NNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 360,8 | 225,0 | 10,3 |
| DN 50 | 2" | PN 16 | SM109E00ABA0A0NNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 15,5 |
| DN 50 | 2" | PN 25-40 | SM109I00ABA0A0NNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 16,8 |
| DN 65 | 2" 1/2 | PN 16 | SM110E00ABA0A0NNV000AFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 25,0 |
| DN 65 | 2" 1/2 | PN 25-40 | SM110I00ABA0A0NNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 27,0 |
| DN 80 | 3" | PN 16 | SM111E00ABA0A0NNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 31,0 |
| DN 80 | 3" | PN 25-40 | SM111I00ABA0A0NNV000AFLA0 | SRN0240401S | KCNDEHD5330 | 520,3 | 318,0 | 34,0 |
| DN 100 | 4" | PN 16 | SM112E00ABA0A0NNV000AFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,0 |
| DN 100 | 4" | PN 25-40 | SM112I00ABA0A0NNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 379,0 | 59,5 |
| **MISURA** *SIZE* **DN [mm]** | **[inch]** | **PN** | **CODICE ARTICOLO -CF8M-** *ITEM CODE -CF8M-* | **ATTUATORE** *ACTUATOR* | **KIT di montaggio** *Mounting KIT* | **N [mm]** | **H [mm]** | **Peso Kg** *Weight Kg* |
| DN 50 | 2" | PN 16 | SM109E00AEA0A0NNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 12,9 |
| DN 65 | 2" 1/2 | PN 16 | SM110E00AEA0A0NNV000AFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 18,5 |
| DN 80 | 3" | PN 16 | SM111E00AEA0A0NNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 23,5 |
| DN 100 | 4" | PN 16 | SM112E00AEA0A0NNV000AFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 39,3 |

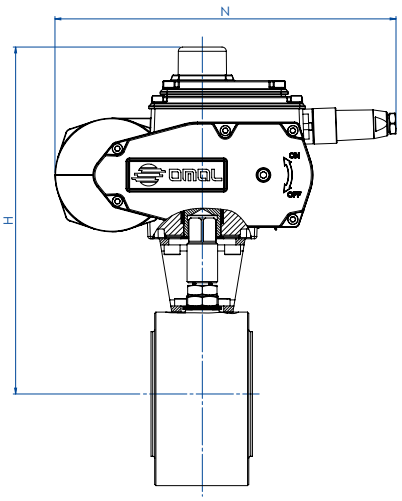
### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | SM104101ABA0A0NNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 154,2 | 3,0 |
| DN 15 | 1/2" | ANSI 300 | SM104201ABA0A0NNV000AFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,0 |
| DN 20 | 3/4" | ANSI 150 | SM105101ABA0A0NNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,4 |
| DN 20 | 3/4" | ANSI 300 | SM105201ABA0A0NNV000AFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 4,7 |
| DN 25 | 1" | ANSI 150 | SM106101ABA0A0NNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 5,1 |
| DN 25 | 1" | ANSI 300 | SM106201ABA0A0NNV000AFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 5,6 |
| DN 32 | 1" 1/4 | ANSI 150 | SM107101ABA0A0NNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 300 | SM107201ABA0A0NNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,0 |
| DN 40 | 1" 1/2 | ANSI 150 | SM108101ABA0A0NNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 9,3 |
| DN 40 | 1" 1/2 | ANSI 300 | SM108201ABA0A0NNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,2 |
| DN 50 | 2" | ANSI 150 | SM109101ABA0A0NNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,1 |
| DN 50 | 2" | ANSI 300 | SM109201ABA0A0NNV000AFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 18,3 |
| DN 65 | 2" 1/2 | ANSI 150 | SM110101ABA0A0NNV000AFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | ANSI 300 | SM110201ABA0A0NNV000AFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,2 |
| DN 80 | 3" | ANSI 150 | SM111101ABA0A0NNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,4 |
| DN 80 | 3" | ANSI 300 | SM111201ABA0A0NNV000AFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 324,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM112101ABA0A0NNV000AFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 359,0 | 53,1 |
| DN 100 | 4" | ANSI 300 | SM112201ABA0A0NNV000AFNA0 | SRN0480401S | KCNEFHD5334 | 648,2 | 393,0 | 72,4 |

*Sfera non contenuta *Protruding ball*

# MAGNUM WAFER - PN 16-40 ANSI 150-300
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






## CODICI ARTICOLI IN 316 E CF8M ACCIAIO INOX -PN- *ITEM CODES IN 316 AND CF8M STAINLESS STEEL -PN-*

| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | EM104F00ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 20 | 3/4" | PN 16-40 | EM105F00ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 25 | 1" | PN 16-40 | EM106F00ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107F00ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,9 |
| DN 32 | 1" 1/4 | PN 16-40 | EM107S00ABA0A0NNV000AMGG0 * | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM108F00ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 9,5 |
| DN 50 | 2" | PN 16-40 | EM109F00ABA0A0NNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,4 |
| DN 65 | 2" 1/2 | PN 16 | EM110E00ABA0A0NNV000AMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | EM110I00ABA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 24,0 |
| DN 80 | 3" | PN 16-40 | EM111F00ABA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,5 |
| DN 100 | 4" | PN 16 | EM112E00ABA0A0NNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | PN 25-40 | EM112I00ABA0A0NNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 352,5 | 49,5 |
| MISURA *SIZE* | | PN | CODICE ARTICOLO -CF8M- *ITEM CODE -CF8M-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
| DN [mm] | [inch] | | | | | | | |
| DN 50 | 2" | PN 16 | EM109E00AEA0A0NNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 13,8 |
| DN 65 | 2" 1/2 | PN 16 | EM110E00AEA0A0NNV000AMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 17,2 |
| DN 80 | 3" | PN 16 | EM111E00AEA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 20 |
| DN 100 | 4" | PN 16 | EM112E00AEA0A0NNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 30,8 |

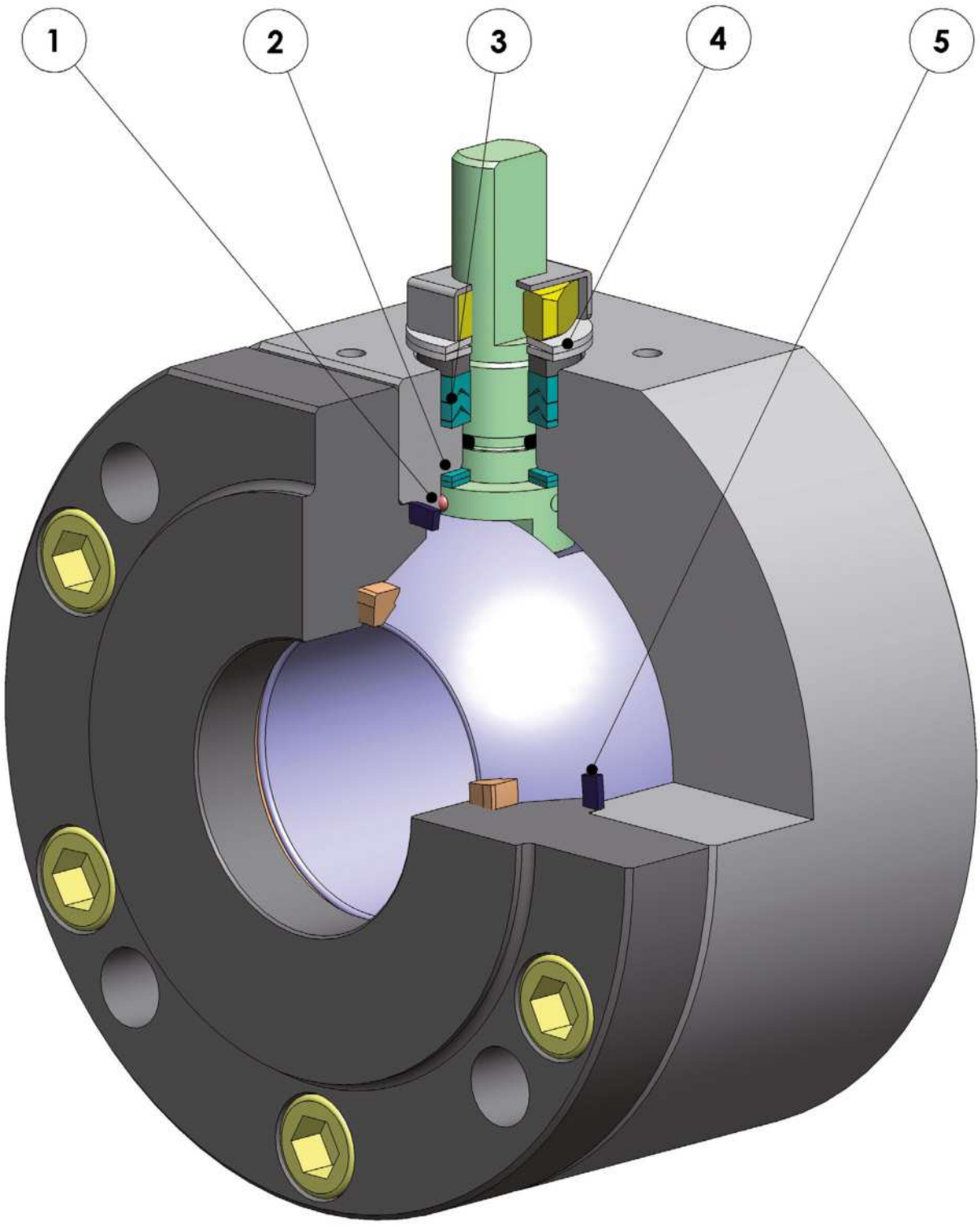
## CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | EM104101ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 5,0 |
| DN 15 | 1/2" | ANSI 300 | EM104201ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 5,0 |
| DN 20 | 3/4" | ANSI 150 | EM105101ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 5,4 |
| DN 20 | 3/4" | ANSI 300 | EM105201ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 5,7 |
| DN 25 | 1" | ANSI 150 | EM106101ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 6,1 |
| DN 25 | 1" | ANSI 300 | EM106201ABA0A0NNV000AMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 6,5 |
| DN 32 | 1" 1/4 | ANSI 150 | EM107101ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,1 |
| DN 32 | 1" 1/4 | ANSI 300 | EM107201ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 7,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM108101ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 8,8 |
| DN 40 | 1" 1/2 | ANSI 300 | EM108201ABA0A0NNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 10,8 |
| DN 50 | 2" | ANSI 150 | EM109101ABA0A0NNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 16,6 |
| DN 50 | 2" | ANSI 300 | EM109201ABA0A0NNV000AMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 17,9 |
| DN 65 | 2" 1/2 | ANSI 150 | EM110101ABA0A0NNV000AMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,0 |
| DN 65 | 2" 1/2 | ANSI 300 | EM110201ABA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 26,1 |
| DN 80 | 3" | ANSI 150 | EM111101ABA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 27,9 |
| DN 80 | 3" | ANSI 300 | EM111201ABA0A0NNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 31,5 |
| DN 100 | 4" | ANSI 150 | EM112101ABA0A0NNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 338,5 | 44,5 |
| DN 100 | 4" | ANSI 300 | EM112201ABA0A0NNV000AMNA0 | AE160040 | KCNEEHV5338 | 256,5 | 352,5 | 57,0 |

*Sfera non contenuta *Protruding ball*

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

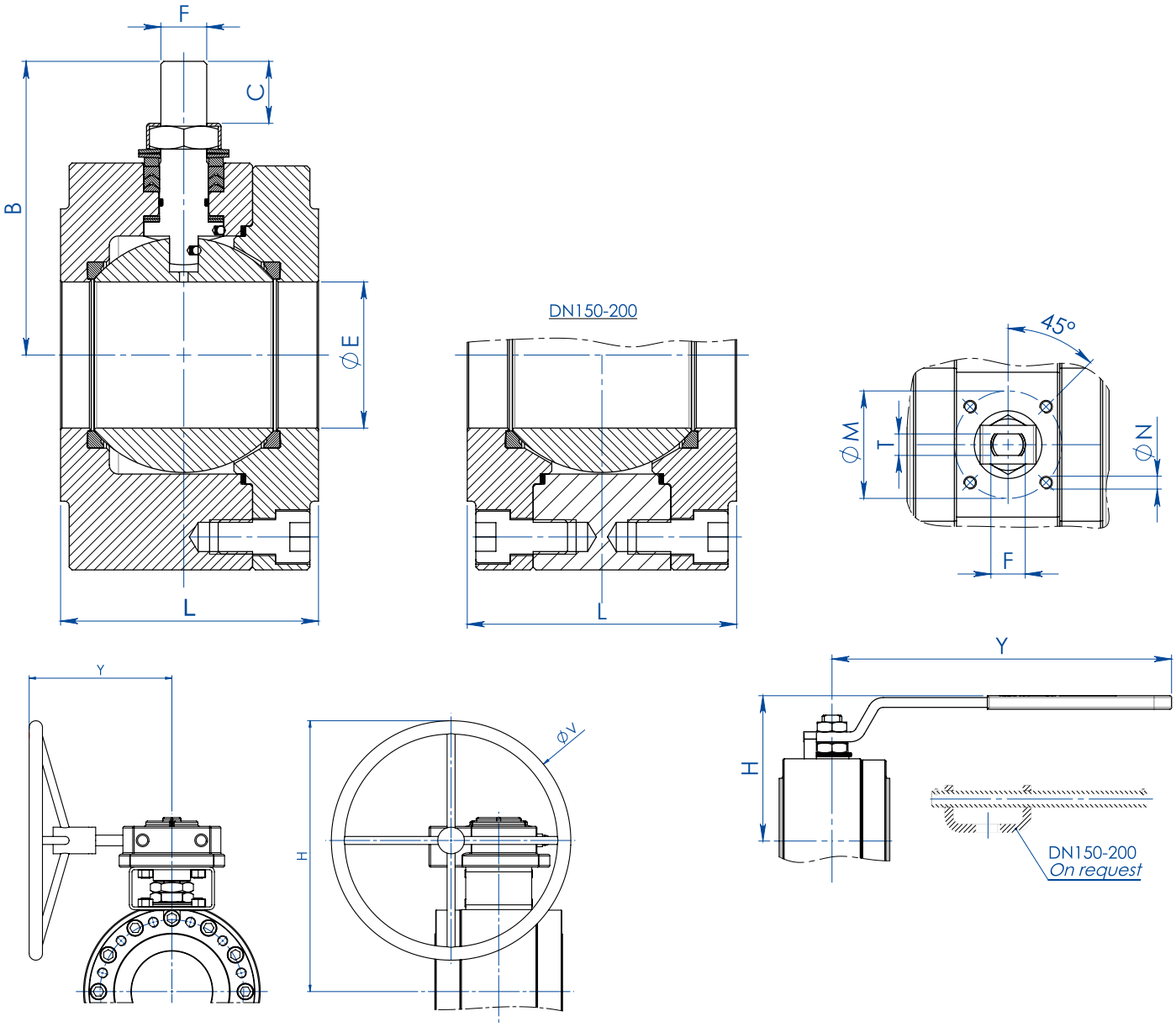
# MAGNUM SPLIT WAFER



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Breakaway Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "v" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite vero l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizoini tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less breakaway torque* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

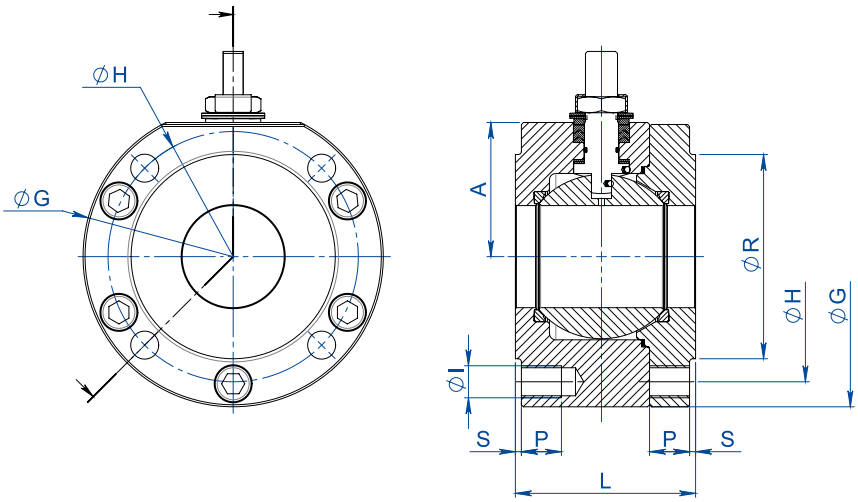
# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300




| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ØE** | **L** | **B** | **C** | **ATT.ISO** | **ØM** | **ØN** | **F/T** | **H** | **Y** | **ØV** | **KIT LEVA** *LEVER KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | |
| DN 15 | 1/2" | 13 | 53 | 52 | 10 | F03 | 36 | M5 | 10/6 | 71 | 140 | --- | KLV58004 |
| DN 20 | 3/4" | 19 | 53 | 55 | 10 | F03 | 36 | M5 | 10/6 | 73 | 140 | --- | KLV58004 |
| DN 25 | 1" | 25 | 58 | 68 | 15 | F04 | 42 | M5 | 12/8 | 87 | 150 | --- | KLV58006 |
| DN 32 | 1" 1/4 | 32 | 65 | 73 | 15 | F04 | 42 | M5 | 12/8 | 91 | 150 | --- | KLV58006 |
| DN 40 | 1" 1/2 | 38 | 79 | 93 | 21 | F05 | 50 | M6 | 16/10 | 108 | 275 | --- | KLV58008 |
| DN 50 | 2" | 51 | 90 | 102 | 21 | F05 | 50 | M6 | 16/10 | 118 | 275 | --- | KLV58008 |
| DN 65 | 2" 1/2 | 64 | 107 | 130,5 | 28 | F07 | 70 | M8 | 22/14 | 143 | 350 | --- | KLV58010 |
| DN 80 | 3" | 76 | 120 | 137,5 | 28 | F07 | 70 | M8 | 22/14 | 150 | 350 | --- | KLV58010 |
| DN 100 | 4" | 102 | 167 | 172 | 35 | F10 | 102 | M10 | 30/18 | 198 | 450 | --- | KLV58012 |
| DN 125 | 5" | 118 | 180 | 182 | 35 | F10 | 102 | M10 | 30/18 | 208 | 450 | --- | KLV58012 |
| DN 150 PN16-ANSI150 (*) | 6" | 152 | 240 | 227,5 | 40,5 | F14 | 140 | M16 | 45/30 | 522 | 326 | 400 | --- |
| DN 150 PN25-40 - ANSI300 | 6" | 152 | 240 | 227,5 | 40,5 | F14 | 140 | M16 | 45/30 | 522 | 347,5 | 600 | --- |
| DN 200 PN16-PN25-ANSI150 (*) | 8" | 203 | 314 | 274 | 44,8 | F14 | 140 | M16 | 52/35 | 516 | 347 | 500 | --- |
| DN 200 PN40 | 8" | 203 | 314 | 274 | 44,8 | F14 | 140 | M16 | 52/35 | 614 | 348 | 500 | --- |

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300




## DIMENSIONI *DIMENSIONS* -PN-

| MISURA *SIZE* DN [mm] | [inch] | PN | A | ØG | ØR | S | ØH | N°FORI *HOLES N°* | ØI | P | Kg | L | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16-40 | 32 | 90 | 45 | 2 | 65 | 4 | M12 | 15 | 2,1 | 53 | KGBV485040 |
| DN 20 | 3/4" | PN 16-40 | 35 | 100 | 58 | 2 | 75 | 4 | M12 | 14 | 2,4 | 53 | KGBV485050 |
| DN 25 | 1" | PN 16-40 | 42 | 110 | 68 | 2 | 85 | 4 | M12 | 16 | 3,5 | 58 | KGBV485060 |
| DN 32 | 1" 1/4 | PN 16-40 | 47 | 130 | 78 | 2 | 100 | 4 | M16 | 20 | 5,2 | 65 | KGBV485070 |
| DN 40 | 1" 1/2 | PN 16-40 | 58 | 140 | 88 | 3 | 110 | 4 | M16 | 20 | 7,5 | 79 | KGBV485080 |
| DN 50 | 2" | PN 16-40 | 67 | 150 | 102 | 3 | 125 | 4 | M16 | 20 | 9,7 | 90 | KGBV485090 |
| DN 65 | 2" 1/2 | PN 16 | 83 | 178 | 122 | 3 | 145 | 4 | M16 | 20 | 16,4 | 107 | KGBV485100 |
| DN 65 | 2" 1/2 | PN 25-40 | 83 | 178 | 122 | 3 | 145 | 8 | M16 | 20 | 16,1 | 107 | KGBV485100 |
| DN 80 | 3" | PN 16-40 | 90 | 190 | 138 | 3 | 160 | 8 | M16 | 20 | 20,2 | 120 | KGBV485110 |
| DN 100 | 4" | PN 16 | 107 | 235 | 158 | 3 | 180 | 8 | M16 | 20 | 40,4 | 167 | KGBV485120 |
| DN 100 | 4" | PN 25-40 | 107 | 235 | 162 | 3 | 190 | 8 | M20 | 25 | 40,5 | 167 | KGBV485120 |
| DN 125 | 5" | PN 16 | 117 | 250 | 188 | 3 | 210 | 8 | M16 | 25 | 48,2 | 180 | KGBV485130 |
| DN 125 | 5" | PN 25-40 | 125 | 270 | 188 | 3 | 220 | 8 | M24 | 30 | 57,9 | 180 | KGBV485130 |
| DN 150(*) | 6" | PN 16 | 154 | 332 | 212 | 3 | 240 | 8 | M20 | 25 | 109,3 | 240 | KGBV485140 |
| DN 150 | 6" | PN 25-40 | 154 | 332 | 218 | 3 | 250 | 8 | M24 | 24 | 111,5 | 240 | KGBV48514D |
| DN 200(*) | 8" | PN 16 | 188 | 396 | 268 | 3 | 295 | 12 | M20 | 30 | 191,8 | 314 | KGBV485150 |
| DN 200(*) | 8" | PN 25 | 188 | 396 | 278 | 3 | 310 | 12 | M24 | 30 | 196,5 | 314 | KGBV485150 |
| DN 200 | 8" | PN 40 | 195 | 408 | 285 | 3 | 320 | 12 | M27 | 30 | 220 | 314 | KGBV48515D |

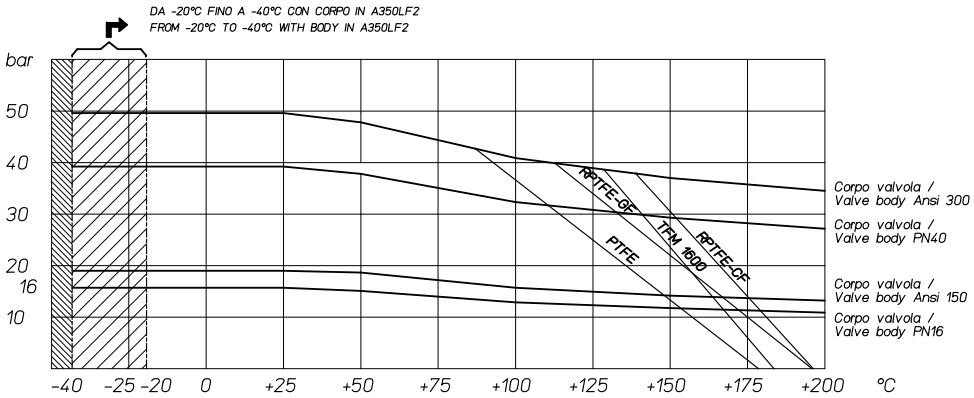
## DIMENSIONI *DIMENSIONS* -ANSI-

| MISURA *SIZE* DN [mm] | [inch] | ANSI | A | ØG | ØR | S | ØH | N°FORI *HOLES N°* | ØI | P | Kg | L | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | 32 | 90 | 34,9 | 1,6 | 60,3 | 4 | 1/2"UNC | 16 | 2,1 | 53 | KGBV485040 |
| DN 15 | 1/2" | ANSI 300 | 34 | 90 | 34,9 | 1,6 | 66,7 | 4 | 1/2"UNC | 16 | 2,1 | 53 | KGBV485040 |
| DN 20 | 3/4" | ANSI 150 | 35 | 100 | 42,9 | 1,6 | 69,8 | 4 | 1/2"UNC | 16 | 2,5 | 53 | KGBV485050 |
| DN 20 | 3/4" | ANSI 300 | 40 | 110 | 42,9 | 1,6 | 82,5 | 4 | 5/8"UNC | 16 | 3,1 | 53 | KGBV485050 |
| DN 25 | 1" | ANSI 150 | 42 | 110 | 50,8 | 1,6 | 79,4 | 4 | 1/2"UNC | 16 | 3,4 | 58 | KGBV485060 |
| DN 25 | 1" | ANSI 300 | 45 | 118 | 50,8 | 1,6 | 88,9 | 4 | 5/8"UNC | 20 | 3,8 | 58 | KGBV485060 |
| DN 32 | 1" 1/4 | ANSI 150 | 47 | 130 | 63,5 | 1,6 | 89 | 4 | 1/2"UNC | 20 | 5,2 | 65 | KGBV485070 |
| DN 32 | 1" 1/4 | ANSI 300 | 47 | 130 | 63,5 | 1,6 | 98,4 | 4 | 5/8"UNC | 20 | 5,2 | 65 | KGBV485070 |
| DN 40 | 1" 1/2 | ANSI 150 | 58 | 140 | 73 | 1,6 | 98,4 | 4 | 1/2"UNC | 20 | 7,5 | 79 | KGBV485080 |
| DN 40 | 1" 1/2 | ANSI 300 | 58 | 150 | 73 | 1,6 | 114,3 | 4 | 3/4"UNC | 22 | 8,6 | 79 | KGBV485080 |
| DN 50 | 2" | ANSI 150 | 67 | 150 | 92,1 | 1,6 | 120,6 | 4 | 5/8"UNC | 20 | 9,7 | 90 | KGBV485090 |
| DN 50 | 2" | ANSI 300 | 73 | 160 | 92,1 | 1,6 | 127,0 | 8 | 5/8"UNC | 20 | 11,2 | 90 | KGBV485090 |
| DN 65 | 2" 1/2 | ANSI 150 | 83 | 178 | 104,8 | 1,6 | 139,7 | 4 | 5/8"UNC | 20 | 16,5 | 107 | KGBV485100 |
| DN 65 | 2" 1/2 | ANSI 300 | 89 | 190 | 104,8 | 1,6 | 149,2 | 8 | 3/4"UNC | 25 | 18,7 | 107 | KGBV485100 |
| DN 80 | 3" | ANSI 150 | 90 | 190 | 127 | 1,6 | 152,4 | 4 | 5/8"UNC | 20 | 20,7 | 120 | KGBV485110 |
| DN 80 | 3" | ANSI 300 | 96 | 205 | 127 | 1,6 | 168,3 | 8 | 3/4"UNC | 25 | 24,0 | 120 | KGBV485110 |
| DN 100 | 4" | ANSI 150 | 107 | 235 | 157,2 | 1,6 | 190,5 | 8 | 5/8"UNC | 20 | 40,7 | 167 | KGBV485120 |
| DN 100 | 4" | ANSI 300 | 115 | 250 | 157,2 | 1,6 | 200,0 | 8 | 3/4"UNC | 25 | 48,2 | 167 | KGBV485120 |
| DN 125 | 5" | ANSI 150 | 117 | 250 | 185,7 | 1,6 | 216 | 8 | 3/4"UNC | 30 | 48,3 | 180 | KGBV485130 |
| DN 150(*) | 6" | ANSI 150 | 154 | 332 | 216 | 1,6 | 241,3 | 8 | 3/4"UNC | 25 | 110,3 | 240 | KGBV485140 |
| DN 150 | 6" | ANSI 300 | 154 | 332 | 216 | 1,6 | 269,9 | 12 | 3/4"UNC | 25 | 112 | 240 | KGBV48514D |
| DN 200(*) | 8" | ANSI 150 | 188 | 396 | 269,9 | 1,6 | 298,5 | 8 | 3/4"UNC | 30 | 193,7 | 314 | KGBV485150 |

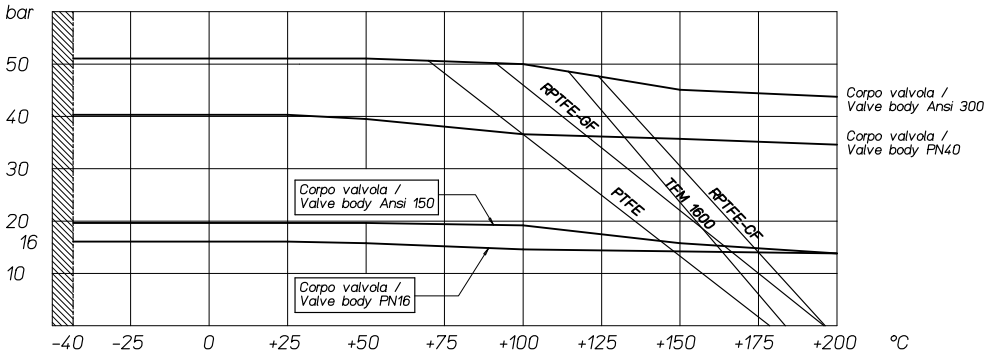
Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300

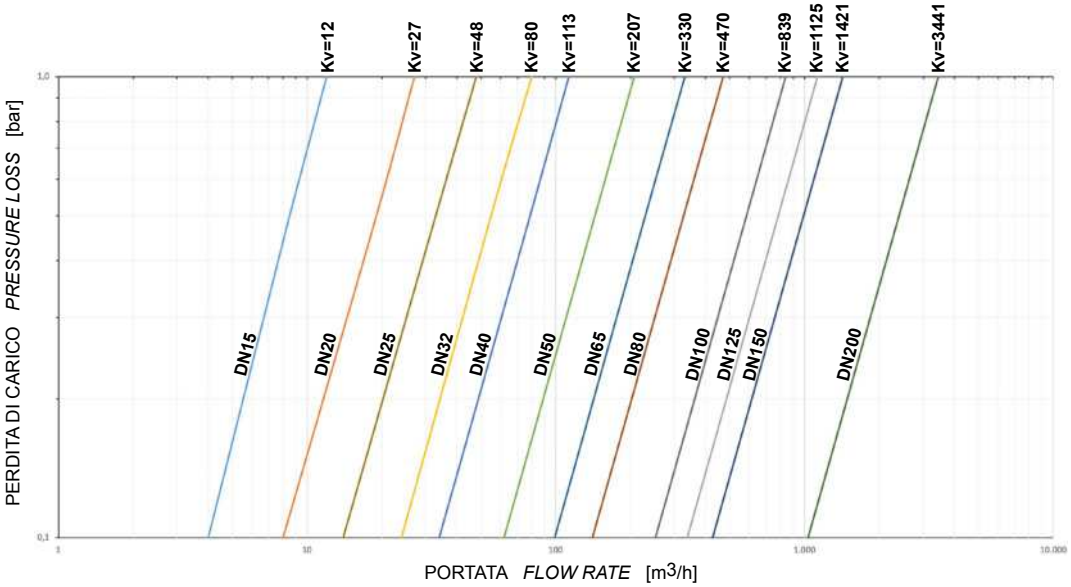
## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*




## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300

| COPPIE DI SPUNTO IN Nm CON SEGGIO IN TFM 1600 E CON FLUIDO INTERCETTATO ACQUA (*)<br>*BREAKAWAY TORQUE IN Nm WITH TFM 1600 SEAT AND WATER INTERCEPTED FLUID (*)* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA *SIZE*** | DN 15 | DN 20 | DN 25 | DN 32 | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 |
| 0 bar | | | | | | | | | | | | |
| PN16 bar | 8 | 13 | 18 | 27 | 37 | 61 | 80 | 120 | 220 | 270 | 450 | 850 |
| PN25 bar | 9,5 | 15 | 20 | 29 | 40 | 67 | 95 | 130 | 240 | 383 | | |
| PN40 bar | 11 | 17 | 21 | 31 | 41 | 75 | 110 | 165 | 290 | 510 | | |
| Ansi 150-20 bar | 9 | 14 | 19 | 28 | 38 | 65 | 90 | 128 | 225 | 360 | 480 | 910 |
| Ansi 300-50 bar | 12 | 19 | 21 | 32 | 42 | 80 | 120 | 170 | 300 | 570 | | |

*(*): qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto riportato in tabella*
*(*): If not lubricated fluids and/or fluids containing solid particles are intercepted, torques could be higher than those in the table.*

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4. Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied. Torque can drop on high frequency of operation.*

**Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.**
***The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.***

# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat TFM 1600.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

## *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN16-40; ANSI 150-300.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40 C° in LF2.
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40 C°).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF) *. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating ,epoxy coating.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate* **ON REQUEST.**

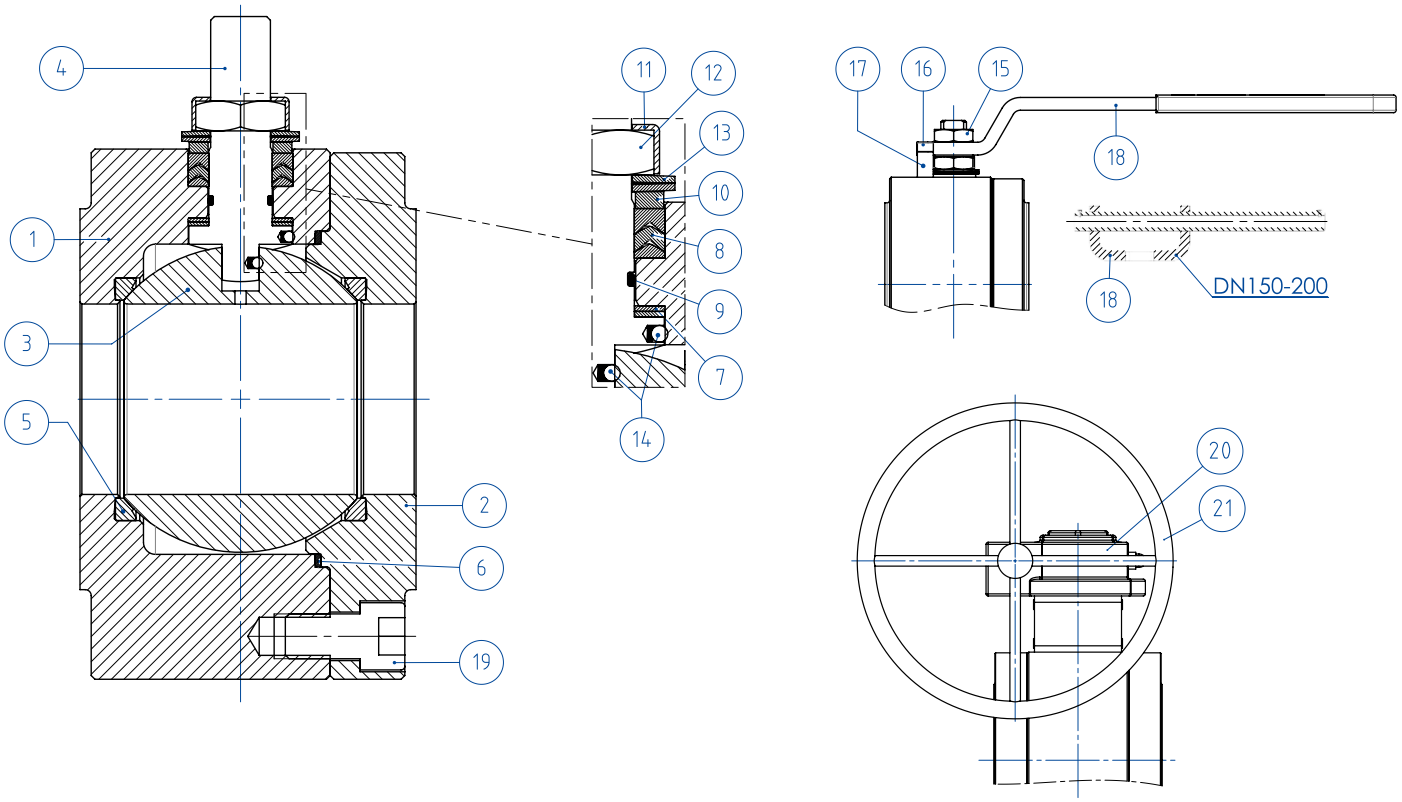
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate* ***ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT WAFER PN16-40 ANSI 150-300 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Ghiera *Ring nut* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | ASTM A182F6A / A479 TP.410 (**) | ASTM A182F6A / A479 TP.410 (**) |
| 5* | Seggio *Seat* | TFM1600 (.) (2) | TFM1600 (.) (2) |
| 6* | Guarnizione corpo ghiera *Body-ring nut gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 18 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) | Fe37 zincato - *Galvanized* (x) |
| 19 | Vite corpo-ghiera *Body-ring nut screw* | 8.8 UNI 3740 *Galvanized* | A2.70 UNI 3740 (304 S.S) |
| 20 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* | Ghisa (verniciato) *Cast iron (painted)* |
| 21 | Volantino *Handwheel* | Fe 42 UNI 7091 | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): A564 TP.630 (17-4PH)
(x): 304 s.s.
(xx): 301 s.s.
(1): per DN150 & 200 disponibile solo in 304 S.S.
*(1): for DN150 & 200 available only in 304 S.S.*
(2) DEVLON per DN150 PN25-40 - ANSI300, DN200 PN40
*(2) DEVLON for DN150 PN25-40 - ANSI300, DN200 PN40*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO - CON LEVA - CON RIDUTTORE *FREE SHAFT - WITH LEVER - WITH GEARBOX*



**CODICI VALVOLE IN ACCIAIO AL CARBONIO: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -PN-**
***CARBON STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -PN-***

| MISURA *SIZE* | | PN | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 16-40 | V/LM404F00CAB0BBQNV00B | V/LM404F00CBB0BAQNV00B |
| DN 20 | 3/4" | PN 16-40 | V/LM405F00CAB0BBQNV00B | V/LM405F00CBB0BAQNV00B |
| DN 25 | 1" | PN 16-40 | V/LM406F00CAB0BBQNV00B | V/LM406F00CBB0BAQNV00B |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM407F00CAB0BBQNV00B | V/LM407F00CBB0BAQNV00B |
| DN 40 | 1" 1/2 | PN 16-40 | V/LM408F00CAB0BBQNV00B | V/LM408F00CBB0BAQNV00B |
| DN 50 | 2" | PN 16-40 | V/LM409F00CAB0BBQNV00B | V/LM409F00CBB0BAQNV00B |
| DN 65 | 2" 1/2 | PN 16 | V/LM410E00CAB0BBQNV00B | V/LM410E00CBB0BAQNV00B |
| DN 65 | 2" 1/2 | PN 25-40 | V/LM410I00CAB0BBQNV00B | V/LM410I00CBB0BAQNV00B |
| DN 80 | 3" | PN 16-40 | V/LM411F00CAB0BBQNV00B | V/LM411F00CBB0BAQNV00B |
| DN 100 | 4" | PN 16 | V/LM412E00CAB0BBQNV00B | V/LM412E00CBB0BAQNV00B |
| DN 100 | 4" | PN 25-40 | V/LM412I00CAB0BBQNV00B | V/LM412I00CBB0BAQNV00B |
| DN 125 | 5" | PN 16 | V/LM413E00CAB0BBQNV00B | V/LM413E00CBB0BAQNV00B |
| DN 125 | 5" | PN 25-40 | V/LM413I00CAB0BBQNV00B | V/LM413I00CBB0BAQNV00B |
| DN150(*) | 6" | PN 16 | V/RM414E00CAB0BBQNV00B | V/RM414E00CBB0BAQNV00B |
| DN150 | 6" | PN 25-40 | V/RM414I00CAB0BBMNV00B | V/RM414I00CBB0BAMNV00B |
| DN200(*) | 8" | PN 16 | V/RM415E00CAB0BBQNV00B | V/RM415E00CBB0BAQNV00B |
| DN200(*) | 8" | PN 25 | V/RM415H00CAB0BBQNV00B | V/RM415H00CBB0BAQNV00B |
| DN200 | 8" | PN 40 | V/RM415J00CAB0BBMNV00B | V/RM415J00CBB0BAMNV00B |

**CODICI VALVOLE IN ACCIAIO AL CARBONIO: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -ANSI-**
***CARBON STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -ANSI-***

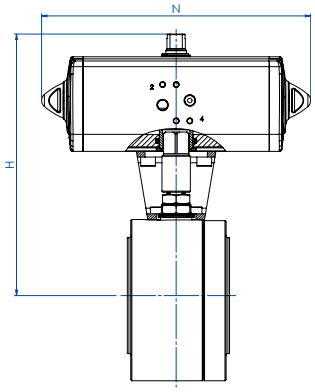
| MISURA *SIZE* | | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 150 | V/LM404101CAB0BBQNV00B | V/LM404101CBB0BAQNV00B |
| DN 15 | 1/2" | ANSI 300 | V/LM404201CAB0BBQNV00B | V/LM404201CBB0BAQNV00B |
| DN 20 | 3/4" | ANSI 150 | V/LM405101CAB0BBQNV00B | V/LM405101CBB0BAQNV00B |
| DN 20 | 3/4" | ANSI 300 | V/LM405201CAB0BBQNV00B | V/LM405201CBB0BAQNV00B |
| DN 25 | 1" | ANSI 150 | V/LM406101CAB0BBQNV00B | V/LM406101CBB0BAQNV00B |
| DN 25 | 1" | ANSI 300 | V/LM406201CAB0BBQNV00B | V/LM406201CBB0BAQNV00B |
| DN 32 | 1" 1/4 | ANSI 150 | V/LM407101CAB0BBQNV00B | V/LM407101CBB0BAQNV00B |
| DN 32 | 1" 1/4 | ANSI 300 | V/LM407201CAB0BBQNV00B | V/LM407201CBB0BAQNV00B |
| DN 40 | 1" 1/2 | ANSI 150 | V/LM408101CAB0BBQNV00B | V/LM408101CBB0BAQNV00B |
| DN 40 | 1" 1/2 | ANSI 300 | V/LM408201CAB0BBQNV00B | V/LM408201CBB0BAQNV00B |
| DN 50 | 2" | ANSI 150 | V/LM409101CAB0BBQNV00B | V/LM409101CBB0BAQNV00B |
| DN 50 | 2" | ANSI 300 | V/LM409201CAB0BBQNV00B | V/LM409201CBB0BAQNV00B |
| DN 65 | 2" 1/2 | ANSI 150 | V/LM410101CAB0BBQNV00B | V/LM410101CBB0BAQNV00B |
| DN 65 | 2" 1/2 | ANSI 300 | V/LM410201CAB0BBQNV00B | V/LM410201CBB0BAQNV00B |
| DN 80 | 3" | ANSI 150 | V/LM411101CAB0BBQNV00B | V/LM411101CBB0BAQNV00B |
| DN 80 | 3" | ANSI 300 | V/LM411201CAB0BBQNV00B | V/LM411201CBB0BAQNV00B |
| DN 100 | 4" | ANSI 150 | V/LM412101CAB0BBQNV00B | V/LM412101CBB0BAQNV00B |
| DN 100 | 4" | ANSI 300 | V/LM412201CAB0BBQNV00B | V/LM412201CBB0BAQNV00B |
| DN 125 | 5" | ANSI 150 | V/LM413101CAB0BBQNV00B | V/LM413101CBB0BAQNV00B |
| DN150(*) | 6" | ANSI 150 | V/RM414101CAB0BBQNV00B | V/RM414101CBB0BAQNV00B |
| DN150 | 6" | ANSI 300 | V/RM414201CAB0BBMNV00B | V/RM414201CBB0BAMNV00B |
| DN200(*) | 8" | ANSI 150 | V/RM415101CAB0BBQNV00B | V/RM415101CBB0BAQNV00B |

DN200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# MAGNUM SPLIT WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

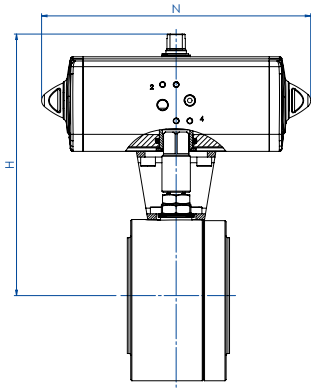
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DM404E00CAB0BBQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,1 | 154,2 | 3,2 |
| DN 15 | 1/2" | PN 25-40 | DM404I00CAB0BBQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 161,2 | 3,5 |
| DN 20 | 3/4" | PN 16-40 | DM405F00CAB0BBQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 164,2 | 3,8 |
| DN 25 | 1" | PN 16-40 | DM406F00CAB0BBQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,3 | 181,2 | 6,0 |
| DN 32 | 1" 1/4 | PN 16-40 | DM407F00CAB0BBQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | PN 16-40 | DM408F00CAB0BBQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 9,8 |
| DN 50 | 2" | PN 16 | DM409E00CAB0BBQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 13,0 |
| DN 50 | 2" | PN 25-40 | DM409I00CAB0BBQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 257,4 | 234,0 | 13,1 |
| DN 65 | 2" 1/2 | PN 16 | DM410E00CAB0BBQNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 19,9 |
| DN 65 | 2" 1/2 | PN 25-40 | DM410I00CAB0BBQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 21,8 |
| DN 80 | 3" | PN 16 | DM411E00CAB0BBQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,9 |
| DN 80 | 3" | PN 25-40 | DM411I00CAB0BBQNV00BAFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,7 |
| DN 100 | 4" | PN 16 | DM412E00CAB0BBQNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 51,7 |
| DN 100 | 4" | PN 25-40 | DM412I00CAB0BBQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,7 | 387,7 | 52,7 |
| DN 125 | 5" | PN 16 | DM413E00CAB0BBQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,7 | 362,0 | 60,4 |
| DN 125 | 5" | PN 25-40 | DM413I00CAB0BBQNV00BAFMA0 | DAN0720411S | KCNEFHD5348 | 433,0 | 383,0 | 72,6 |
| DN 150 | 6" | PN 16 | DM414E00CAB0BBQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,0 | 432,0 | 127,0 |
| DN 150 | 6" | PN 25-40 | DM414I00CAB0BBMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 150,4 |
| DN 200 | 8" | PN 16 | DM415E00CAB0BBQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,0 | 524,0 | 222,0 |
| DN 200 | 8" | PN 25 | DM415H00CAB0BBQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,0 | 524,0 | 224,7 |
| DN 200 | 8" | PN 40 | DM415J00CAB0BBMNV00BAFSA0 | DA2880E16D0A | KCNGHHD5367 | 667,0 | 654,0 | 343,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DM404E00CBB0BAQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,1 | 154,2 | 3,2 |
| DN 15 | 1/2" | PN 25-40 | DM404I00CBB0BAQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 161,2 | 3,5 |
| DN 20 | 3/4" | PN 16-40 | DM405F00CBB0BAQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 164,2 | 3,8 |
| DN 25 | 1" | PN 16-40 | DM406F00CBB0BAQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,3 | 181,2 | 6,0 |
| DN 32 | 1" 1/4 | PN 16-40 | DM407F00CBB0BAQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | PN 16-40 | DM408F00CBB0BAQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 9,8 |
| DN 50 | 2" | PN 16 | DM409E00CBB0BAQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 13,0 |
| DN 50 | 2" | PN 25-40 | DM409I00CBB0BAQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 257,4 | 234,0 | 13,1 |
| DN 65 | 2" 1/2 | PN 16 | DM410E00CBB0BAQNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 19,9 |
| DN 65 | 2" 1/2 | PN 25-40 | DM410I00CBB0BAQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 21,8 |
| DN 80 | 3" | PN 16 | DM411E00CBB0BAQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,9 |
| DN 80 | 3" | PN 25-40 | DM411I00CBB0BAQNV00BAFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,7 |
| DN 100 | 4" | PN 16 | DM412E00CBB0BAQNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 51,7 |
| DN 100 | 4" | PN 25-40 | DM412I00CBB0BAQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,7 | 387,7 | 52,7 |
| DN 125 | 5" | PN 16 | DM413E00CBB0BAQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,7 | 362,0 | 60,4 |
| DN 125 | 5" | PN 25-40 | DM413I00CBB0BAQNV00BAFMA0 | DAN0720411S | KCNEFHD5348 | 433,0 | 383,0 | 72,6 |
| DN 150 | 6" | PN 16 | DM414E00CBB0BAQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,0 | 432,0 | 127,0 |
| DN 150 | 6" | PN 25-40 | DM414I00CBB0BAMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 150,4 |
| DN 200 | 8" | PN 16 | DM415E00CBB0BAQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,0 | 524,0 | 222,0 |
| DN 200 | 8" | PN 25 | DM415H00CBB0BAQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,0 | 524,0 | 224,7 |
| DN 200 | 8" | PN 40 | DM415J00CBB0BAMNV00BAFSA0 | DA2880E16D0A | KCNGHHD5367 | 667,0 | 654,0 | 343,3 |

# MAGNUM SPLIT WAFER - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

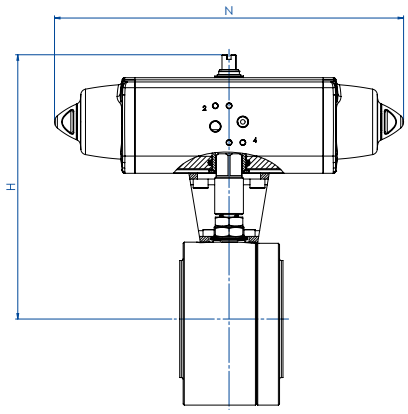
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DM404101CAB0BBQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 3,2 |
| DN 15 | 1/2" | ANSI 300 | DM404201CAB0BBQNV00BAFCA0 | DAN0030411S | KCNAAHD5313 | 174,2 | 163,2 | 3,5 |
| DN 20 | 3/4" | ANSI 150 | DM405101CAB0BBQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,9 |
| DN 20 | 3/4" | ANSI 300 | DM405201CAB0BBQNV00BAFCA0 | DAN0030411S | KCNAAHD5314 | 174,2 | 169,2 | 4,5 |
| DN 25 | 1" | ANSI 150 | DM406101CAB0BBQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 5,0 |
| DN 25 | 1" | ANSI 300 | DM406201CAB0BBQNV00BAFCA0 | DAN0030411S | KCNBCHD5249 | 174,2 | 184,2 | 5,4 |
| DN 32 | 1" 1/4 | ANSI 150 | DM407101CAB0BBQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DM407201CAB0BBQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | ANSI 150 | DM408101CAB0BBQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 202,5 | 9,8 |
| DN 40 | 1" 1/2 | ANSI 300 | DM408201CAB0BBQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 10,9 |
| DN 50 | 2" | ANSI 150 | DM409101CAB0BBQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 13,0 |
| DN 50 | 2" | ANSI 300 | DM409201CAB0BBQNV00BAFHA0 | DAN0120411S | KCNCCHD5267 | 244,1 | 240,0 | 14,6 |
| DN 65 | 2" 1/2 | ANSI 150 | DM410101CAB0BBQNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 20,0 |
| DN 65 | 2" 1/2 | ANSI 300 | DM410201CAB0BBQNV00BAFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 25,0 |
| DN 80 | 3" | ANSI 150 | DM411101CAB0BBQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 26,4 |
| DN 80 | 3" | ANSI 300 | DM411201CAB0BBQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 31,1 |
| DN 100 | 4" | ANSI 150 | DM412101CAB0BBQNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 335,0 | 48,9 |
| DN 100 | 4" | ANSI 300 | DM412201CAB0BBQNV00BAFLA0 | DAN0480411S | KCNEFHD5348 | 387,6 | 359,9 | 60,5 |
| DN 125 | 5" | ANSI 150 | DM413101CAB0BBQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 60,5 |
| DN 150 | 6" | ANSI 150 | DM414101CAB0BBQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 412,0 | 126,7 |
| DN 150 | 6" | ANSI 300 | DM414201CAB0BBMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 150,9 |
| DN 200 | 8" | ANSI 150 | DM415101CAB0BBQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 484,0 | 221,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DM404101CBB0BAQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 3,2 |
| DN 15 | 1/2" | ANSI 300 | DM404201CBB0BAQNV00BAFCA0 | DAN0030411S | KCNAAHD5313 | 174,2 | 163,2 | 3,5 |
| DN 20 | 3/4" | ANSI 150 | DM405101CBB0BAQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,9 |
| DN 20 | 3/4" | ANSI 300 | DM405201CBB0BAQNV00BAFCA0 | DAN0030411S | KCNAAHD5314 | 174,2 | 169,2 | 4,5 |
| DN 25 | 1" | ANSI 150 | DM406101CBB0BAQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 5,0 |
| DN 25 | 1" | ANSI 300 | DM406201CBB0BAQNV00BAFCA0 | DAN0030411S | KCNBCHD5249 | 174,2 | 184,2 | 5,4 |
| DN 32 | 1" 1/4 | ANSI 150 | DM407101CBB0BAQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DM407201CBB0BAQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | ANSI 150 | DM408101CBB0BAQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 202,5 | 9,8 |
| DN 40 | 1" 1/2 | ANSI 300 | DM408201CBB0BAQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 10,9 |
| DN 50 | 2" | ANSI 150 | DM409101CBB0BAQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 13,0 |
| DN 50 | 2" | ANSI 300 | DM409201CBB0BAQNV00BAFHA0 | DAN0120411S | KCNCCHD5267 | 244,1 | 240,0 | 14,6 |
| DN 65 | 2" 1/2 | ANSI 150 | DM410101CBB0BAQNV00BAFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 20,0 |
| DN 65 | 2" 1/2 | ANSI 300 | DM410201CBB0BAQNV00BAFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 25,0 |
| DN 80 | 3" | ANSI 150 | DM411101CBB0BAQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 26,4 |
| DN 80 | 3" | ANSI 300 | DM411201CBB0BAQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 31,1 |
| DN 100 | 4" | ANSI 150 | DM412101CBB0BAQNV00BAFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 335,0 | 48,9 |
| DN 100 | 4" | ANSI 300 | DM412201CBB0BAQNV00BAFLA0 | DAN0480411S | KCNEFHD5348 | 387,6 | 359,9 | 60,5 |
| DN 125 | 5" | ANSI 150 | DM413101CBB0BAQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 60,5 |
| DN 150 | 6" | ANSI 150 | DM414101CBB0BAQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 412,0 | 126,7 |
| DN 150 | 6" | ANSI 300 | DM414201CBB0BAMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 150,9 |
| DN 200 | 8" | ANSI 150 | DM415101CBB0BAQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 484,0 | 221,9 |

# MAGNUM SPLIT WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

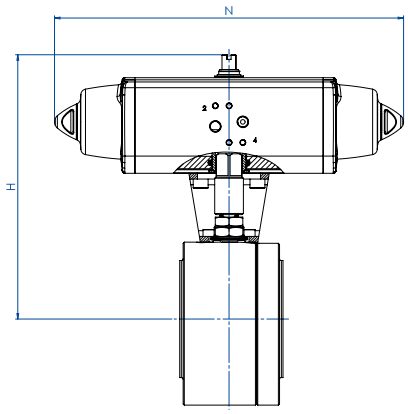
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | SM404E00CAB0BBQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | PN 25-40 | SM404I00CAB0BBQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 4,6 |
| DN 20 | 3/4" | PN 16-40 | SM405F00CAB0BBQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 25 | 1" | PN 16-40 | SM406F00CAB0BBQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | SM407F00CAB0BBQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | PN 16-40 | SM408F00CAB0BBQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 50 | 2" | PN 16 | SM409E00CAB0BBQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | PN 25-40 | SM409I00CAB0BBQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 17,6 |
| DN 65 | 2" 1/2 | PN 16 | SM410E00CAB0BBQNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | PN 25-40 | SM410I00CAB0BBQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 26,1 |
| DN 80 | 3" | PN 16 | SM411E00CAB0BBQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,2 |
| DN 80 | 3" | PN 25-40 | SM411I00CAB0BBQNV00BAFLA0 | SRN0240401S | KCNDEHD5330 | 520,5 | 335,0 | 33,8 |
| DN 100 | 4" | PN 16 | SM412E00CAB0BBQNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 59,5 |
| DN 100 | 4" | PN 25-40 | SM412I00CAB0BBQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 385,0 | 66,3 |
| DN 125 | 5" | PN 16 | SM413E00CAB0BBQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,0 |
| DN 125 | 5" | PN 25-40 | SM413I00CAB0BBQNV00BAFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 94,5 |
| DN 150 | 6" | PN 16 | SM414E00CAB0BBQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 147,4 |
| DN 150 | 6" | PN 25-40 | SM414I00CAB0BBMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,4 |
| DN 200 | 8" | PN 16 | SM415E00CAB0BBQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 272,0 |
| DN 200 | 8" | PN 25 | SM415H00CAB0BBQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 276,7 |
| DN 200 | 8" | PN 40 | SM415J00CAB0BBMNV00BAFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 343,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | SM404E00CBB0BAQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | PN 25-40 | SM404I00CBB0BAQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 4,6 |
| DN 20 | 3/4" | PN 16-40 | SM405F00CBB0BAQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 25 | 1" | PN 16-40 | SM406F00CBB0BAQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | SM407F00CBB0BAQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | PN 16-40 | SM408F00CBB0BAQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 50 | 2" | PN 16 | SM409E00CBB0BAQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | PN 25-40 | SM409I00CBB0BAQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 17,6 |
| DN 65 | 2" 1/2 | PN 16 | SM410E00CBB0BAQNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | PN 25-40 | SM410I00CBB0BAQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 26,1 |
| DN 80 | 3" | PN 16 | SM411E00CBB0BAQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,2 |
| DN 80 | 3" | PN 25-40 | SM411I00CBB0BAQNV00BAFLA0 | SRN0240401S | KCNDEHD5330 | 520,5 | 335,0 | 33,8 |
| DN 100 | 4" | PN 16 | SM412E00CBB0BAQNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 59,5 |
| DN 100 | 4" | PN 25-40 | SM412I00CBB0BAQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 385,0 | 66,3 |
| DN 125 | 5" | PN 16 | SM413E00CBB0BAQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,0 |
| DN 125 | 5" | PN 25-40 | SM413I00CBB0BAQNV00BAFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 94,5 |
| DN 150 | 6" | PN 16 | SM414E00CBB0BAQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 147,4 |
| DN 150 | 6" | PN 25-40 | SM414I00CBB0BAMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,4 |
| DN 200 | 8" | PN 16 | SM415E00CBB0BAQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 272,0 |
| DN 200 | 8" | PN 25 | SM415H00CBB0BAQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 276,7 |
| DN 200 | 8" | PN 40 | SM415J00CBB0BAMNV00BAFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 343,3 |

# MAGNUM SPLIT WAFER - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

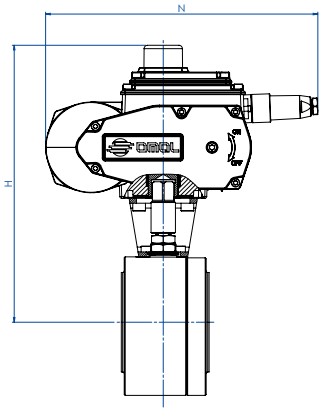
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | SM404101CAB0BBQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | ANSI 300 | SM404201CAB0BBQNV00BAFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,6 |
| DN 20 | 3/4" | ANSI 150 | SM405101CAB0BBQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 20 | 3/4" | ANSI 300 | SM405201CAB0BBQNV00BAFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 5,6 |
| DN 25 | 1" | ANSI 150 | SM406101CAB0BBQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,0 |
| DN 25 | 1" | ANSI 300 | SM406201CAB0BBQNV00BAFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 6,4 |
| DN 32 | 1" 1/4 | ANSI 150 | SM407101CAB0BBQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 32 | 1" 1/4 | ANSI 300 | SM407201CAB0BBQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | ANSI 150 | SM408101CAB0BBQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 40 | 1" 1/2 | ANSI 300 | SM408201CAB0BBQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 12,7 |
| DN 50 | 2" | ANSI 150 | SM409101CAB0BBQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | ANSI 300 | SM409201CAB0BBQNV00BAFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 19,1 |
| DN 65 | 2" 1/2 | ANSI 150 | SM410101CAB0BBQNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 300 | SM410201CAB0BBQNV00BAFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,3 |
| DN 80 | 3" | ANSI 150 | SM411101CAB0BBQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,7 |
| DN 80 | 3" | ANSI 300 | SM411201CAB0BBQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM412101CAB0BBQNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 56,8 |
| DN 100 | 4" | ANSI 300 | SM412201CAB0BBQNV00BAFNA0 | SRN0480401S | KCNEFHD5389 | 648,2 | 393,0 | 74,2 |
| DN 125 | 5" | ANSI 150 | SM413101CAB0BBQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,1 |
| DN 150 | 6" | ANSI 150 | SM414101CAB0BBQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 148,4 |
| DN 150 | 6" | ANSI 300 | SM414201CAB0BBMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,9 |
| DN 200 | 8" | ANSI 150 | SM415101CAB0BBQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 273,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | SM404101CBB0BAQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | ANSI 300 | SM404201CBB0BAQNV00BAFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,6 |
| DN 20 | 3/4" | ANSI 150 | SM405101CBB0BAQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 20 | 3/4" | ANSI 300 | SM405201CBB0BAQNV00BAFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 5,6 |
| DN 25 | 1" | ANSI 150 | SM406101CBB0BAQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,0 |
| DN 25 | 1" | ANSI 300 | SM406201CBB0BAQNV00BAFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 6,4 |
| DN 32 | 1" 1/4 | ANSI 150 | SM407101CBB0BAQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 32 | 1" 1/4 | ANSI 300 | SM407201CBB0BAQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | ANSI 150 | SM408101CBB0BAQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 40 | 1" 1/2 | ANSI 300 | SM408201CBB0BAQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 12,7 |
| DN 50 | 2" | ANSI 150 | SM409101CBB0BAQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | ANSI 300 | SM409201CBB0BAQNV00BAFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 19,1 |
| DN 65 | 2" 1/2 | ANSI 150 | SM410101CBB0BAQNV00BAFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 300 | SM410201CBB0BAQNV00BAFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,3 |
| DN 80 | 3" | ANSI 150 | SM411101CBB0BAQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,7 |
| DN 80 | 3" | ANSI 300 | SM411201CBB0BAQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM412101CBB0BAQNV00BAFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 56,8 |
| DN 100 | 4" | ANSI 300 | SM412201CBB0BAQNV00BAFNA0 | SRN0480401S | KCNEFHD5389 | 648,2 | 393,0 | 74,2 |
| DN 125 | 5" | ANSI 150 | SM413101CBB0BAQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,1 |
| DN 150 | 6" | ANSI 150 | SM414101CBB0BAQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 148,4 |
| DN 150 | 6" | ANSI 300 | SM414201CBB0BAMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,9 |
| DN 200 | 8" | ANSI 150 | SM415101CBB0BAQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 273,9 |

# MAGNUM SPLIT WAFER - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | EM404F00CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | EM405F00CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,6 |
| DN 25 | 1" | PN 16-40 | EM406F00CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,7 |
| DN 32 | 1" 1/4 | PN 16-40 | EM407F00CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM408F00CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 50 | 2" | PN 16-40 | EM409F00CAB0BBQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,7 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | EM410E00CAB0BBQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,8 |
| DN 65 | 2" 1/2 | PN 25-40 | EM410I00CAB0BBQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 24,7 |
| DN 80 | 3" | PN 16-40 | EM411F00CAB0BBQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 28,8 |
| DN 100 | 4" | PN 16 | EM412E00CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,4 |
| DN 100 | 4" | PN 25-40 | EM412I00CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,5 |
| DN 125 | 5" | PN 16 | EM413E00CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,2 |
| DN 125 | 5" | PN 25-40 | EM413I00CAB0BBQNV00BAMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 81,9 |
| DN 150 | 6" | PN 16 | EM414E00CAB0BBQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 136,0 |
| DN 150 | 6" | PN 25-40 | EM414I00CAB0BBMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 139,7 |
| DN 200 | 8" | PN 16 | EM415E00CAB0BBQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 218,5 |
| DN 200 | 8" | PN 25 | EM415H00CAB0BBQNV00BAMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 224,8 |
| DN 200 | 8" | PN 40 | EM415J00CAB0BBMNV00BAMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 248,3 |

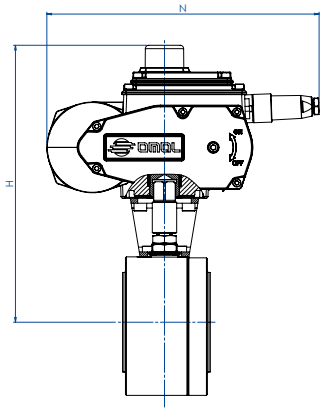
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | EM404F00CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | EM405F00CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,6 |
| DN 25 | 1" | PN 16-40 | EM406F00CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,7 |
| DN 32 | 1" 1/4 | PN 16-40 | EM407F00CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM408F00CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 50 | 2" | PN 16-40 | EM409F00CBB0BAQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,7 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | EM410E00CBB0BAQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,8 |
| DN 65 | 2" 1/2 | PN 25-40 | EM410I00CBB0BAQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 24,7 |
| DN 80 | 3" | PN 16-40 | EM411F00CBB0BAQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 28,8 |
| DN 100 | 4" | PN 16 | EM412E00CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,4 |
| DN 100 | 4" | PN 25-40 | EM412I00CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,5 |
| DN 125 | 5" | PN 16 | EM413E00CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,2 |
| DN 125 | 5" | PN 25-40 | EM413I00CBB0BAQNV00BAMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 81,9 |
| DN 150 | 6" | PN 16 | EM414E00CBB0BAQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 136,0 |
| DN 150 | 6" | PN 25-40 | EM414I00CBB0BAMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 139,7 |
| DN 200 | 8" | PN 16 | EM415E00CBB0BAQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 218,5 |
| DN 200 | 8" | PN 25 | EM415H00CBB0BAQNV00BAMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 224,8 |
| DN 200 | 8" | PN 40 | EM415J00CBB0BAMNV00BAMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 248,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | EM404101CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 15 | 1/2" | ANSI 300 | EM404201CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 6,3 |
| DN 20 | 3/4" | ANSI 150 | EM405101CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,7 |
| DN 20 | 3/4" | ANSI 300 | EM405201CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 7,3 |
| DN 25 | 1" | ANSI 150 | EM406101CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,6 |
| DN 25 | 1" | ANSI 300 | EM406201CAB0BBQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 8,1 |
| DN 32 | 1" 1/4 | ANSI 150 | EM407101CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 32 | 1" 1/4 | ANSI 300 | EM407201CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM408101CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 40 | 1" 1/2 | ANSI 300 | EM408201CAB0BBQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,1 |
| DN 50 | 2" | ANSI 150 | EM409101CAB0BBQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 17,7 |
| DN 50 | 2" | ANSI 300 | EM409201CAB0BBQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 19,2 |
| DN 65 | 2" 1/2 | ANSI 150 | EM410101CAB0BBQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,6 |
| DN 65 | 2" 1/2 | ANSI 300 | EM410201CAB0BBQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 27,9 |
| DN 80 | 3" | ANSI 150 | EM411101CAB0BBQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 29,3 |
| DN 80 | 3" | ANSI 300 | EM411201CAB0BBQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 33,2 |
| DN 100 | 4" | ANSI 150 | EM412101CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,7 |
| DN 100 | 4" | ANSI 300 | EM412201CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5361 | 256,5 | 380,0 | 59,3 |
| DN 125 | 5" | ANSI 150 | EM413101CAB0BBQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,3 |
| DN 150 | 6" | ANSI 150 | EM414101CAB0BBQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 137,0 |
| DN 150 | 6" | ANSI 300 | EM414201CAB0BBMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 140,2 |
| DN 200 | 8" | ANSI 150 | EM415101CAB0BBQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 220,4 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | EM404101CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 15 | 1/2" | ANSI 300 | EM404201CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 6,3 |
| DN 20 | 3/4" | ANSI 150 | EM405101CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,7 |
| DN 20 | 3/4" | ANSI 300 | EM405201CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 7,3 |
| DN 25 | 1" | ANSI 150 | EM406101CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,6 |
| DN 25 | 1" | ANSI 300 | EM406201CBB0BAQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 8,1 |
| DN 32 | 1" 1/4 | ANSI 150 | EM407101CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 32 | 1" 1/4 | ANSI 300 | EM407201CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM408101CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 40 | 1" 1/2 | ANSI 300 | EM408201CBB0BAQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,1 |
| DN 50 | 2" | ANSI 150 | EM409101CBB0BAQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 17,7 |
| DN 50 | 2" | ANSI 300 | EM409201CBB0BAQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 19,2 |
| DN 65 | 2" 1/2 | ANSI 150 | EM410101CBB0BAQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,6 |
| DN 65 | 2" 1/2 | ANSI 300 | EM410201CBB0BAQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 27,9 |
| DN 80 | 3" | ANSI 150 | EM411101CBB0BAQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 29,3 |
| DN 80 | 3" | ANSI 300 | EM411201CBB0BAQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 33,2 |
| DN 100 | 4" | ANSI 150 | EM412101CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,7 |
| DN 100 | 4" | ANSI 300 | EM412201CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5361 | 256,5 | 380,0 | 59,3 |
| DN 125 | 5" | ANSI 150 | EM413101CBB0BAQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,3 |
| DN 150 | 6" | ANSI 150 | EM414101CBB0BAQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 137,0 |
| DN 150 | 6" | ANSI 300 | EM414201CBB0BAMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 140,2 |
| DN 200 | 8" | ANSI 150 | EM415101CBB0BAQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 220,4 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER PN 16-40 ANSI 150-300
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat TFM 1600.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperatura di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

## *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN 1092-1 ed. 2008; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN16-40 - ANSI 150-300.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2 .*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

## ESECUZIONI A RICHIESTA
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *Stainless steel Stem nuts and springs.*
- *For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

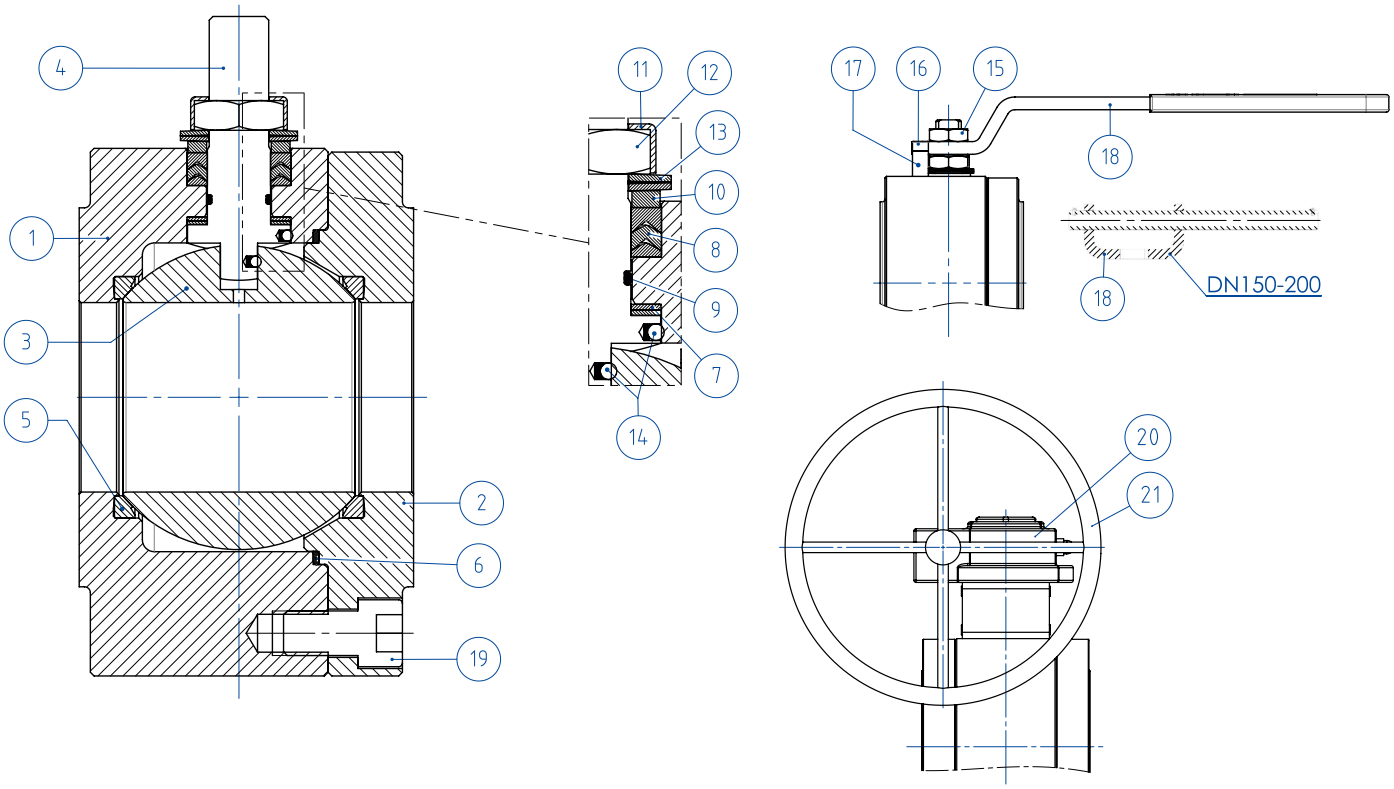
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT WAFER PN16-40 ANSI 150-300 acciaio inox *stainless steel* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A182 F316 / A479TP.316 (x) (1.4401 / X5CrNiMo17-12-2) |
| 2 | Ghiera *Ring nut* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (.) (2) |
| 6* | Guarnizione corpo ghiera *Body-ring nut gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) |
| 18 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) |
| 19 | Vite corpo-ghiera *Body-ring nut screw* | A2.70 UNI 3740 (304 S.S) |
| 20 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* |
| 21 | Volantino *Handwheel* | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
(2) DEVLON per DN150 PN25-40 - ANSI300, DN200 PN40
*(2) DEVLON for DN150 PN25-40 - ANSI300, DN200 PN40*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO - CON LEVA - CON RIDUTTORE *FREE SHAFT - WITH LEVER - WITH GEARBOX*



### CODICI VALVOLE IN ACCIAIO INOX: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -PN-
### *STAINLESS STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -PN-*

| MISURA *SIZE* | | PN | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | PN 16-40 | V/LM404F00ABA0AAQNV000 |
| DN 20 | 3/4" | PN 16-40 | V/LM405F00ABA0AAQNV000 |
| DN 25 | 1" | PN 16-40 | V/LM406F00ABA0AAQNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM407F00ABA0AAQNV000 |
| DN 40 | 1" 1/2 | PN 16-40 | V/LM408F00ABA0AAQNV000 |
| DN 50 | 2" | PN 16-40 | V/LM409F00ABA0AAQNV000 |
| DN 65 | 2" 1/2 | PN16 | V/LM410E00ABA0AAQNV000 |
| DN 65 | 2" 1/2 | PN25-40 | V/LM410I00ABA0AAQNV000 |
| DN 80 | 3" | PN 16-40 | V/LM411F00ABA0AAQNV000 |
| DN 100 | 4" | PN16 | V/LM412E00ABA0AAQNV000 |
| DN 100 | 4" | PN 25-40 | V/LM412I00ABA0AAQNV000 |
| DN 125 | 5" | PN 16 | V/LM413E00ABA0AAQNV000 |
| DN 125 | 5" | PN 25-40 | V/LM413I00ABA0AAQNV000 |
| DN150(*) | 6" | PN 16 | V/RM414E00ABA0AAQNV000 |
| DN150 | 6" | PN 25-40 | V/RM414I00ABA0AAMNV000 |
| DN200(*) | 8" | PN 16 | V/RM415E00ABA0AAQNV000 |
| DN200(*) | 8" | PN 25 | V/RM415H00ABA0AAQNV000 |
| DN200 | 8" | PN 40 | V/RM415J00ABA0AAMNV000 |

### CODICI VALVOLE IN ACCIAIO INOX: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -ANSI-
### *STAINLESS STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -ANSI-*

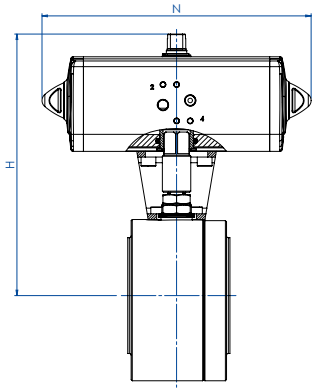
| MISURA *SIZE* | | ANSI | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | ANSI 150 | V/LM404101ABA0AAQNV000 |
| DN 15 | 1/2" | ANSI 300 | V/LM404201ABA0AAQNV000 |
| DN 20 | 3/4" | ANSI 150 | V/LM405101ABA0AAQNV000 |
| DN 20 | 3/4" | ANSI 300 | V/LM405201ABA0AAQNV000 |
| DN 25 | 1" | ANSI 150 | V/LM406101ABA0AAQNV000 |
| DN 25 | 1" | ANSI 300 | V/LM406201ABA0AAQNV000 |
| DN 32 | 1" 1/4 | ANSI 150 | V/LM407101ABA0AAQNV000 |
| DN 32 | 1" 1/4 | ANSI 300 | V/LM407201ABA0AAQNV000 |
| DN 40 | 1" 1/2 | ANSI 150 | V/LM408101ABA0AAQNV000 |
| DN 40 | 1" 1/2 | ANSI 300 | V/LM408201ABA0AAQNV000 |
| DN 50 | 2" | ANSI 150 | V/LM409101ABA0AAQNV000 |
| DN 50 | 2" | ANSI 300 | V/LM409201ABA0AAQNV000 |
| DN 65 | 2" 1/2 | ANSI 150 | V/LM410101ABA0AAQNV000 |
| DN 65 | 2" 1/2 | ANSI 300 | V/LM410201ABA0AAQNV000 |
| DN 80 | 3" | ANSI 150 | V/LM411101ABA0AAQNV000 |
| DN 80 | 3" | ANSI 300 | V/LM411201ABA0AAQNV000 |
| DN 100 | 4" | ANSI 150 | V/LM412101ABA0AAQNV000 |
| DN 100 | 4" | ANSI 300 | V/LM412201ABA0AAQNV000 |
| DN 125 | 5" | ANSI 150 | V/LM413101ABA0AAQNV000 |
| DN150(*) | 6" | ANSI 150 | V/RM414101ABA0AAQNV000 |
| DN150 | 6" | ANSI 300 | V/RM414201ABA0AAMNV000 |
| DN200(*) | 8" | ANSI 150 | V/RM415101ABA0AAQNV000 |

DN200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

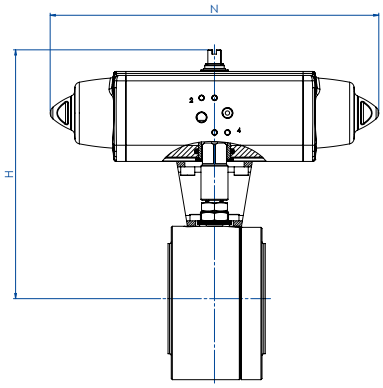
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16 | DM404E00ABA0AAQNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,1 | 154,2 | 3,2 |
| DN 15 | 1/2" | PN 25-40 | DM404I00ABA0AAQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 161,2 | 3,5 |
| DN 20 | 3/4" | PN 16-40 | DM405F00ABA0AAQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,3 | 164,2 | 3,8 |
| DN 25 | 1" | PN 16-40 | DM406F00ABA0AAQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,3 | 181,2 | 6,0 |
| DN 32 | 1" 1/4 | PN 16-40 | DM407F00ABA0AAQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | PN 16-40 | DM408F00ABA0AAQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,1 | 208,4 | 9,8 |
| DN 50 | 2" | PN 16 | DM409E00ABA0AAQNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,1 | 230,3 | 13,0 |
| DN 50 | 2" | PN 25-40 | DM409I00ABA0AAQNV000AFHA0 | DAN0120411S | KCNCCHD5317 | 257,4 | 234,0 | 13,1 |
| DN 65 | 2" 1/2 | PN 16 | DM410E00ABA0AAQNV000AFHA0 | DAN0120411S | KCNDDHD5318 | 257,4 | 250,0 | 19,9 |
| DN 65 | 2" 1/2 | PN 25-40 | DM410I00ABA0AAQNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 21,8 |
| DN 80 | 3" | PN 16 | DM411E00ABA0AAQNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 25,9 |
| DN 80 | 3" | PN 25-40 | DM411I00ABA0AAQNV000AFJA0 | DAN0240411S | KCNDDHD5319 | 313,6 | 291,1 | 26,7 |
| DN 100 | 4" | PN 16 | DM412E00ABA0AAQNV000AFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 329,0 | 51,7 |
| DN 100 | 4" | PN 25-40 | DM412I00ABA0AAQNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,7 | 387,7 | 52,7 |
| DN 125 | 5" | PN 16 | DM413E00ABA0AAQNV000AFLA0 | DAN0480411S | KCNEFHD5332 | 387,7 | 362,0 | 60,4 |
| DN 125 | 5" | PN 25-40 | DM413I00ABA0AAQNV000AFMA0 | DAN0720411S | KCNEFHD5348 | 433,1 | 383,0 | 72,6 |
| DN 150 | 6" | PN 16 | DM414E00ABA0AAQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 127,0 |
| DN 150 | 6" | PN 25-40 | DM414I00ABA0AAMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 150,4 |
| DN 200 | 8" | PN 16 | DM415E00ABA0AAQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 524,0 | 222,0 |
| DN 200 | 8" | PN 25 | DM415H00ABA0AAQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 524,0 | 224,7 |
| DN 200 | 8" | PN 40 | DM415J00ABA0AAMNV000AFSA0 | DA2880E16D0A | KCNGHHD5367 | 667,0 | 654,0 | 343,3 |

## CODICI ARTICOLI IN 316 ACCIAIO INOX - ANSI- *ITEM CODES IN 316 STAINLESS STEEL - ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | DM404101ABA0AAQNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 3,2 |
| DN 15 | 1/2" | ANSI 300 | DM404201ABA0AAQNV000AFCA0 | DAN0030411S | KCNAAHD5313 | 174,2 | 163,2 | 3,5 |
| DN 20 | 3/4" | ANSI 150 | DM405101ABA0AAQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 3,9 |
| DN 20 | 3/4" | ANSI 300 | DM405201ABA0AAQNV000AFCA0 | DAN0030411S | KCNAAHD5314 | 174,2 | 169,2 | 4,5 |
| DN 25 | 1" | ANSI 150 | DM406101ABA0AAQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 5,0 |
| DN 25 | 1" | ANSI 300 | DM406201ABA0AAQNV000AFCA0 | DAN0030411S | KCNBCHD5249 | 174,2 | 184,2 | 5,4 |
| DN 32 | 1" 1/4 | ANSI 150 | DM407101ABA0AAQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DM407201ABA0AAQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 7,0 |
| DN 40 | 1" 1/2 | ANSI 150 | DM408101ABA0AAQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 202,5 | 9,8 |
| DN 40 | 1" 1/2 | ANSI 300 | DM408201ABA0AAQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 10,9 |
| DN 50 | 2" | ANSI 150 | DM409101ABA0AAQNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 13,0 |
| DN 50 | 2" | ANSI 300 | DM409201ABA0AAQNV000AFHA0 | DAN0120411S | KCNCCHD5267 | 244,1 | 240,0 | 14,6 |
| DN 65 | 2" 1/2 | ANSI 150 | DM410101ABA0AAQNV000AFHA0 | DAN0120411S | KCNDDHD5318 | 244,1 | 250,0 | 20,0 |
| DN 65 | 2" 1/2 | ANSI 300 | DM410201ABA0AAQNV000AFIA0 | DAN0180411S | KCNDDHD5320 | 289,9 | 286,5 | 25,0 |
| DN 80 | 3" | ANSI 150 | DM411101ABA0AAQNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 26,4 |
| DN 80 | 3" | ANSI 300 | DM411201ABA0AAQNV000AFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 31,1 |
| DN 100 | 4" | ANSI 150 | DM412101ABA0AAQNV000AFKA0 | DAN0360411S | KCNEEHD5321 | 339,3 | 335,0 | 48,9 |
| DN 100 | 4" | ANSI 300 | DM412201ABA0AAQNV000AFLA0 | DAN0480411S | KCNEFHD5348 | 387,6 | 359,9 | 60,5 |
| DN 125 | 5" | ANSI 150 | DM413101ABA0AAQNV000AFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 60,5 |
| DN 150 | 6" | ANSI 150 | DM414101ABA0AAQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 412,0 | 126,7 |
| DN 150 | 6" | ANSI 300 | DM414201ABA0AAMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 150,9 |
| DN 200 | 8" | ANSI 150 | DM415101ABA0AAQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 484,0 | 221,9 |

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

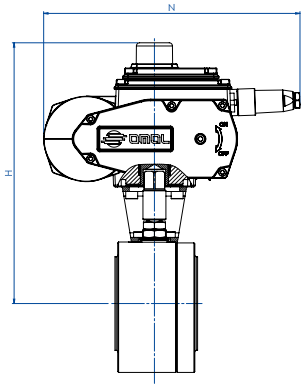
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16 | SM404E00ABA0AAQNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | PN 25-40 | SM404I00ABA0AAQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 4,6 |
| DN 20 | 3/4" | PN 16-40 | SM405F00ABA0AAQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 25 | 1" | PN 16-40 | SM406F00ABA0AAQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,1 |
| DN 32 | 1" 1/4 | PN 16-40 | SM407F00ABA0AAQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | PN 16-40 | SM408F00ABA0AAQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 50 | 2" | PN 16 | SM409E00ABA0AAQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | PN 25-40 | SM409I00ABA0AAQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 17,6 |
| DN 65 | 2" 1/2 | PN 16 | SM410E00ABA0AAQNV000AFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,3 |
| DN 65 | 2" 1/2 | PN 25-40 | SM410I00ABA0AAQNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 26,1 |
| DN 80 | 3" | PN 16 | SM411E00ABA0AAQNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,2 |
| DN 80 | 3" | PN 25-40 | SM411I00ABA0AAQNV000AFLA0 | SRN0240401S | KCNDEHD5330 | 520,5 | 335,0 | 33,8 |
| DN 100 | 4" | PN 16 | SM412E00ABA0AAQNV000AFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 59,5 |
| DN 100 | 4" | PN 25-40 | SM412I00ABA0AAQNV000AFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 385,0 | 66,3 |
| DN 125 | 5" | PN 16 | SM413E00ABA0AAQNV000AFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,0 |
| DN 125 | 5" | PN 25-40 | SM413I00ABA0AAQNV000AFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 94,5 |
| DN 150 | 6" | PN 16 | SM414E00ABA0AAQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 147,4 |
| DN 150 | 6" | PN 25-40 | SM414I00ABA0AAMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,4 |
| DN 200 | 8" | PN 16 | SM415E00ABA0AAQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 272,0 |
| DN 200 | 8" | PN 25 | SM415H00ABA0AAQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 276,7 |
| DN 200 | 8" | PN 40 | SM415J00ABA0AAMNV000AFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 343,3 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | SM404101ABA0AAQNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 3,7 |
| DN 15 | 1/2" | ANSI 300 | SM404201ABA0AAQNV000AFEA0 | SRN0030402S | KCNACHD5325 | 258,8 | 184,4 | 4,6 |
| DN 20 | 3/4" | ANSI 150 | SM405101ABA0AAQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 4,9 |
| DN 20 | 3/4" | ANSI 300 | SM405201ABA0AAQNV000AFEA0 | SRN0030402S | KCNACHD5326 | 258,8 | 190,4 | 5,6 |
| DN 25 | 1" | ANSI 150 | SM406101ABA0AAQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 6,0 |
| DN 25 | 1" | ANSI 300 | SM406201ABA0AAQNV000AFEA0 | SRN0030402S | KCNBCHD5250 | 258,8 | 195,4 | 6,4 |
| DN 32 | 1" 1/4 | ANSI 150 | SM407101ABA0AAQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 32 | 1" 1/4 | ANSI 300 | SM407201ABA0AAQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 8,9 |
| DN 40 | 1" 1/2 | ANSI 150 | SM408101ABA0AAQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 11,6 |
| DN 40 | 1" 1/2 | ANSI 300 | SM408201ABA0AAQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 12,7 |
| DN 50 | 2" | ANSI 150 | SM409101ABA0AAQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 16,7 |
| DN 50 | 2" | ANSI 300 | SM409201ABA0AAQNV000AFJA0 | SRN0120401S | KCNCDHD5268 | 409,6 | 274,1 | 19,1 |
| DN 65 | 2" 1/2 | ANSI 150 | SM410101ABA0AAQNV000AFJA0 | SRN0120401S | KCNDDHD5319 | 409,6 | 284,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 300 | SM410201ABA0AAQNV000AFKA0 | SRN0180401S | KCNDDHD5320 | 474,0 | 297,0 | 29,3 |
| DN 80 | 3" | ANSI 150 | SM411101ABA0AAQNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 30,7 |
| DN 80 | 3" | ANSI 300 | SM411201ABA0AAQNV000AFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 37,7 |
| DN 100 | 4" | ANSI 150 | SM412101ABA0AAQNV000AFMA0 | SRN0360401S | KCNEFHD5332 | 613,0 | 365,0 | 56,8 |
| DN 100 | 4" | ANSI 300 | SM412201ABA0AAQNV000AFNA0 | SRN0480401S | KCNEFHD5389 | 648,2 | 393,0 | 74,2 |
| DN 125 | 5" | ANSI 150 | SM413101ABA0AAQNV000AFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 74,1 |
| DN 150 | 6" | ANSI 150 | SM414101ABA0AAQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 148,4 |
| DN 150 | 6" | ANSI 300 | SM414201ABA0AAMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 185,9 |
| DN 200 | 8" | ANSI 150 | SM415101ABA0AAQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 273,9 |

# MAGNUM SPLIT WAFER - PN 16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

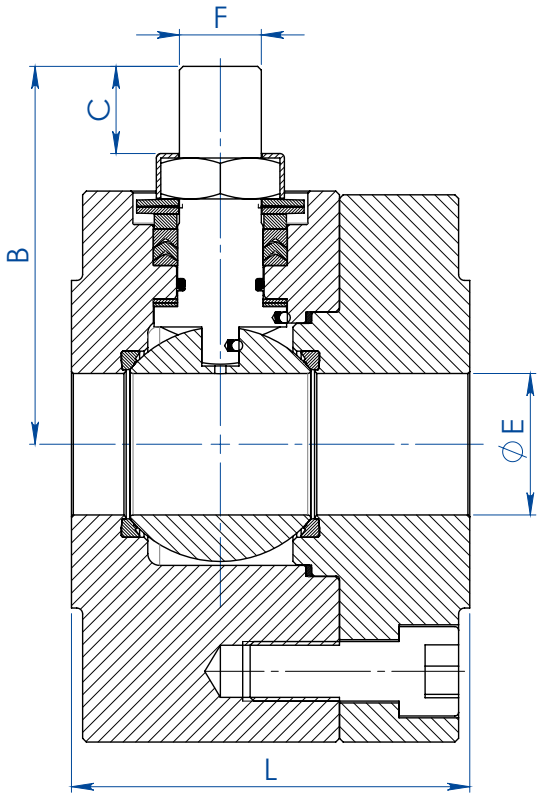
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16-40 | EM404F00ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | EM405F00ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,6 |
| DN 25 | 1" | PN 16-40 | EM406F00ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,7 |
| DN 32 | 1" 1/4 | PN 16-40 | EM407F00ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | PN 16-40 | EM408F00ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 50 | 2" | PN 16-40 | EM409F00ABA0AAQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,7 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | EM410E00ABA0AAQNV000AMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,8 |
| DN 65 | 2" 1/2 | PN 25-40 | EM410I00ABA0AAQNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 24,7 |
| DN 80 | 3" | PN 16-40 | EM411F00ABA0AAQNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 28,8 |
| DN 100 | 4" | PN 16 | EM412E00ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,4 |
| DN 100 | 4" | PN 25-40 | EM412I00ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,5 |
| DN 125 | 5" | PN 16 | EM413E00ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,2 |
| DN 125 | 5" | PN 25-40 | EM413I00ABA0AAQNV000AMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 81,9 |
| DN 150 | 6" | PN 16 | EM414E00ABA0AAQNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 136,0 |
| DN 150 | 6" | PN 25-40 | EM414I00ABA0AAMNV000AMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 139,7 |
| DN 200 | 8" | PN 16 | EM415E00ABA0AAQNV000AMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 218,5 |
| DN 200 | 8" | PN 25 | EM415H00ABA0AAQNV000AMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 224,8 |
| DN 200 | 8" | PN 40 | EM415J00ABA0AAMNV000AMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 248,3 |

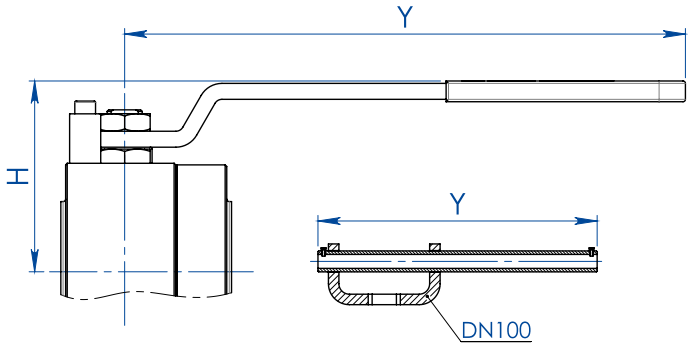
### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

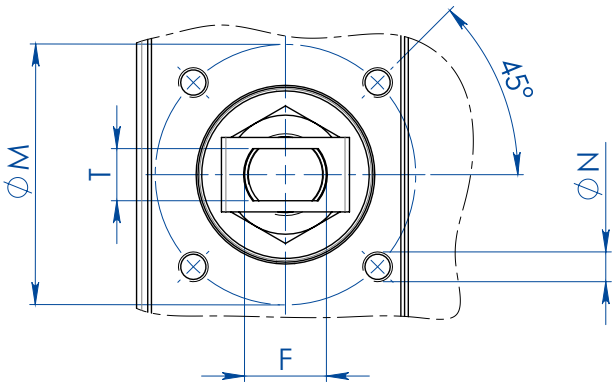
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | EM404101ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,3 |
| DN 15 | 1/2" | ANSI 300 | EM404201ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5325 | 250,0 | 231,0 | 6,3 |
| DN 20 | 3/4" | ANSI 150 | EM405101ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 6,7 |
| DN 20 | 3/4" | ANSI 300 | EM405201ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNACHD5326 | 250,0 | 237,0 | 7,3 |
| DN 25 | 1" | ANSI 150 | EM406101ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 7,6 |
| DN 25 | 1" | ANSI 300 | EM406201ABA0AAQNV000AMEG0 | EA0035A5C000 | KCNBCHD5250 | 250,0 | 242,0 | 8,1 |
| DN 32 | 1" 1/4 | ANSI 150 | EM407101ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 32 | 1" 1/4 | ANSI 300 | EM407201ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 9,6 |
| DN 40 | 1" 1/2 | ANSI 150 | EM408101ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 12,0 |
| DN 40 | 1" 1/2 | ANSI 300 | EM408201ABA0AAQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,1 |
| DN 50 | 2" | ANSI 150 | EM409101ABA0AAQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 17,7 |
| DN 50 | 2" | ANSI 300 | EM409201ABA0AAQNV000AMIG0 | EA0130A5C000 | KCNCCHD5267 | 280,0 | 290,5 | 19,2 |
| DN 65 | 2" 1/2 | ANSI 150 | EM410101ABA0AAQNV000AMIG0 | EA0130A5C000 | KCNDDHD5318 | 280,0 | 300,5 | 24,6 |
| DN 65 | 2" 1/2 | ANSI 300 | EM410201ABA0AAQNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 306,5 | 27,9 |
| DN 80 | 3" | ANSI 150 | EM411101ABA0AAQNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 29,3 |
| DN 80 | 3" | ANSI 300 | EM411201ABA0AAQNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 33,2 |
| DN 100 | 4" | ANSI 150 | EM412101ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 372,0 | 51,7 |
| DN 100 | 4" | ANSI 300 | EM412201ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5361 | 256,5 | 380,0 | 59,3 |
| DN 125 | 5" | ANSI 150 | EM413101ABA0AAQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 59,3 |
| DN 150 | 6" | ANSI 150 | EM414101ABA0AAQNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 137,0 |
| DN 150 | 6" | ANSI 300 | EM414201ABA0AAMNV000AMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 140,2 |
| DN 200 | 8" | ANSI 150 | EM415101ABA0AAQNV000AMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 220,4 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600

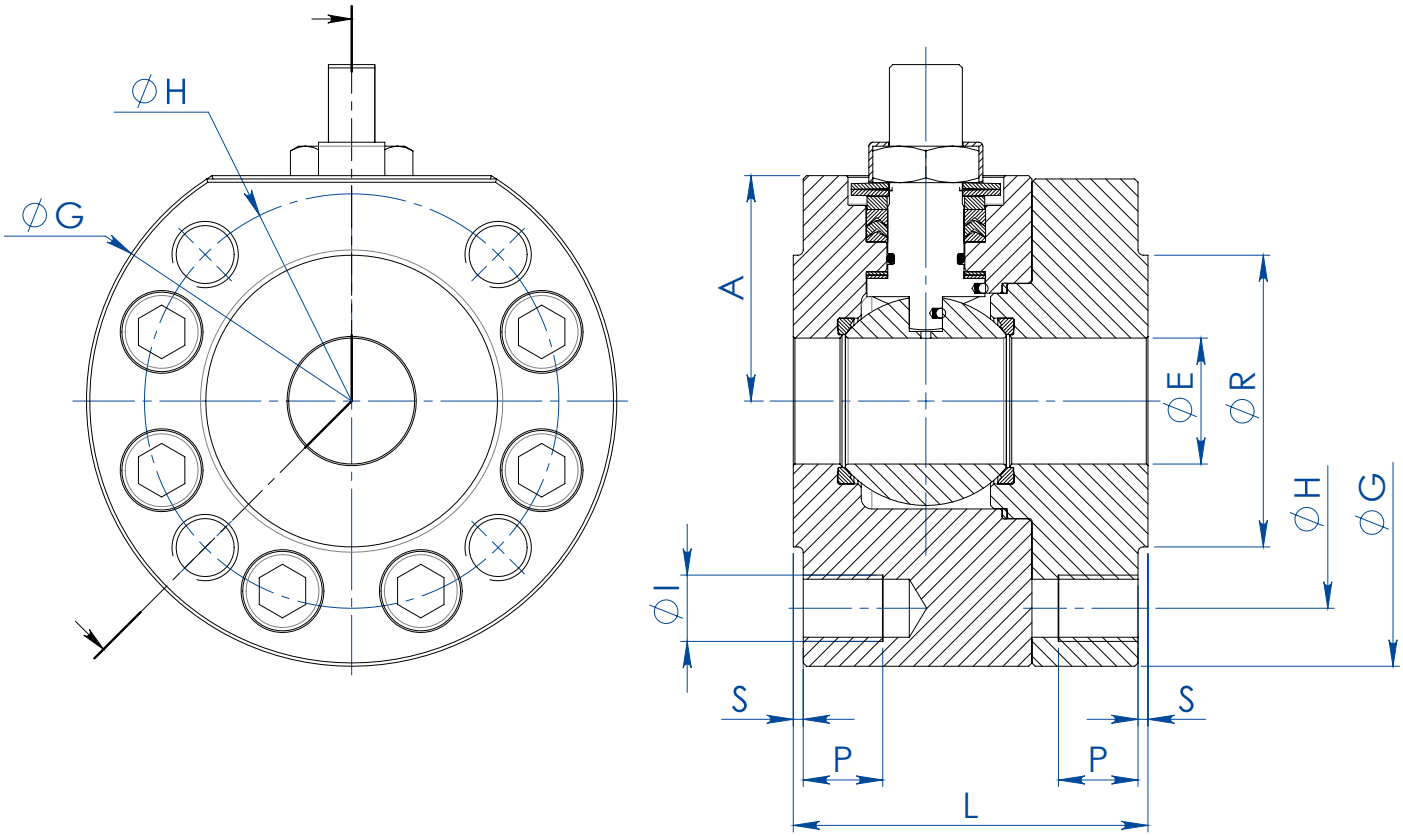



| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ØE** | **L** | **B** | **C** | **ATT.ISO** | **ØM** | **ØN** | **F/T** | **H** | **Y** | **KIT LEVA** *LEVER KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | |
| DN 15 | 1/2" | 13 | 68 | 54,5 | 9,5 | F04 | 42 | M5 | 12/8 | 80 | 150 | KLV58006 |
| DN 20 | 3/4" | 19 | 72 | 57,5 | 9,5 | F04 | 42 | M5 | 12/8 | 83 | 150 | KLV58006 |
| DN 25 | 1" | 25 | 87 | 71,5 | 14,6 | F05 | 50 | M6 | 16/10 | 95 | 275 | KLV58008 |
| DN 32 | 1" 1/4 | 32 | 92 | 76,5 | 14,6 | F05 | 50 | M6 | 16/10 | 100 | 275 | KLV58008 |
| DN 40 | 1" 1/2 | 38 | 107 | 98,5 | 20,4 | F07 | 70 | M8 | 22/14 | 120 | 350 | KLV58010 |
| DN 50 | 2" | 51 | 115 | 107,5 | 20,4 | F07 | 70 | M8 | 22/14 | 129 | 350 | KLV58010 |
| DN 65 | 2" 1/2 | 64 | 140 | 144 | 25,1 | F10 | 102 | M10 | 30/18 | 180 | 450 | KLV58012 |
| DN 80 | 3" | 76 | 150 | 151,5 | 25,1 | F10 | 102 | M10 | 30/18 | 188 | 450 | KLV58012 |
| DN 100 | 4" | 102 | 190 | 196,5 | 40,5 | F14 | 140 | M16 | 45/30 | 233 | 800 | KLV58014 |

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600

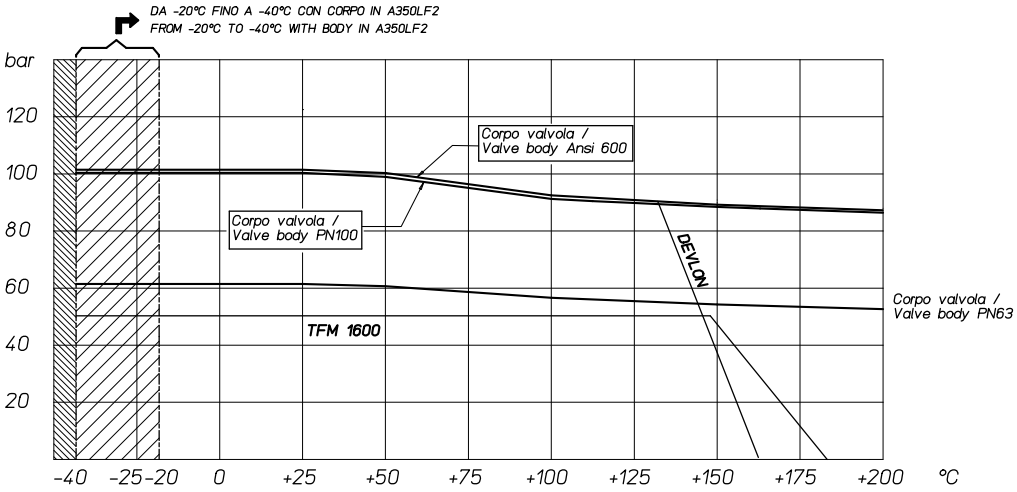



| DIMENSIONI *DIMENSIONS* -PN- | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **PN** | **A** | **ØG** | **ØR** | **S** | **ØH** | **N°FORI** *HOLES N°* | **Ø I** | **P** | **Kg** | **L** | **KIT GUARNIZIONI** *SEALS KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | 40 | 95 | 45 | 2 | 75 | 4 | M12 | 16 | 4,2 | 68 | KGBV472040 |
| DN 20 | 3/4" | PN 63-100 | 45 | 115 | 58 | 2 | 90 | 4 | M16 | 20 | 6,7 | 72 | KGBV472050 |
| DN 25 | 1" | PN 63-100 | 50 | 125 | 68 | 2 | 100 | 4 | M16 | 20 | 6,9 | 87 | KGBV472060 |
| DN 32 | 1" 1/4 | PN 63-100 | 55 | 145 | 78 | 2 | 110 | 4 | M20 | 24 | 9,3 | 92 | KGBV472070 |
| DN 40 | 1" 1/2 | PN 63-100 | 68 | 160 | 88 | 3 | 125 | 4 | M20 | 24 | 13,5 | 107 | KGBV472080 |
| DN 50 | 2" | PN 63 | 79 | 170 | 102 | 3 | 135 | 4 | M20 | 24 | 16,5 | 115 | KGBV472090 |
| DN 50 | 2" | PN 100 | 79 | 185 | 102 | 3 | 145 | 4 | M24 | 28 | 19,5 | 115 | KGBV472090 |
| DN 65 | 2" 1/2 | PN 63 | 94 | 208 | 122 | 3 | 160 | 8 | M20 | 25 | 29,5 | 140 | KGBV472100 |
| DN 65 | 2" 1/2 | PN 100 | 101 | 220 | 122 | 3 | 170 | 8 | M24 | 30 | 33,2 | 140 | KGBV472100 |
| DN 80 | 3" | PN 63 | 101,5 | 220 | 138 | 3 | 170 | 8 | M20 | 25 | 34,9 | 150 | KGBV472110 |
| DN 80 | 3" | PN 100 | 108,5 | 235 | 138 | 3 | 180 | 8 | M24 | 30 | 40,3 | 150 | KGBV472110 |
| DN 100 | 4" | PN 63 | 123 | 275 | 162 | 3 | 200 | 8 | M24 | 30 | 67,5 | 190 | KGBV472120 |
| DN 100 | 4" | PN 100 | 123 | 275 | 162 | 3 | 210 | 8 | M27 | 32 | 67,2 | 190 | KGBV472120 |

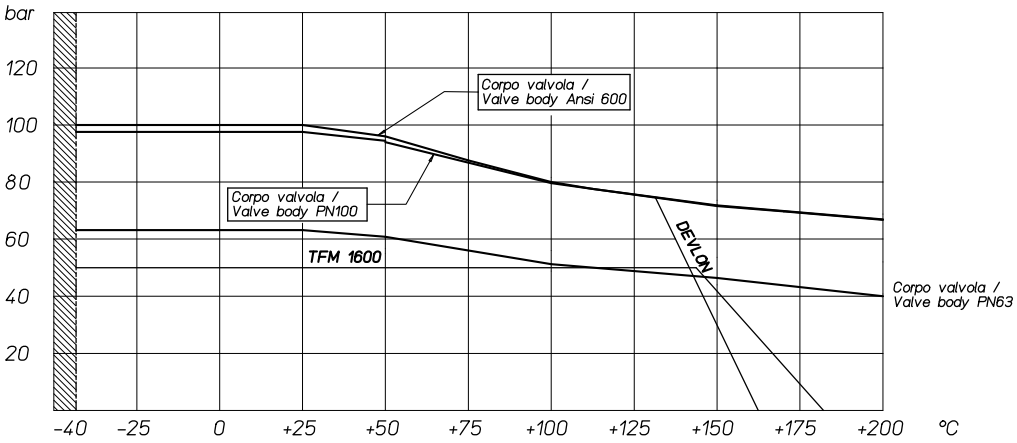
| DIMENSIONI *DIMENSIONS* -ANSI- | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **A** | **ØG** | **ØR** | **S** | **ØH** | **N°FORI** *HOLES N°* | **Ø I** | **P** | **Kg** | **L** | **KIT GUARNIZIONI** *SEALS KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | 40 | 95 | 34,9 | 6,3 | 66,7 | 4 | 1/2"UNC | 16 | 4,1 | 68 | KGBV472040 |
| DN 20 | 3/4" | ANSI 600 | 45 | 115 | 42,9 | 6,3 | 82,6 | 4 | 5/8"UNC | 20 | 4,4 | 72 | KGBV472050 |
| DN 25 | 1" | ANSI 600 | 50 | 125 | 50,8 | 6,3 | 88,9 | 4 | 5/8"UNC | 20 | 6,3 | 87 | KGBV472060 |
| DN 32 | 1" 1/4 | ANSI 600 | 55 | 135 | 63,5 | 6,3 | 98,4 | 4 | 5/8"UNC | 20 | 7,6 | 92 | KGBV472070 |
| DN 40 | 1" 1/2 | ANSI 600 | 68 | 155 | 73 | 6,3 | 114,3 | 4 | 3/4"UNC | 24 | 11,2 | 107 | KGBV472080 |
| DN 50 | 2" | ANSI 600 | 79 | 170 | 92,1 | 6,3 | 127 | 8 | 5/8"UNC | 20 | 15,5 | 115 | KGBV472090 |
| DN 65 | 2" 1/2 | ANSI 600 | 94 | 208 | 104,8 | 6,3 | 149,2 | 8 | 3/4"UNC | 25 | 28,3 | 140 | KGBV472100 |
| DN 80 | 3" | ANSI 600 | 101,5 | 220 | 127 | 6,3 | 168,3 | 8 | 3/4"UNC | 25 | 33,8 | 150 | KGBV472110 |
| DN 100 | 4" | ANSI 600 | 126 | 279 | 157,2 | 6,3 | 215,9 | 8 | 7/8"UNC | 30 | 68,2 | 190 | KGBV472120 |

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600

## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*



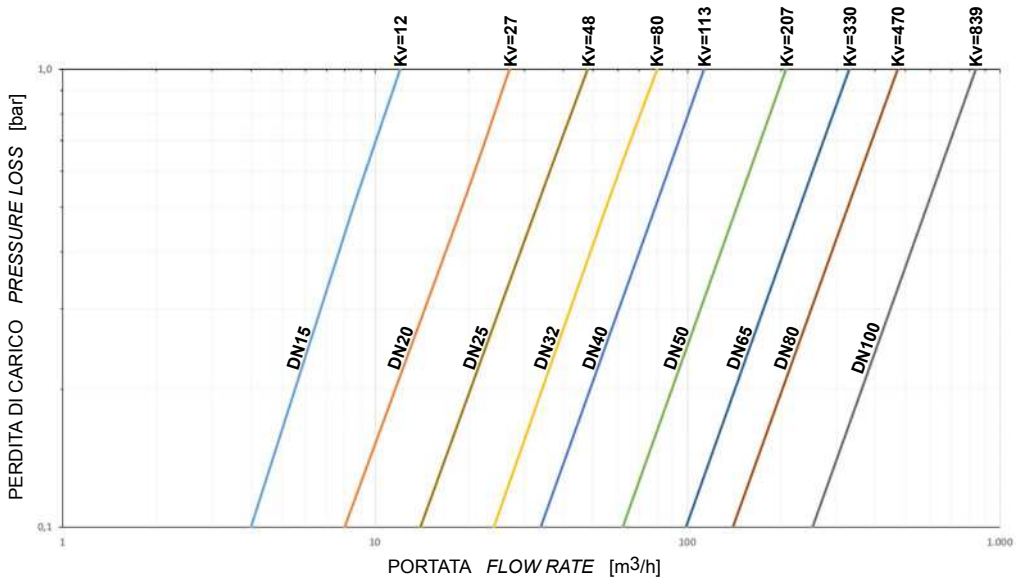

## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.*

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600

## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat: DEVLON.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN 63-100; ANSI 600.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

## *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal: DEVLON.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN 63-100; ANSI 600.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40 C° in LF2.
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40 C°).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF) *. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating ,epoxy coating.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

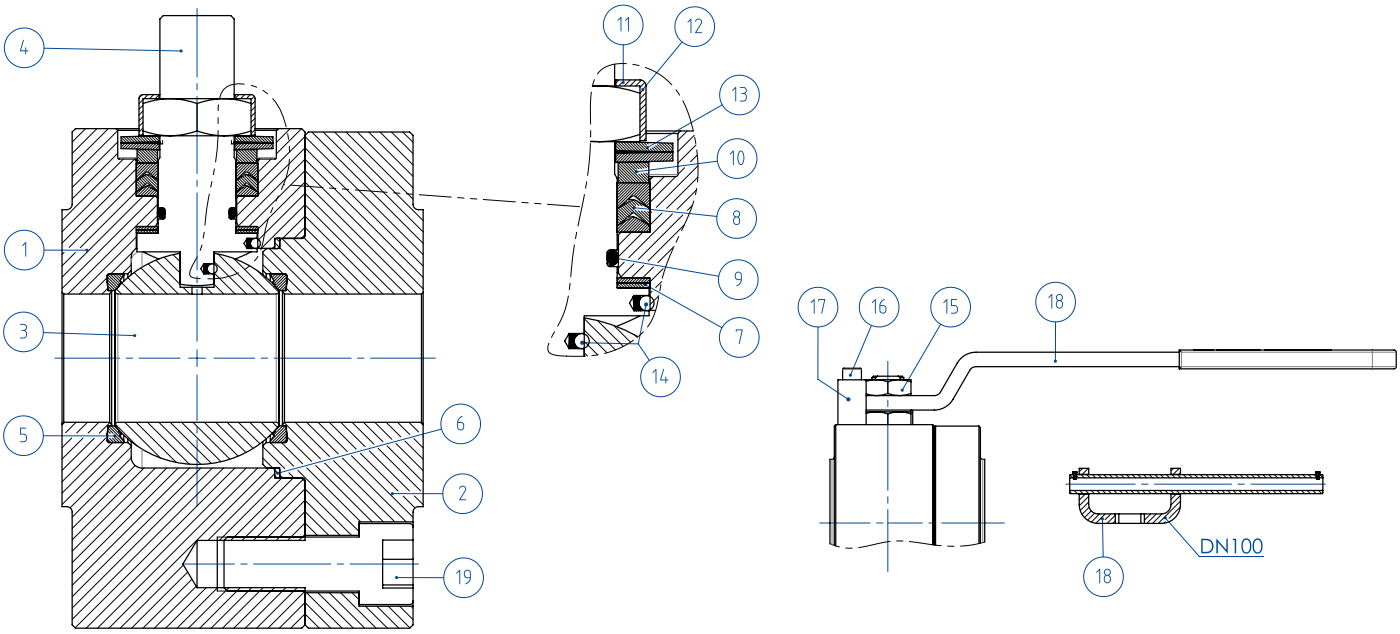
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS*<br>SPLIT WAFER PN63-100 ANSI 600 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Ghiera *Ring nut* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) (**) | ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10) (**) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON | DEVLON |
| 6* | Guarnizione corpo ghiera *Body-ring nut gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) • | TFM1600 (.) • |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 19 | Vite corpo-ghiera *Body-ring nut screw* | A2.70 UNI 3740 (304 S.S:) | A2.70 UNI 3740 (304 S.S:) |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 18 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) | Fe37 zincato - *Galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): per ≤DN32 disponibile solo in CF8M *for ≤DN32 available only in CF8M*
(x): 304 s.s.
(xx): 301 s.s.
• : per ≤DN32 disponibile solo in DEVLON *for ≤DN32 available only in DEVLON*
(1): Per DN100 disponibile solo in 304 *DN100 available only in 304*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -PN-
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

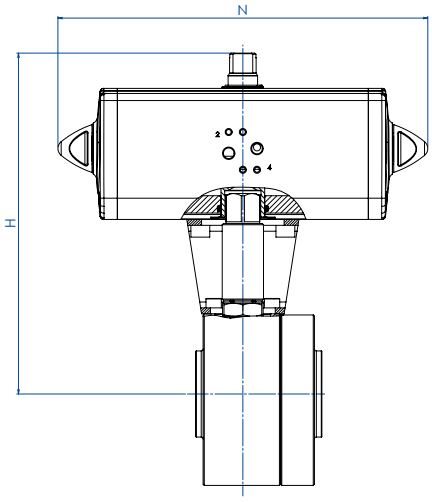
| MISURA *SIZE* | | PN | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 63-100 | V/LM404N00CAA0AAMRV00B | V/LM404N00CBA0AAMRV00B |
| DN 20 | 3/4" | PN 63-100 | V/LM405N00CAA0AAMRV00B | V/LM405N00CBA0AAMRV00B |
| DN 25 | 1" | PN 63-100 | V/LM406N00CAA0AAMRV00B | V/LM406N00CBA0AAMRV00B |
| DN 32 | 1" 1/4 | PN 63-100 | V/LM407N00CAA0AAMRV00B | V/LM407N00CBA0AAMRV00B |
| DN 40 | 1" 1/2 | PN 63-100 | V/LM408N00CAB0AAMNV00B | V/LM408N00CBB0AAMNV00B |
| DN 50 | 2" | PN 63 | V/LM409K00CAB0AAMNV00B | V/LM409K00CBB0AAMNV00B |
| DN 50 | 2" | PN 100 | V/LM409L00CAB0AAMNV00B | V/LM409L00CBB0AAMNV00B |
| DN 65 | 2" 1/2 | PN 63 | V/LM410K00CAB0AAMNV00B | V/LM410K00CBB0AAMNV00B |
| DN 65 | 2" 1/2 | PN 100 | V/LM410L00CAB0AAMNV00B | V/LM410L00CBB0AAMNV00B |
| DN 80 | 3" | PN 63 | V/LM411K00CAB0AAMNV00B | V/LM411K00CBB0AAMNV00B |
| DN 80 | 3" | PN 100 | V/LM411L00CAB0AAMNV00B | V/LM411L00CBB0AAMNV00B |
| DN 100 | 4" | PN 63 | V/LM412K00CAB0AAMNV00B | V/LM412K00CBB0AAMNV00B |
| DN 100 | 4" | PN 100 | V/LM412L00CAB0AAMNV00B | V/LM412L00CBB0AAMNV00B |

### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -ANSI-
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 600 | V/LM404401CAA0AAMRV00B | V/LM404401CBA0AAMRV00B |
| DN 20 | 3/4" | ANSI 600 | V/LM405401CAA0AAMRV00B | V/LM405401CBA0AAMRV00B |
| DN 25 | 1" | ANSI 600 | V/LM406401CAA0AAMRV00B | V/LM406401CBA0AAMRV00B |
| DN 32 | 1" 1/4 | ANSI 600 | V/LM407401CAA0AAMRV00B | V/LM407401CBA0AAMRV00B |
| DN 40 | 1" 1/2 | ANSI 600 | V/LM408401CAB0AAMNV00B | V/LM408401CBB0AAMNV00B |
| DN 50 | 2" | ANSI 600 | V/LM409401CAB0AAMNV00B | V/LM409401CBB0AAMNV00B |
| DN 65 | 2" 1/2 | ANSI 600 | V/LM410401CAB0AAMNV00B | V/LM410401CBB0AAMNV00B |
| DN 80 | 3" | ANSI 600 | V/LM411401CAB0AAMNV00B | V/LM411401CBB0AAMNV00B |
| DN 100 | 4" | ANSI 600 | V/LM412401CAB0AAMNV00B | V/LM412401CBB0AAMNV00B |

# MAGNUM SPLIT WAFER - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

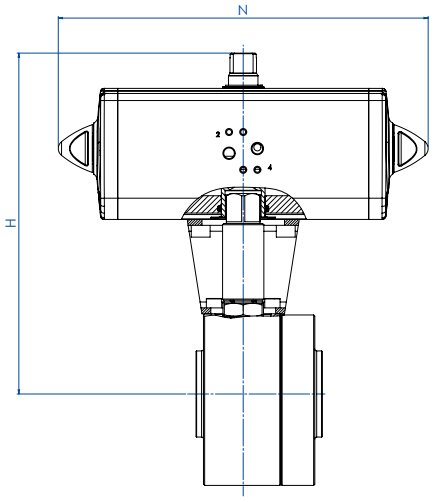
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | DM404N00CAA0AAMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | PN 63-100 | DM405N00CAA0AAMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | PN 63-100 | DM406N00CAA0AAMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | PN 63-100 | DM407N00CAA0AAMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | PN 63-100 | DM408N00CAB0AAMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | PN 63 | DM409K00CAB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 50 | 2" | PN 100 | DM409L00CAB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 25,3 |
| DN 65 | 2" 1/2 | PN 63 | DM410K00CAB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 65 | 2" 1/2 | PN 100 | DM410L00CAB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5347 | 313,6 | 322,1 | 40,5 |
| DN 80 | 3" | PN 63 | DM411K00CAB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 80 | 3" | PN 100 | DM411L00CAB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5347 | 339,3 | 336,5 | 48,7 |
| DN 100 | 4" | PN 63 | DM412K00CAB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,9 |
| DN 100 | 4" | PN 100 | DM412L00CAB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,6 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | DM404N00CBA0AAMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | PN 63-100 | DM405N00CBA0AAMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | PN 63-100 | DM406N00CBA0AAMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | PN 63-100 | DM407N00CBA0AAMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | PN 63-100 | DM408N00CBB0AAMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | PN 63 | DM409K00CBB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 50 | 2" | PN 100 | DM409L00CBB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 25,3 |
| DN 65 | 2" 1/2 | PN 63 | DM410K00CBB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 65 | 2" 1/2 | PN 100 | DM410L00CBB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5347 | 313,6 | 322,1 | 40,5 |
| DN 80 | 3" | PN 63 | DM411K00CBB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 80 | 3" | PN 100 | DM411L00CBB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5347 | 339,3 | 336,5 | 48,7 |
| DN 100 | 4" | PN 63 | DM412K00CBB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,9 |
| DN 100 | 4" | PN 100 | DM412L00CBB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,6 |

# MAGNUM SPLIT WAFER - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

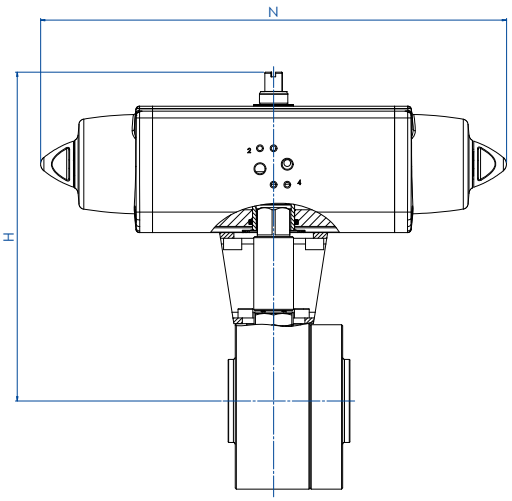
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | DM404401CAA0AAMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | ANSI 600 | DM405401CAA0AAMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | ANSI 600 | DM406401CAA0AAMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | ANSI 600 | DM407401CAA0AAMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | ANSI 600 | DM408401CAB0AAMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | ANSI 600 | DM409401CAB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 65 | 2" 1/2 | ANSI 600 | DM410401CAB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 80 | 3" | ANSI 600 | DM411401CAB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 100 | 4" | ANSI 600 | DM412401CAB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 83,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | DM404401CBA0AAMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | ANSI 600 | DM405401CBA0AAMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | ANSI 600 | DM406401CBA0AAMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | ANSI 600 | DM407401CBA0AAMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | ANSI 600 | DM408401CBB0AAMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | ANSI 600 | DM409401CBB0AAMNV00BAFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 65 | 2" 1/2 | ANSI 600 | DM410401CBB0AAMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 80 | 3" | ANSI 600 | DM411401CBB0AAMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 100 | 4" | ANSI 600 | DM412401CBB0AAMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 83,9 |

# MAGNUM SPLIT WAFER - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

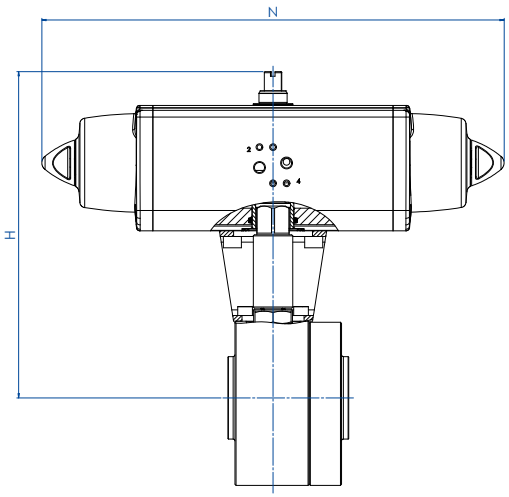
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | SM404N00CAA0AAMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,9 |
| DN 20 | 3/4" | PN 63-100 | SM405N00CAA0AAMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,2 |
| DN 25 | 1" | PN 63-100 | SM406N00CAA0AAMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 11,1 |
| DN 32 | 1" 1/4 | PN 63-100 | SM407N00CAA0AAMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 16,4 |
| DN 40 | 1" 1/2 | PN 63-100 | SM408N00CAB0AAMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 21,5 |
| DN 50 | 2" | PN 63 | SM409K00CAB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 26,6 |
| DN 50 | 2" | PN 100 | SM409L00CAB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 29,6 |
| DN 65 | 2" 1/2 | PN 63 | SM410K00CAB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 43,2 |
| DN 65 | 2" 1/2 | PN 100 | SM410L00CAB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5355 | 520,5 | 346,0 | 47,0 |
| DN 80 | 3" | PN 63 | SM411K00CAB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 53,3 |
| DN 80 | 3" | PN 100 | SM411L00CAB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5355 | 613,0 | 366,5 | 58,8 |
| DN 100 | 4" | PN 63 | SM412K00CAB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,6 |
| DN 100 | 4" | PN 100 | SM412L00CAB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | SM404N00CBA0AAMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,9 |
| DN 20 | 3/4" | PN 63-100 | SM405N00CBA0AAMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,2 |
| DN 25 | 1" | PN 63-100 | SM406N00CBA0AAMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 11,1 |
| DN 32 | 1" 1/4 | PN 63-100 | SM407N00CBA0AAMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 16,4 |
| DN 40 | 1" 1/2 | PN 63-100 | SM408N00CBB0AAMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 21,5 |
| DN 50 | 2" | PN 63 | SM409K00CBB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 26,6 |
| DN 50 | 2" | PN 100 | SM409L00CBB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 29,6 |
| DN 65 | 2" 1/2 | PN 63 | SM410K00CBB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 43,2 |
| DN 65 | 2" 1/2 | PN 100 | SM410L00CBB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5355 | 520,5 | 346,0 | 47,0 |
| DN 80 | 3" | PN 63 | SM411K00CBB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 53,3 |
| DN 80 | 3" | PN 100 | SM411L00CBB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5355 | 613,0 | 366,5 | 58,8 |
| DN 100 | 4" | PN 63 | SM412K00CBB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,6 |
| DN 100 | 4" | PN 100 | SM412L00CBB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,3 |

# MAGNUM SPLIT WAFER - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

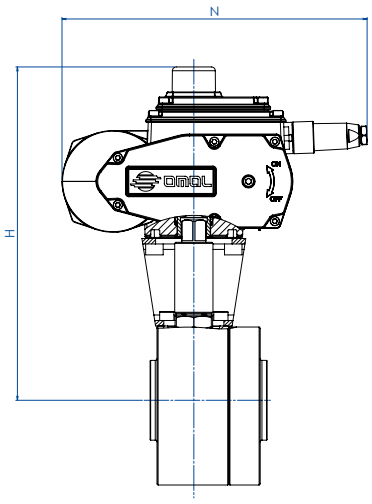
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | SM404401CAA0AAMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,8 |
| DN 20 | 3/4" | ANSI 600 | SM405401CAA0AAMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 8,2 |
| DN 25 | 1" | ANSI 600 | SM406401CAA0AAMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 10,5 |
| DN 32 | 1" 1/4 | ANSI 600 | SM407401CAA0AAMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 14,7 |
| DN 40 | 1" 1/2 | ANSI 600 | SM408401CAB0AAMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 19,2 |
| DN 50 | 2" | ANSI 600 | SM409401CAB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 284,0 | 25,6 |
| DN 65 | 2" 1/2 | ANSI 600 | SM410401CAB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 42,2 |
| DN 80 | 3" | ANSI 600 | SM411401CAB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 52,2 |
| DN 100 | 4" | ANSI 600 | SM412401CAB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 147,4 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | SM404401CBA0AAMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,8 |
| DN 20 | 3/4" | ANSI 600 | SM405401CBA0AAMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 8,2 |
| DN 25 | 1" | ANSI 600 | SM406401CBA0AAMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 10,5 |
| DN 32 | 1" 1/4 | ANSI 600 | SM407401CBA0AAMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 14,7 |
| DN 40 | 1" 1/2 | ANSI 600 | SM408401CBB0AAMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 19,2 |
| DN 50 | 2" | ANSI 600 | SM409401CBB0AAMNV00BAFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 284,0 | 25,6 |
| DN 65 | 2" 1/2 | ANSI 600 | SM410401CBB0AAMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 42,2 |
| DN 80 | 3" | ANSI 600 | SM411401CBB0AAMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 52,2 |
| DN 100 | 4" | ANSI 600 | SM412401CBB0AAMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 147,4 |

# MAGNUM SPLIT WAFER - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | EM404N00CAA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,5 |
| DN 20 | 3/4" | PN 63-100 | EM405N00CAA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,6 |
| DN 25 | 1" | PN 63-100 | EM406N00CAA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 11,5 |
| DN 32 | 1" 1/4 | PN 63-100 | EM407N00CAA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 13,9 |
| DN 40 | 1" 1/2 | PN 63-100 | EM408N00CAB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 21,7 |
| DN 50 | 2" | PN 63 | EM409K00CAB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 24,7 |
| DN 50 | 2" | PN 100 | EM409L00CAB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 27,7 |
| DN 65 | 2" 1/2 | PN 63 | EM410K00CAB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 38,9 |
| DN 65 | 2" 1/2 | PN 100 | EM410L00CAB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5347 | 280,0 | 338,5 | 42,6 |
| DN 80 | 3" | PN 63 | EM411K00CAB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 46,0 |
| DN 80 | 3" | PN 100 | EM411L00CAB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5360 | 256,5 | 373,5 | 51,5 |
| DN 100 | 4" | PN 63 | EM412K00CAB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 94,2 |
| DN 100 | 4" | PN 100 | EM412L00CAB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 93,9 |

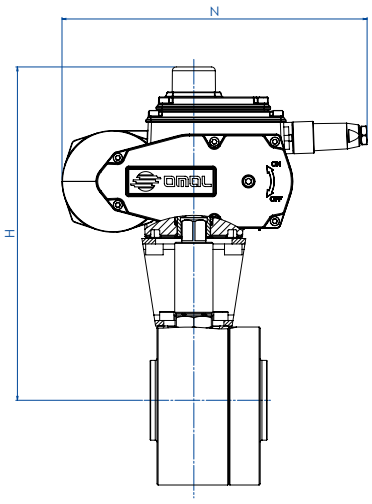
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | EM404N00CBA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,5 |
| DN 20 | 3/4" | PN 63-100 | EM405N00CBA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,6 |
| DN 25 | 1" | PN 63-100 | EM406N00CBA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 11,5 |
| DN 32 | 1" 1/4 | PN 63-100 | EM407N00CBA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 13,9 |
| DN 40 | 1" 1/2 | PN 63-100 | EM408N00CBB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 21,7 |
| DN 50 | 2" | PN 63 | EM409K00CBB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 24,7 |
| DN 50 | 2" | PN 100 | EM409L00CBB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 27,7 |
| DN 65 | 2" 1/2 | PN 63 | EM410K00CBB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 38,9 |
| DN 65 | 2" 1/2 | PN 100 | EM410L00CBB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5347 | 280,0 | 338,5 | 42,6 |
| DN 80 | 3" | PN 63 | EM411K00CBB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 46,0 |
| DN 80 | 3" | PN 100 | EM411L00CBB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5360 | 256,5 | 373,5 | 51,5 |
| DN 100 | 4" | PN 63 | EM412K00CBB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 94,2 |
| DN 100 | 4" | PN 100 | EM412L00CBB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 93,9 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | EM404401CAA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,4 |
| DN 20 | 3/4" | ANSI 600 | EM405401CAA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,8 |
| DN 25 | 1" | ANSI 600 | EM406401CAA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 10,9 |
| DN 32 | 1" 1/4 | ANSI 600 | EM407401CAA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 12,2 |
| DN 40 | 1" 1/2 | ANSI 600 | EM408401CAB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 19,4 |
| DN 50 | 2" | ANSI 600 | EM409401CAB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 23,7 |
| DN 65 | 2" 1/2 | ANSI 600 | EM410401CAB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 37,7 |
| DN 80 | 3" | ANSI 600 | EM411401CAB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 44,9 |
| DN 100 | 4" | ANSI 600 | EM412401CAB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 95,0 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | EM404401CBA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,4 |
| DN 20 | 3/4" | ANSI 600 | EM405401CBA0AAMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,8 |
| DN 25 | 1" | ANSI 600 | EM406401CBA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 10,9 |
| DN 32 | 1" 1/4 | ANSI 600 | EM407401CBA0AAMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 12,2 |
| DN 40 | 1" 1/2 | ANSI 600 | EM408401CBB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 19,4 |
| DN 50 | 2" | ANSI 600 | EM409401CBB0AAMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 23,7 |
| DN 65 | 2" 1/2 | ANSI 600 | EM410401CBB0AAMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 37,7 |
| DN 80 | 3" | ANSI 600 | EM411401CBB0AAMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 44,9 |
| DN 100 | 4" | ANSI 600 | EM412401CBB0AAMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 95,0 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER PN 63-100 ANSI 600
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD
- Sfera flottante contenuta, passaggio totale.
- Tenuta soft-seat: DEVLON.
- Norme per flange d'attacco EN 1092-1 ed. 2008; ANSI B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN63-100; ANSI 600.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

## *STANDARD FEATURES*
- *No protuding floating ball, full bore.*
- *Soft-seat seal: DEVLON.*
- *Standard for connecting flanges: EN 1092-1 ed. 2008;ANSI B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN63-100 - ANSI 600.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

## ESECUZIONI A RICHIESTA
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *Stainless steel Stem nuts and springs.*
- *For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Marking and certificate ATEX **ON REQUEST.***

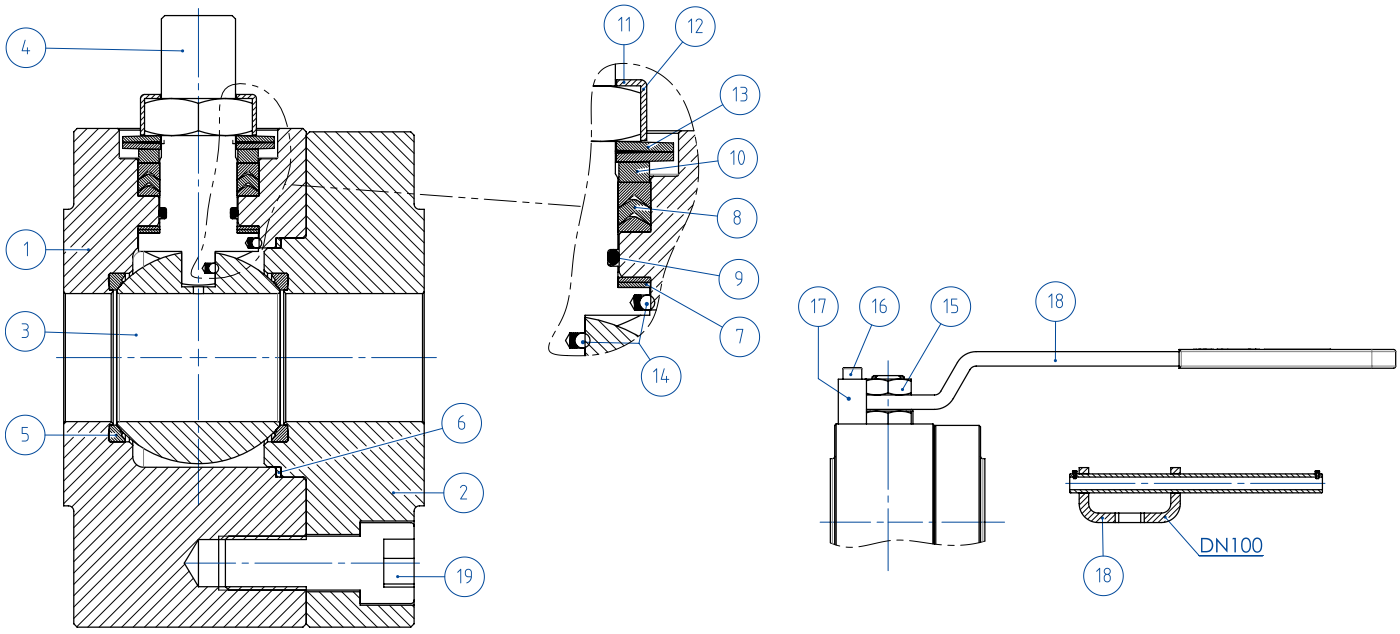
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS*<br>SPLIT WAFER PN63-100 ANSI 600 acciaio inox *stainless steel* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A182 F316 / A479TP.316 (x)<br>(1.4401 / X5CrNiMo17-12-2) |
| 2 | Ghiera *Ring nut* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M<br>(1.4408/GX5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON |
| 6* | Guarnizione corpo ghiera *Body-ring nut gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) • |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 19 | Vite corpo-ghiera *Body-ring nut screw* | A2-70 UNI 3740 (304 S.S.) |
| 15 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 16 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) |
| 18 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
• : per ≤DN32 disponibile solo in DEVLON *for ≤DN32 available only in DEVLON*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -PN-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

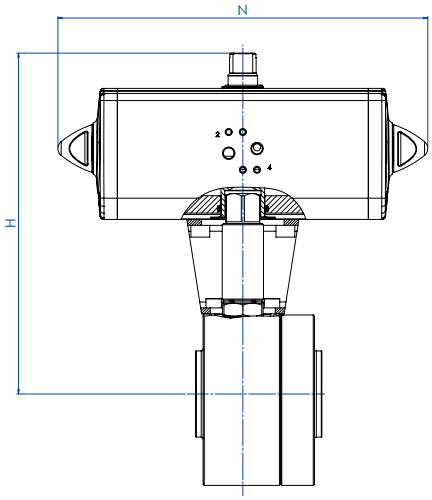
| MISURA *SIZE* | | PN | *316 Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | PN 63-100 | V/LM404N00ABA0AAMRV000 |
| DN 20 | 3/4" | PN 63-100 | V/LM405N00ABA0AAMRV000 |
| DN 25 | 1" | PN 63-100 | V/LM406N00ABA0AAMRV000 |
| DN 32 | 1" 1/4 | PN 63-100 | V/LM407N00ABA0AAMRV000 |
| DN 40 | 1" 1/2 | PN 63-100 | V/LM408N00ABA0AAMNV000 |
| DN 50 | 2" | PN 63 | V/LM409K00ABA0AAMNV000 |
| DN 50 | 2" | PN 100 | V/LM409L00ABA0AAMNV000 |
| DN 65 | 2" 1/2 | PN 63 | V/LM410K00ABA0AAMNV000 |
| DN 65 | 2" 1/2 | PN 100 | V/LM410L00ABA0AAMNV000 |
| DN 80 | 3" | PN 63 | V/LM411K00ABA0AAMNV000 |
| DN 80 | 3" | PN 100 | V/LM411L00ABA0AAMNV000 |
| DN 100 | 4" | PN 63 | V/LM412K00ABA0AAMNV000 |
| DN 100 | 4" | PN 100 | V/LM412L00ABA0AAMNV000 |

### CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -ANSI-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | *316 Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | ANSI 600 | V/LM404401ABA0AAMRV000 |
| DN 20 | 3/4" | ANSI 600 | V/LM405401ABA0AAMRV000 |
| DN 25 | 1" | ANSI 600 | V/LM406401ABA0AAMRV000 |
| DN 32 | 1" 1/4 | ANSI 600 | V/LM407401ABA0AAMRV000 |
| DN 40 | 1" 1/2 | ANSI 600 | V/LM408401ABA0AAMNV000 |
| DN 50 | 2" | ANSI 600 | V/LM409401ABA0AAMNV000 |
| DN 65 | 2" 1/2 | ANSI 600 | V/LM410401ABA0AAMNV000 |
| DN 80 | 3" | ANSI 600 | V/LM411401ABA0AAMNV000 |
| DN 100 | 4" | ANSI 600 | V/LM412401ABA0AAMNV000 |

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

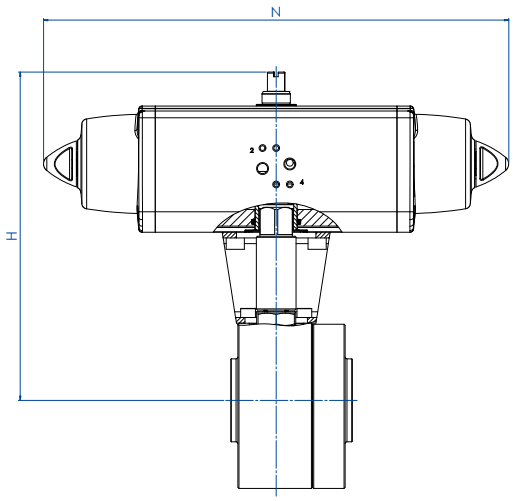
| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | DM404N00ABA0AAMRV000AFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | PN 63-100 | DM405N00ABA0AAMRV000AFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | PN 63-100 | DM406N00ABA0AAMRV000AFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | PN 63-100 | DM407N00ABA0AAMRV000AFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | PN 63-100 | DM408N00ABA0AAMNV000AFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | PN 63 | DM409K00ABA0AAMNV000AFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 50 | 2" | PN 100 | DM409L00ABA0AAMNV000AFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 25,3 |
| DN 65 | 2" 1/2 | PN 63 | DM410K00ABA0AAMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 65 | 2" 1/2 | PN 100 | DM410L00ABA0AAMNV000AFJA0 | DAN0240411S | KCNEEHD5347 | 313,6 | 322,1 | 40,5 |
| DN 80 | 3" | PN 63 | DM411K00ABA0AAMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 80 | 3" | PN 100 | DM411L00ABA0AAMNV000AFKA0 | DAN0360411S | KCNEEHD5347 | 339,3 | 336,5 | 48,7 |
| DN 100 | 4" | PN 63 | DM412K00ABA0AAMNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,9 |
| DN 100 | 4" | PN 100 | DM412L00ABA0AAMNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 401,0 | 83,6 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | DM404401ABA0AAMRV000AFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 5,9 |
| DN 20 | 3/4" | ANSI 600 | DM405401ABA0AAMRV000AFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,6 |
| DN 25 | 1" | ANSI 600 | DM406401ABA0AAMRV000AFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 9,3 |
| DN 32 | 1" 1/4 | ANSI 600 | DM407401ABA0AAMRV000AFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 12,6 |
| DN 40 | 1" 1/2 | ANSI 600 | DM408401ABA0AAMNV000AFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 218,3 | 17,1 |
| DN 50 | 2" | ANSI 600 | DM409401ABA0AAMNV000AFIA0 | DAN0180411S | KCNDDHD5345 | 289,9 | 276,5 | 22,3 |
| DN 65 | 2" 1/2 | ANSI 600 | DM410401ABA0AAMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 36,8 |
| DN 80 | 3" | ANSI 600 | DM411401ABA0AAMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 43,3 |
| DN 100 | 4" | ANSI 600 | DM412401ABA0AAMNV000AFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 83,9 |

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

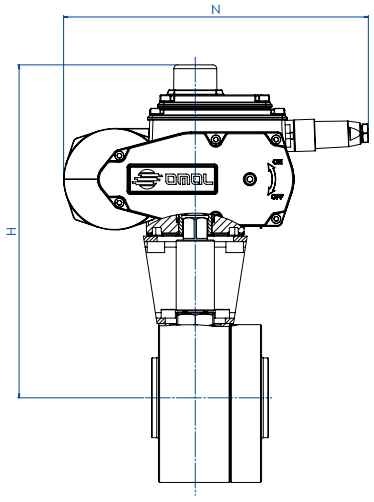
| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | SM404N00ABA0AAMRV000AFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,9 |
| DN 20 | 3/4" | PN 63-100 | SM405N00ABA0AAMRV000AFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,2 |
| DN 25 | 1" | PN 63-100 | SM406N00ABA0AAMRV000AFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 11,1 |
| DN 32 | 1" 1/4 | PN 63-100 | SM407N00ABA0AAMRV000AFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 16,4 |
| DN 40 | 1" 1/2 | PN 63-100 | SM408N00ABA0AAMNV000AFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 21,5 |
| DN 50 | 2" | PN 63 | SM409K00ABA0AAMNV000AFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 26,6 |
| DN 50 | 2" | PN 100 | SM409L00ABA0AAMNV000AFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 287,0 | 29,6 |
| DN 65 | 2" 1/2 | PN 63 | SM410K00ABA0AAMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 43,2 |
| DN 65 | 2" 1/2 | PN 100 | SM410L00ABA0AAMNV000AFLA0 | SRN0240401S | KCNEEHD5355 | 520,5 | 346,0 | 47,0 |
| DN 80 | 3" | PN 63 | SM411K00ABA0AAMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 53,3 |
| DN 80 | 3" | PN 100 | SM411L00ABA0AAMNV000AFMA0 | SRN0360401S | KCNEEHD5355 | 613,0 | 366,5 | 58,8 |
| DN 100 | 4" | PN 63 | SM412K00ABA0AAMNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,6 |
| DN 100 | 4" | PN 100 | SM412L00ABA0AAMNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 439,0 | 105,3 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | SM404401ABA0AAMRV000AFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 6,8 |
| DN 20 | 3/4" | ANSI 600 | SM405401ABA0AAMRV000AFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 8,2 |
| DN 25 | 1" | ANSI 600 | SM406401ABA0AAMRV000AFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 10,5 |
| DN 32 | 1" 1/4 | ANSI 600 | SM407401ABA0AAMRV000AFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 14,7 |
| DN 40 | 1" 1/2 | ANSI 600 | SM408401ABA0AAMNV000AFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 19,2 |
| DN 50 | 2" | ANSI 600 | SM409401ABA0AAMNV000AFKA0 | SRN0180401S | KCNDDHD5345 | 474,0 | 284,0 | 25,6 |
| DN 65 | 2" 1/2 | ANSI 600 | SM410401ABA0AAMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 42,2 |
| DN 80 | 3" | ANSI 600 | SM411401ABA0AAMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 52,2 |
| DN 100 | 4" | ANSI 600 | SM412401ABA0AAMNV000AFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 147,4 |

# MAGNUM SPLIT WAFER - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | EM404N00ABA0AAMRV000AMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,5 |
| DN 20 | 3/4" | PN 63-100 | EM405N00ABA0AAMRV000AMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,6 |
| DN 25 | 1" | PN 63-100 | EM406N00ABA0AAMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 11,5 |
| DN 32 | 1" 1/4 | PN 63-100 | EM407N00ABA0AAMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 13,9 |
| DN 40 | 1" 1/2 | PN 63-100 | EM408N00ABA0AAMNV000AMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 21,7 |
| DN 50 | 2" | PN 63 | EM409K00ABA0AAMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 24,7 |
| DN 50 | 2" | PN 100 | EM409L00ABA0AAMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 27,7 |
| DN 65 | 2" 1/2 | PN 63 | EM410K00ABA0AAMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 38,9 |
| DN 65 | 2" 1/2 | PN 100 | EM410L00ABA0AAMNV000AMKG0 | EA0240A5C000 | KCNEEHD5347 | 280,0 | 338,5 | 42,6 |
| DN 80 | 3" | PN 63 | EM411K00ABA0AAMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 46,0 |
| DN 80 | 3" | PN 100 | EM411L00ABA0AAMNV000AMNA0 | AE160040 | KCNEEHV5360 | 256,5 | 373,5 | 51,5 |
| DN 100 | 4" | PN 63 | EM412K00ABA0AAMNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 94,2 |
| DN 100 | 4" | PN 100 | EM412L00ABA0AAMNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 457,0 | 93,9 |

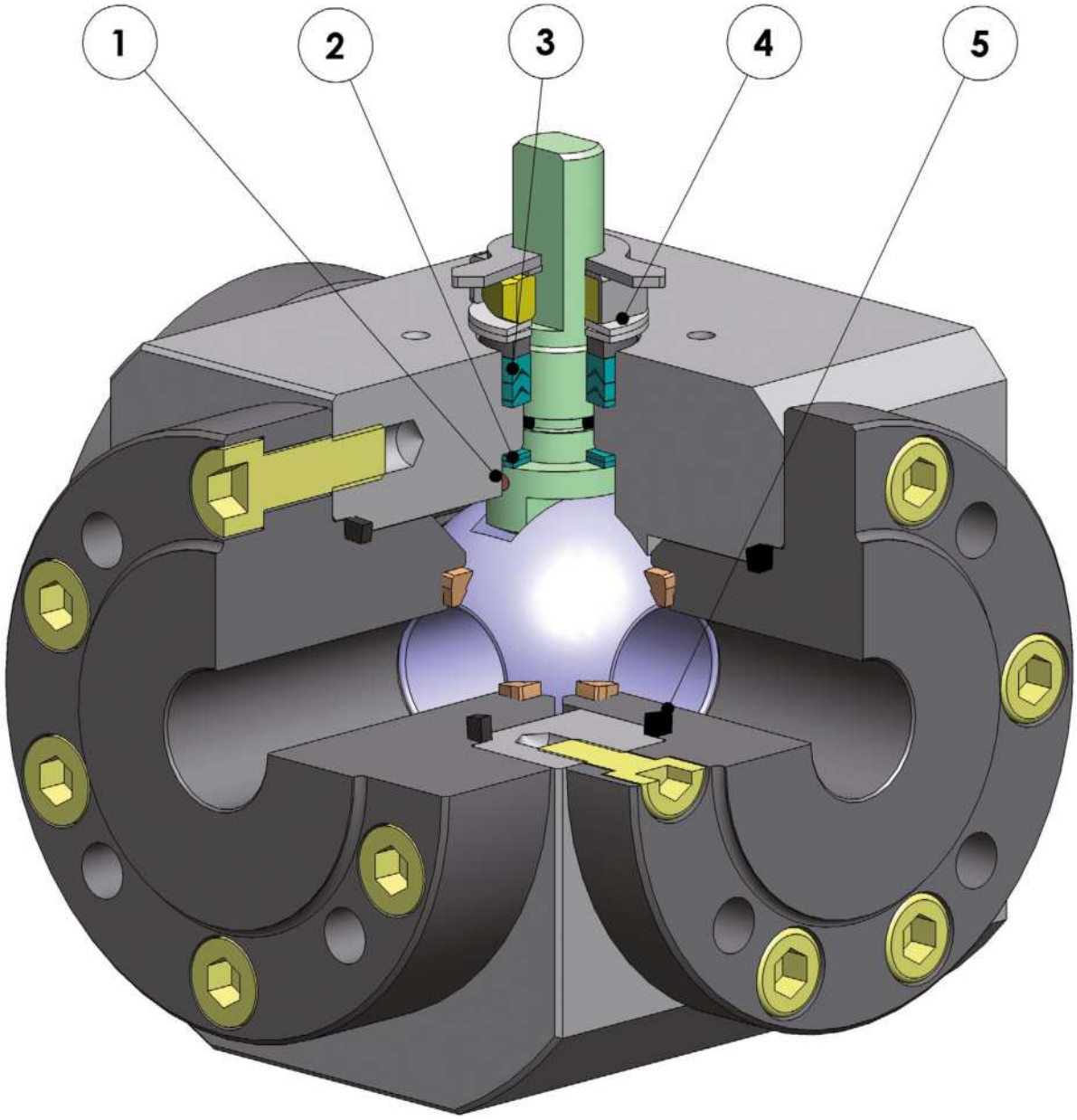
### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | EM404401ABA0AAMRV000AMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 8,4 |
| DN 20 | 3/4" | ANSI 600 | EM405401ABA0AAMRV000AMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 8,8 |
| DN 25 | 1" | ANSI 600 | EM406401ABA0AAMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 10,9 |
| DN 32 | 1" 1/4 | ANSI 600 | EM407401ABA0AAMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 12,2 |
| DN 40 | 1" 1/2 | ANSI 600 | EM408401ABA0AAMNV000AMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 19,4 |
| DN 50 | 2" | ANSI 600 | EM409401ABA0AAMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 296,5 | 23,7 |
| DN 65 | 2" 1/2 | ANSI 600 | EM410401ABA0AAMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 37,7 |
| DN 80 | 3" | ANSI 600 | EM411401ABA0AAMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 44,9 |
| DN 100 | 4" | ANSI 600 | EM412401ABA0AAMNV000AMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 95,0 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# MAGNUM SPLIT WAFER 3 VIE 4 GUARNIZIONI

## *3 WAY 4 SEALS*

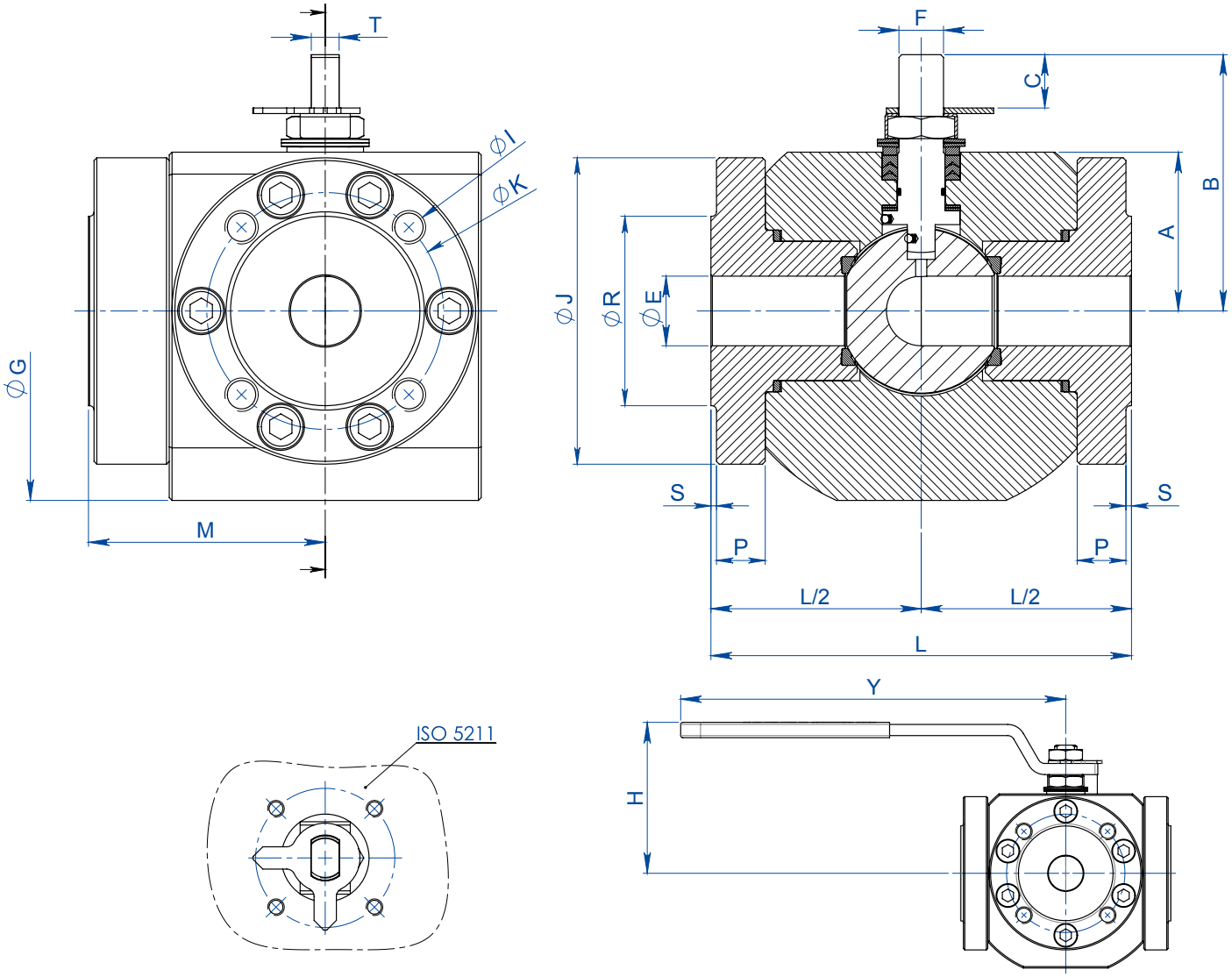


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Breakaway Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "v" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite vero l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizoini tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less breakaway torque* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS

## PN 16-40 ANSI 150




| DIMENSIONI *DIMENSIONS* -PN- | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | PN | ∅E | L | M | A | B | C | ATT. ISO | F/T | ∅G | ∅J | ∅R | S | P | ∅K | N° FORI | ∅I | H | Y | Kg. | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 1/2" | 16-40 | 13 | 124 | 62 | 40 | 55 | 9,2 | F03 | 10/6 | 112 | 90 | 45 | 2 | 15 | 65 | 4 | M12 | 73 | 140 | 6,8 | KLV58004 | KGBV557040 |
| 20 | 3/4" | 16-40 | 19 | 136 | 79 | 48 | 71 | 13 | F04 | 12/8 | 130 | 100 | 58 | 2 | 14 | 75 | 4 | M12 | 90,4 | 150 | 10,5 | KLV58006 | KGBV557050 |
| 25 | 1" | 16-40 | 25 | 151 | 85 | 57 | 92 | 19,1 | F05 | 16/10 | 149 | 110 | 68 | 2 | 16 | 85 | 4 | M12 | 108,4 | 275 | 15,2 | KLV58008 | KGBV557060 |
| 32 | 1" 1/4 | 16-40 | 32 | 167 | 96 | 60 | 95 | 19,1 | F05 | 16/10 | 164 | 130 | 78 | 2 | 20 | 100 | 4 | M16 | 111,4 | 275 | 20,8 | KLV58008 | KGBV557070 |
| 40 | 1" 1/2 | 16-40 | 38 | 185 | 100 | 72 | 119,5 | 26,4 | F07 | 22/14 | 185 | 140 | 88 | 3 | 20 | 110 | 4 | M16 | 132,5 | 350 | 26,1 | KLV58010 | KGBV557080 |
| 50 | 2" | 16-40 | 51 | 200 | 110 | 81 | 128,5 | 26,7 | F07 | 22/14 | 195 | 150 | 102 | 3 | 20 | 125 | 4 | M16 | 141,5 | 350 | 32,4 | KLV58010 | KGBV557090 |
| 65 | 2" 1/2 | 16 | 64 | 218 | 121 | 93 | 154 | 33,2 | F10 | 30/18 | 220 | 178 | 122 | 3 | 20 | 145 | 4 | M16 | 180,3 | 450 | 47,6 | KLV58012 | KGBV557100 |
| 80 | 3" | 16 | 76 | 244 | 126 | 101 | 162 | 33,2 | F10 | 30/18 | 239 | 190 | 135 | 3 | 20 | 160 | 8 | M16 | 188,3 | 450 | 57,9 | KLV58012 | KGBV557110 |
| 100 | 4" | 16 | 102 | 325 | 150 | 124 | 182 | 33,2 | F10 | 30/18 | 296 | 235 | 158 | 3 | 20 | 180 | 8 | M16 | 208,3 | 450 | 109 | KLV58012 | KGBV557120 |

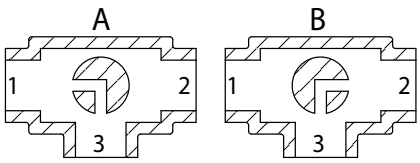
| DIMENSIONI *DIMENSIONS* -ANSI- | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | ANSI | ∅E | L | M | A | B | C | ATT. ISO | F/T | ∅G | ∅J | ∅R | S | P | ∅K | N° FORI | ØI | H | Y | Kg. | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 1/2" | 150 | 13 | 124 | 62 | 40 | 55 | 9,2 | F03 | 10/6 | 112 | 90 | 34,9 | 1,6 | 16 | 60,3 | 4 | 1/2"UNC | 73 | 140 | 6,8 | KLV58004 | KGBV557040 |
| 20 | 3/4" | 150 | 19 | 136 | 79 | 48 | 71 | 13 | F04 | 12/8 | 130 | 100 | 42,9 | 1,6 | 16 | 69,8 | 4 | 1/2"UNC | 90,4 | 150 | 10,4 | KLV58006 | KGBV557050 |
| 25 | 1" | 150 | 25 | 151 | 85 | 57 | 92 | 19,1 | F05 | 16/10 | 149 | 110 | 50,7 | 1,6 | 16 | 79,4 | 4 | 1/2"UNC | 108,4 | 275 | 15,2 | KLV58008 | KGBV557060 |
| 32 | 1" 1/4 | 150 | 32 | 167 | 96 | 60 | 95 | 19,1 | F05 | 16/10 | 164 | 130 | 63,5 | 1,6 | 16 | 88,9 | 4 | 1/2"UNC | 111,4 | 275 | 21,3 | KLV58008 | KGBV557070 |
| 40 | 1" 1/2 | 150 | 38 | 185 | 100 | 72 | 119,5 | 26,4 | F07 | 22/14 | 185 | 140 | 73 | 1,6 | 16 | 98,4 | 4 | 1/2"UNC | 132,5 | 350 | 26,4 | KLV58010 | KGBV557080 |
| 50 | 2" | 150 | 51 | 200 | 110 | 81 | 128,5 | 26,7 | F07 | 22/14 | 195 | 150 | 92,1 | 1,6 | 20 | 120,6 | 4 | 5/8"UNC | 141,5 | 350 | 32,6 | KLV58010 | KGBV557090 |
| 65 | 2" 1/2 | 150 | 64 | 218 | 121 | 93 | 154 | 33,2 | F10 | 30/18 | 220 | 178 | 104,8 | 1,6 | 20 | 139,7 | 4 | 5/8"UNC | 180,3 | 450 | 46,6 | KLV58012 | KGBV557100 |
| 80 | 3" | 150 | 76 | 244 | 126 | 101 | 162 | 33,2 | F10 | 30/18 | 239 | 190 | 127 | 1,6 | 20 | 152,4 | 4 | 5/8"UNC | 188,3 | 450 | 58,5 | KLV58012 | KGBV557110 |
| 100 | 4" | 150 | 102 | 325 | 150 | 124 | 182 | 33,2 | F10 | 30/18 | 296 | 235 | 157,2 | 1,6 | 20 | 190,5 | 8 | 5/8"UNC | 208,3 | 450 | 109 | KLV58012 | KGBV557120 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS
## PN 16-40 ANSI 150

### SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*



Vista da sopra *View from above*

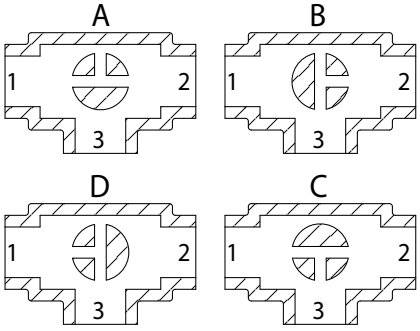
### SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

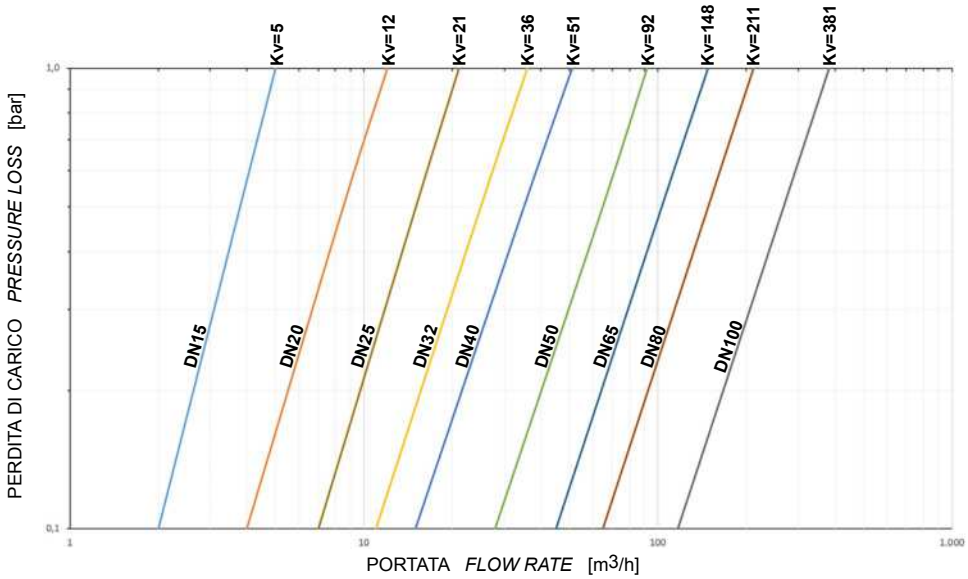
*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*



Vista da sopra *View from above*

### DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
### *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
Qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto previsto.

*The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.*
*In case of not lubricated fluids and/or fluids containing solid particles, torques could be higher than the ones indicated.*

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS PN 16-40 ANSI 150
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft seat TFM 1600.
- Norme per flange d'attacco: EN1092-1, ASME B16.5.
- Classi di pressione : ANSI 150; PN16-40.
- Classe di tenuta: EN12266-1 rate A.
- Temperatura di utilizzo: -20°C +150°C.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.

## *STANDARD FEATURES*
- *Floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN1092-1, ASME B16.5 .*
- *Pressure Class : ANSI 150; PN16-40.*
- *Tightness Class: EN12266-1 rate A.*
- *Working temperature: -20°C +150°C.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40°C in A350 LF2.
- Per altri tipi di flangiatura contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Leva, Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA**.

## *EXECUTION ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40°C).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials please contact our sales department.*
- *Stainless steel lever.*
- *Stainless steel stem nuts and springs.*
- *For versions with materials (body/ball/stem) different from the standard please contact our sales department.*
- *Surface treatment: white zinc coating, epoxy coating. For other coating please contact our sales department.*
- *Marking and certificate ATEX **ON REQUEST.***

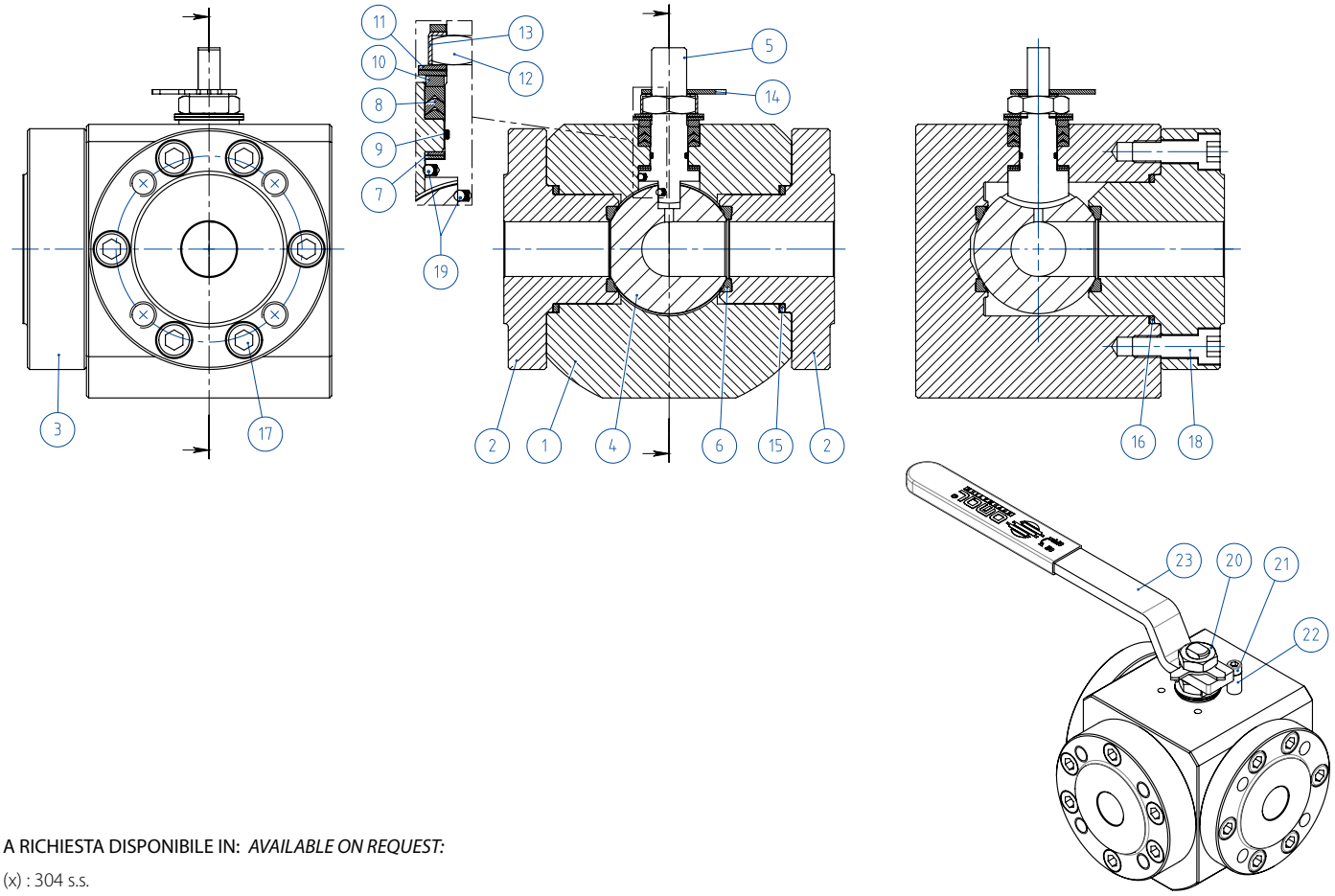
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a ASME B16.34, ASME VIII div.1, EN12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN12516 per valvole PN.

## *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN12516 for PN valves.*

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




A RICHIESTA DISPONIBILE IN: *AVAILABLE ON REQUEST:*

(x) : 304 s.s.
(xx) : 301 s.s.

| MATERIALI *MATERIALS* - SPLIT WAFER PN16-40 ANSI 150 | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Ghiera *Ring nut* | | |
| 3 | Ghiera side entry *Side entry ring nut* | | |
| 4 | Sfera *Ball* | ASTM A351 CF8M | ASTM A351 CF8M |
| 5 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 6* | Seggio *Seat* | TFM1600 | TFM1600 |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 | TFM1600 |
| 8* | Pacco a V *Chavron ring* | TFM1600 | TFM1600 |
| 9* | O-ring stelo *Stem o-ring* | FKM | FKM |
| 10 | Anello premi guarnizione *Packing gland ring* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 11 | Molle stelo *Stem springs* | 50CrV4 ZINCATO - *galvanized* (xx) | |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *galvanized* (x) | |
| 13 | Piastra blocca dado *Stop nut plate* | 304 S.S. | |
| 14 | Indicatore *Indicator* | 304 S.S. | |
| 15* | Guarnizione corpo ghiera *Body ring nut gasket* | GRAFOIL | GRAFOIL |
| 16* | Guarnizione corpo ghiera side entry *Body side entry ring nut gasket* | GRAFOIL | GRAFOIL |
| 17 | Viti corpo ghiera *Body ring nut screw* | *8.8 UNI 3740 ZINCATE - galvanized* | A2-70 UNI 3740 (304 S.S.) |
| 18 | Viti corpo ghiera side entry *Body-side entring ring nut screw* | | |
| 19 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 20 | Controdado *Lock nut* | UNI 3740-1 6S zincato - *galvanized* (x) | UNI 3740-1 6S zincato - *galvanized* (x) |
| 21 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 22 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 23 | Leva *Lever* | Fe37 zincato - *galvanized* (x) | Fe37 zincato - *galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA - SFERA A "L" e "T" *FREE SHAFT AND WITH LEVER - "L" and "T" BALL*



### CODICI VALVOLE IN ACCIAIO AL CARBONIO ASSE LIBERO (V__) E CON LEVA (L__) - SFERA A "L"
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE - "L" BALL*

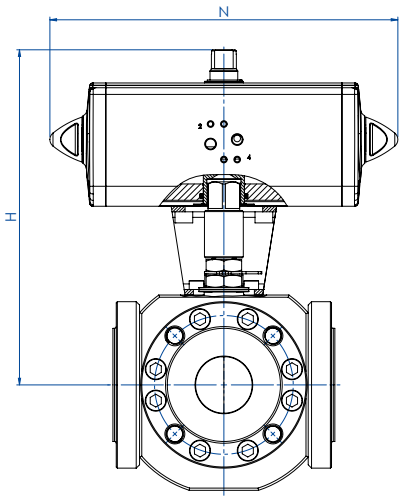
| | MISURA *SIZE* | | PN/ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|---|
| | DN [mm] | [inch] | | | |
| PN | DN 15 | 1/2" | PN 16-40 | V/LM504F00CAA0ABQNV00B | V/LM504F00CBA0AAQNV00B |
| | DN 20 | 3/4" | PN 16-40 | V/LM505F00CAA0ABQNV00B | V/LM505F00CBA0AAQNV00B |
| | DN 25 | 1" | PN 16-40 | V/LM506F00CAA0ABQNV00B | V/LM506F00CBA0AAQNV00B |
| | DN 32 | 1" 1/4 | PN 16-40 | V/LM507F00CAA0ABQNV00B | V/LM507F00CBA0AAQNV00B |
| | DN 40 | 1" 1/2 | PN 16-40 | V/LM508F00CAA0ABQNV00B | V/LM508F00CBA0AAQNV00B |
| | DN 50 | 2" | PN 16-40 | V/LM509F00CAA0ABQNV00B | V/LM509F00CBA0AAQNV00B |
| | DN 65 | 2" 1/2 | PN 16 | V/LM510E00CAA0ABQNV00B | V/LM510E00CBA0AAQNV00B |
| | DN 80 | 3" | PN 16 | V/LM511E00CAA0ABQNV00B | V/LM511E00CBA0AAQNV00B |
| | DN 100 | 4" | PN 16 | V/LM512E00CAA0ABQNV00B | V/LM512E00CBA0AAQNV00B |
| ANSI | DN 15 | 1/2" | ANSI 150 | V/LM504101CAA0ABQNV00B | V/LM504101CBA0AAQNV00B |
| | DN 20 | 3/4" | ANSI 150 | V/LM505101CAA0ABQNV00B | V/LM505101CBA0AAQNV00B |
| | DN 25 | 1" | ANSI 150 | V/LM506101CAA0ABQNV00B | V/LM506101CBA0AAQNV00B |
| | DN 32 | 1" 1/4 | ANSI 150 | V/LM507101CAA0ABQNV00B | V/LM507101CBA0AAQNV00B |
| | DN 40 | 1" 1/2 | ANSI 150 | V/LM508101CAA0ABQNV00B | V/LM508101CBA0AAQNV00B |
| | DN 50 | 2" | ANSI 150 | V/LM509101CAA0ABQNV00B | V/LM509101CBA0AAQNV00B |
| | DN 65 | 2" 1/2 | ANSI 150 | V/LM510101CAA0ABQNV00B | V/LM510101CBA0AAQNV00B |
| | DN 80 | 3" | ANSI 150 | V/LM511101CAA0ABQNV00B | V/LM511101CBA0AAQNV00B |
| | DN 100 | 4" | ANSI 150 | V/LM512101CAA0ABQNV00B | V/LM512101CBA0AAQNV00B |

### CODICI VALVOLE IN ACCIAIO AL CARBONIO ASSE LIBERO (V__) E CON LEVA (L__) - SFERA A "T"
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE - "T" BALL*

| | MISURA *SIZE* | | PN/ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|---|
| | DN [mm] | [inch] | | | |
| PN | DN 15 | 1/2" | PN 16-40 | V/LM604F00CAA0ABQNV00B | V/LM604F00CBA0AAQNV00B |
| | DN 20 | 3/4" | PN 16-40 | V/LM605F00CAA0ABQNV00B | V/LM605F00CBA0AAQNV00B |
| | DN 25 | 1" | PN 16-40 | V/LM606F00CAA0ABQNV00B | V/LM606F00CBA0AAQNV00B |
| | DN 32 | 1" 1/4 | PN 16-40 | V/LM607F00CAA0ABQNV00B | V/LM607F00CBA0AAQNV00B |
| | DN 40 | 1" 1/2 | PN 16-40 | V/LM608F00CAA0ABQNV00B | V/LM608F00CBA0AAQNV00B |
| | DN 50 | 2" | PN 16-40 | V/LM609F00CAA0ABQNV00B | V/LM609F00CBA0AAQNV00B |
| | DN 65 | 2" 1/2 | PN 16 | V/LM610E00CAA0ABQNV00B | V/LM610E00CBA0AAQNV00B |
| | DN 80 | 3" | PN 16 | V/LM611E00CAA0ABQNV00B | V/LM611E00CBA0AAQNV00B |
| | DN 100 | 4" | PN 16 | V/LM612E00CAA0ABQNV00B | V/LM612E00CBA0AAQNV00B |
| ANSI | DN 15 | 1/2" | ANSI 150 | V/LM604101CAA0ABQNV00B | V/LM604101CBA0AAQNV00B |
| | DN 20 | 3/4" | ANSI 150 | V/LM605101CAA0ABQNV00B | V/LM605101CBA0AAQNV00B |
| | DN 25 | 1" | ANSI 150 | V/LM606101CAA0ABQNV00B | V/LM606101CBA0AAQNV00B |
| | DN 32 | 1" 1/4 | ANSI 150 | V/LM607101CAA0ABQNV00B | V/LM607101CBA0AAQNV00B |
| | DN 40 | 1" 1/2 | ANSI 150 | V/LM608101CAA0ABQNV00B | V/LM608101CBA0AAQNV00B |
| | DN 50 | 2" | ANSI 150 | V/LM609101CAA0ABQNV00B | V/LM609101CBA0AAQNV00B |
| | DN 65 | 2" 1/2 | ANSI 150 | V/LM610101CAA0ABQNV00B | V/LM610101CBA0AAQNV00B |
| | DN 80 | 3" | ANSI 150 | V/LM611101CAA0ABQNV00B | V/LM611101CBA0AAQNV00B |
| | DN 100 | 4" | ANSI 150 | V/LM612101CAA0ABQNV00B | V/LM612101CBA0AAQNV00B |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

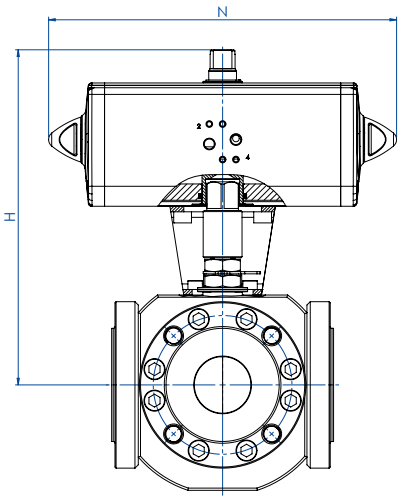
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | DM504F00CAA0ABQNV00BAFEA0 | DM604F00CAA0ABQNV00BAFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 16-40 | DM505F00CAA0ABQNV00BAFGA0 | DM605F00CAA0ABQNV00BAFGA0 | DAN01106411S | KCNBCHD5265 | 237,0 | 211,3 | 13,8 |
| DN 25 | 1" | 16-40 | DM506F00CAA0ABQNV00BAFGA0 | DM606F00CAA0ABQNV00BAFGA0 | DAN01106411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 16-40 | DM507F00CAA0ABQNV00BAFHA0 | DM607F00CAA0ABQNV00BAFHA0 | DAN01204115 | KCNCCHD5317 | 244,1 | 227,0 | 24,2 |
| DN 40 | 1" 1/2 | 16-40 | DM508F00CAA0ABQNV00BAFIA0 | DM608F00CAA0ABQNV00BAFIA0 | DAN01804115 | KCNDDHD5319 | 289,9 | 269,5 | 31,8 |
| DN 50 | 2" | 16-40 | DM509F00CAA0ABQNV00BAFKA0 | DM609F00CAA0ABQNV00BAFKA0 | DAN03604115 | KCNDDHD5319 | 339,3 | 155,0 | 40,0 |
| DN 65 | 2" 1/2 | 16 | DM510E00CAA0ABQNV00BAFKA0 | DM610E00CAA0ABQNV00BAFKA0 | DAN03604115 | KCNEEHD5379 | 339,3 | 321,0 | 55,9 |
| DN 80 | 3" | 16 | DM511E00CAA0ABQNV00BAFLA0 | DM611E00CAA0ABQNV00BAFLA0 | DAN04804115 | KCNEFHD5322 | 387,6 | 305,9 | 70,1 |
| DN 100 | 4" | 16 | DM512E00CAA0ABQNV00BAFNA0 | DM612E00CAA0ABQNV00BAFNA0 | DAN09604115 | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | DM504F00CBA0AAQNV00BAFEA0 | DM604F00CBA0AAQNV00BAFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 16-40 | DM505F00CBA0AAQNV00BAFGA0 | DM605F00CBA0AAQNV00BAFGA0 | DAN01106411S | KCNBCHD5265 | 237,0 | 211,3 | 13,8 |
| DN 25 | 1" | 16-40 | DM506F00CBA0AAQNV00BAFGA0 | DM606F00CBA0AAQNV00BAFGA0 | DAN01106411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 16-40 | DM507F00CBA0AAQNV00BAFHA0 | DM607F00CBA0AAQNV00BAFHA0 | DAN01204115 | KCNCCHD5317 | 244,1 | 227,0 | 24,2 |
| DN 40 | 1" 1/2 | 16-40 | DM508F00CBA0AAQNV00BAFIA0 | DM608F00CBA0AAQNV00BAFIA0 | DAN01804115 | KCNDDHD5319 | 289,9 | 269,5 | 31,8 |
| DN 50 | 2" | 16-40 | DM509F00CBA0AAQNV00BAFKA0 | DM609F00CBA0AAQNV00BAFKA0 | DAN03604115 | KCNDDHD5319 | 339,3 | 155,0 | 40,0 |
| DN 65 | 2" 1/2 | 16 | DM510E00CBA0AAQNV00BAFKA0 | DM610E00CBA0AAQNV00BAFKA0 | DAN03604115 | KCNEEHD5379 | 339,3 | 321,0 | 55,9 |
| DN 80 | 3" | 16 | DM511E00CBA0AAQNV00BAFLA0 | DM611E00CBA0AAQNV00BAFLA0 | DAN04804115 | KCNEFHD5322 | 387,6 | 305,9 | 70,1 |
| DN 100 | 4" | 16 | DM512E00CBA0AAQNV00BAFNA0 | DM612E00CBA0AAQNV00BAFNA0 | DAN09604115 | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

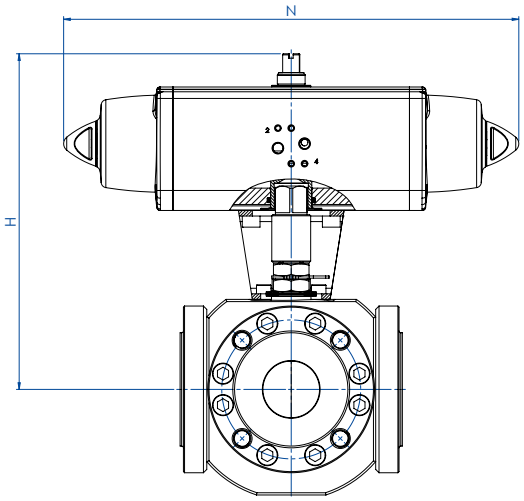
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DM504101CAA0ABQNV00BAFEA0 | DM604101CAA0ABQNV00BAFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 150 | DM505101CAA0ABQNV00BAFGA0 | DM605101CAA0ABQNV00BAFGA0 | DAN0106411S | KCNBCHD5265 | 237,0 | 211,3 | 13,7 |
| DN 25 | 1" | 150 | DM506101CAA0ABQNV00BAFGA0 | DM606101CAA0ABQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 150 | DM507101CAA0ABQNV00BAFHA0 | DM607101CAA0ABQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 24,7 |
| DN 40 | 1" 1/2 | 150 | DM508101CAA0ABQNV00BAFIA0 | DM608101CAA0ABQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 32,1 |
| DN 50 | 2" | 150 | DM509101CAA0ABQNV00BAFKA0 | DM609101CAA0ABQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 155,0 | 40,2 |
| DN 65 | 2" 1/2 | 150 | DM510101CAA0ABQNV00BAFKA0 | DM610101CAA0ABQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 54,9 |
| DN 80 | 3" | 150 | DM511101CAA0ABQNV00BAFLA0 | DM611101CAA0ABQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 305,9 | 70,7 |
| DN 100 | 4" | 150 | DM512101CAA0ABQNV00BAFNA0 | DM612101CAA0ABQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DM504101CBA0AAQNV00BAFEA0 | DM604101CBA0AAQNV00BAFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 150 | DM505101CBA0AAQNV00BAFGA0 | DM605101CBA0AAQNV00BAFGA0 | DAN0106411S | KCNBCHD5265 | 237,0 | 211,3 | 13,7 |
| DN 25 | 1" | 150 | DM506101CBA0AAQNV00BAFGA0 | DM606101CBA0AAQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 150 | DM507101CBA0AAQNV00BAFHA0 | DM607101CBA0AAQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 24,7 |
| DN 40 | 1" 1/2 | 150 | DM508101CBA0AAQNV00BAFIA0 | DM608101CBA0AAQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 32,1 |
| DN 50 | 2" | 150 | DM509101CBA0AAQNV00BAFKA0 | DM609101CBA0AAQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 155,0 | 40,2 |
| DN 65 | 2" 1/2 | 150 | DM510101CBA0AAQNV00BAFKA0 | DM610101CBA0AAQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 54,9 |
| DN 80 | 3" | 150 | DM511101CBA0AAQNV00BAFLA0 | DM611101CBA0AAQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 305,9 | 70,7 |
| DN 100 | 4" | 150 | DM512101CBA0AAQNV00BAFNA0 | DM612101CBA0AAQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

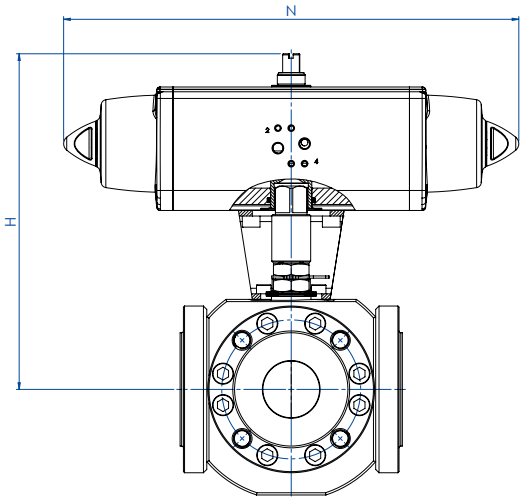
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | SM504F00CAA0ABQNV00BAFHA0 | SM604F00CAA0ABQNV00BAFHA0 | SRN0060401S | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 16-40 | SM505F00CAA0ABQNV00BAFIA0 | SM605F00CAA0ABQNV00BAFIA0 | SRN0090401S | KCNBDHD5382 | 393,7 | 245,5 | 17,4 |
| DN 25 | 1" | 16-40 | SM506F00CAA0ABQNV00BAFIA0 | SM606F00CAA0ABQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 16-40 | SM507F00CAA0ABQNV00BAFJA0 | SM607F00CAA0ABQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 28,7 |
| DN 40 | 1" 1/2 | 16-40 | SM508F00CAA0ABQNV00BAFKA0 | SM608F00CAA0ABQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 36,1 |
| DN 50 | 2" | 16-40 | SM509F00CAA0ABQNV00BAFMA0 | SM609F00CAA0ABQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 50,7 |
| DN 65 | 2" 1/2 | 16 | SM510E00CAA0ABQNV00BAFMA0 | SM610E00CAA0ABQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 66,7 |
| DN 80 | 3" | 16 | SM511E00CAA0ABQNV00BAFNA0 | SM611E00CAA0ABQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 339,0 | 83,7 |
| DN 100 | 4" | 16 | SM512E00CAA0ABQNV00BAFRA0 | SM612E00CAA0ABQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | SM504F00CBA0AAQNV00BAFHA0 | SM604F00CBA0AAQNV00BAFHA0 | SRN0060401S | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 16-40 | SM505F00CBA0AAQNV00BAFIA0 | SM605F00CBA0AAQNV00BAFIA0 | SRN0090401S | KCNBDHD5382 | 393,7 | 245,5 | 17,4 |
| DN 25 | 1" | 16-40 | SM506F00CBA0AAQNV00BAFIA0 | SM606F00CBA0AAQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 16-40 | SM507F00CBA0AAQNV00BAFJA0 | SM607F00CBA0AAQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 28,7 |
| DN 40 | 1" 1/2 | 16-40 | SM508F00CBA0AAQNV00BAFKA0 | SM608F00CBA0AAQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 36,1 |
| DN 50 | 2" | 16-40 | SM509F00CBA0AAQNV00BAFMA0 | SM609F00CBA0AAQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 50,7 |
| DN 65 | 2" 1/2 | 16 | SM510E00CBA0AAQNV00BAFMA0 | SM610E00CBA0AAQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 66,7 |
| DN 80 | 3" | 16 | SM511E00CBA0AAQNV00BAFNA0 | SM611E00CBA0AAQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 339,0 | 83,7 |
| DN 100 | 4" | 16 | SM512E00CBA0AAQNV00BAFRA0 | SM612E00CBA0AAQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

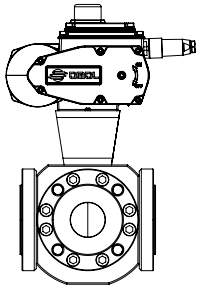
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 150 | SM504101CAA0ABQNV00BAFHA0 | SM604101CAA0ABQNV00BAFHA0 | SRN00060401S | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 150 | SM505101CAA0ABQNV00BAFIA0 | SM605101CAA0ABQNV00BAFIA0 | SRN00090401S | KCNBDHD5382 | 393,7 | 245,5 | 17,3 |
| DN 25 | 1" | 150 | SM506101CAA0ABQNV00BAFIA0 | SM606101CAA0ABQNV00BAFIA0 | SRN00090401S | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 150 | SM507101CAA0ABQNV00BAFJA0 | SM607101CAA0ABQNV00BAFJA0 | SRN01120401S | KCNCDHD5329 | 409,6 | 261,1 | 29,2 |
| DN 40 | 1" 1/2 | 150 | SM508101CAA0ABQNV00BAFKA0 | SM608101CAA0ABQNV00BAFKA0 | SRN01804015 | KCNDDHD5383 | 474,0 | 280,0 | 36,4 |
| DN 50 | 2" | 150 | SM509101CAA0ABQNV00BAFMA0 | SM609101CAA0ABQNV00BAFMA0 | SRN03604015 | KCNDEHD5330 | 613,0 | 339,0 | 50,9 |
| DN 65 | 2" 1/2 | 150 | SM510101CAA0ABQNV00BAFMA0 | SM610101CAA0ABQNV00BAFMA0 | SRN03604015 | KCNEFHD5322 | 613,0 | 351,0 | 65,7 |
| DN 80 | 3" | 150 | SM511101CAA0ABQNV00BAFNA0 | SM611101CAA0ABQNV00BAFNA0 | SRN04804015 | KCNEFHD5392 | 648,2 | 339,0 | 84,3 |
| DN 100 | 4" | 150 | SM512101CAA0ABQNV00BAFRA0 | SM612101CAA0ABQNV00BAFRA0 | SRN09604015 | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 150 | SM504101CBA0AAQNV00BAFHA0 | SM604101CBA0AAQNV00BAFHA0 | SRN00060401S | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 150 | SM505101CBA0AAQNV00BAFIA0 | SM605101CBA0AAQNV00BAFIA0 | SRN00090401S | KCNBDHD5382 | 393,7 | 245,5 | 17,3 |
| DN 25 | 1" | 150 | SM506101CBA0AAQNV00BAFIA0 | SM606101CBA0AAQNV00BAFIA0 | SRN00090401S | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 150 | SM507101CBA0AAQNV00BAFJA0 | SM607101CBA0AAQNV00BAFJA0 | SRN01204015 | KCNCDHD5329 | 409,6 | 261,1 | 29,2 |
| DN 40 | 1" 1/2 | 150 | SM508101CBA0AAQNV00BAFKA0 | SM608101CBA0AAQNV00BAFKA0 | SRN01804015 | KCNDDHD5383 | 474,0 | 280,0 | 36,4 |
| DN 50 | 2" | 150 | SM509101CBA0AAQNV00BAFMA0 | SM609101CBA0AAQNV00BAFMA0 | SRN03604015 | KCNDEHD5330 | 613,0 | 339,0 | 50,9 |
| DN 65 | 2" 1/2 | 150 | SM510101CBA0AAQNV00BAFMA0 | SM610101CBA0AAQNV00BAFMA0 | SRN03604015 | KCNEFHD5322 | 613,0 | 351,0 | 65,7 |
| DN 80 | 3" | 150 | SM511101CBA0AAQNV00BAFNA0 | SM611101CBA0AAQNV00BAFNA0 | SRN04804015 | KCNEFHD5392 | 648,2 | 339,0 | 84,3 |
| DN 100 | 4" | 150 | SM512101CBA0AAQNV00BAFRA0 | SM612101CBA0AAQNV00BAFRA0 | SRN09604015 | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

A richiesta, articoli disponibili anche con attuatore elettrico:
*On request, items available also with electric actuator:*





# MAGNUM SPLIT WAFER 3 WAY 4 SEALS PN 16-40 ANSI 150
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft seat TFM 1600.
- Norme per flange d'attacco: EN1092-1, ASME B16.5.
- Classi di pressione : ansi 150; PN16-40.
- Classe di tenuta: EN12266-1 rate A.
- Temperatura di utilizzo: -40°C +150°C.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.

## *STANDARD FEATURES*
- *Floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN1092-1, ASME B16.5.*
- *Pressure Class : ansi 150; PN16-40.*
- *Tightness Class: EN12266-1 rate A.*
- *Working temperature: -40°C +150°C.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*

## ESECUZIONI A RICHIESTA
- Per altri tipi di flangiatura contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

## *EXECUTION ON REQUEST*
- *For other flanges type please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials please contact our sales department.*
- *Stainless steel lever.*
- *Stainless steel stem nuts and springs.*
- *For versions with materials (body/ball/stem) different from the standard please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

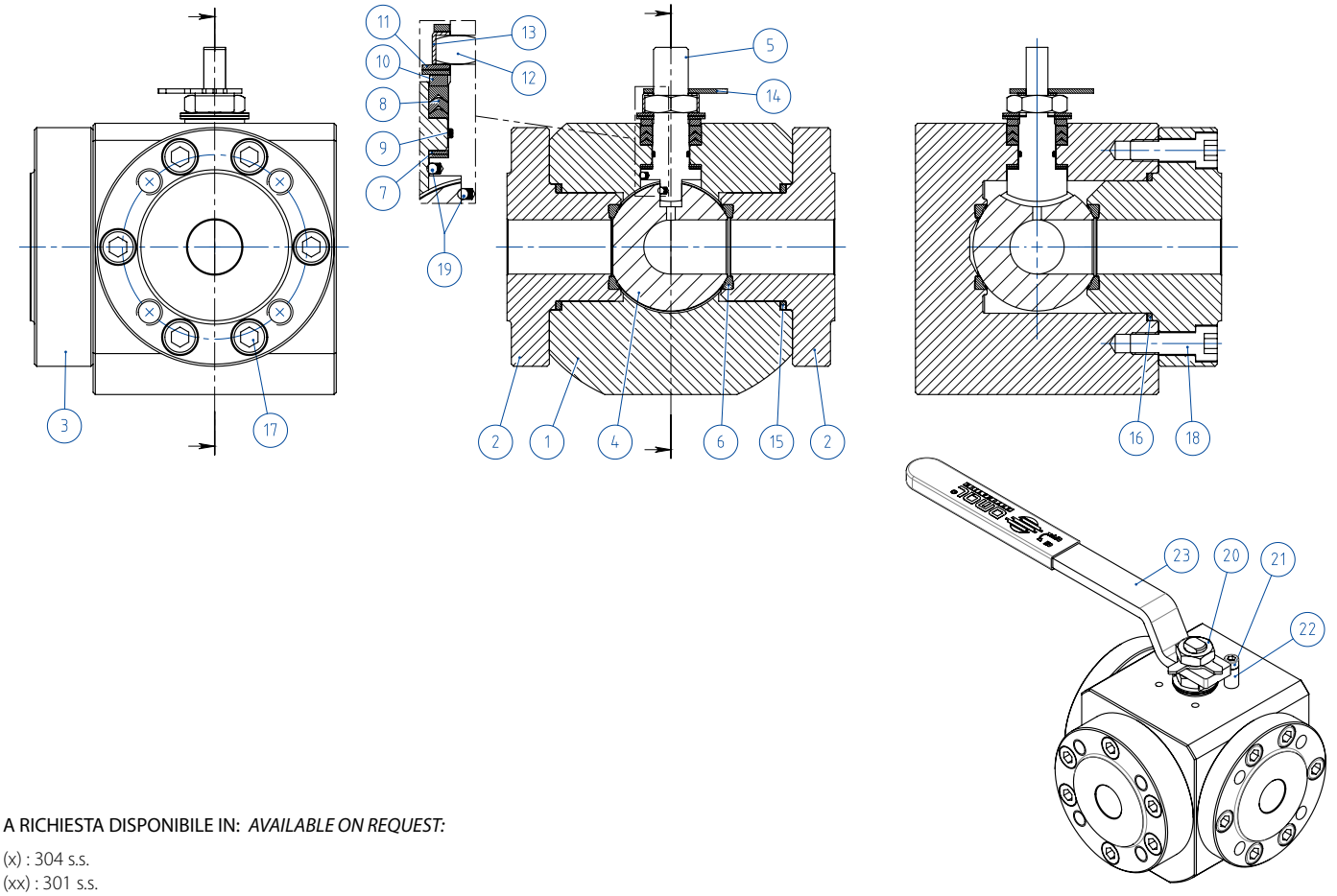
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a ASME B16.34, ASME VIII div.1, EN12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN12516 per valvole PN.

## *ENGINEERING STANDARD*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN12516 for PN valves.*

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




A RICHIESTA DISPONIBILE IN: *AVAILABLE ON REQUEST:*

(x) : 304 s.s.
(xx) : 301 s.s.

| MATERIALI *MATERIALS* - SPLIT WAFER PN16-40 ANSI 150 | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A182 F316 / A479TP.316 |
| 2 | Ghiera *Ring nut* | |
| 3 | Ghiera side entry *Side entry ring nut* | |
| 4 | Sfera *Ball* | ASTM A351 CF8M |
| 5 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 6* | Seggio *Seat* | TFM1600 |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 |
| 8* | Pacco a V *Chavron ring* | TFM1600 |
| 9* | O-ring stelo *Stem o-ring* | FKM |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Molle stelo *Stem springs* | 50CrV4 ZINCATO *-galvanized* (xx) |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO-*galvanized* (x) |
| 13 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 14 | Indicatore *Indicator* | 304 S.S. |
| 15* | Guarnizione corpo ghiera *Body ring nut gasket* | GRAFOIL |
| 16* | Guarnizione corpo ghiera side entry *Body side entry ring nut gasket* | GRAFOIL |
| 17 | Viti corpo ghiera *Body ring nut screw* | A2-70 UNI 3740 (304 S.S.) |
| 18 | Viti corpo ghiera side entry *Body-side entring ring nut screw* | |
| 19 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 20 | Controdado *Lock nut* | UNI 3740-1 6S zincato - *galvanized* (x) |
| 21 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 22 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 23 | Leva *Lever* | Fe37 zincato - *galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA - SFERA A "L" e "T" *FREE SHAFT AND WITH LEVER - "L" and "T" BALL*



### CODICI VALVOLE IN ACCIAIO INOX ASSE LIBERO (V__) E CON LEVA (L__) -PN-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

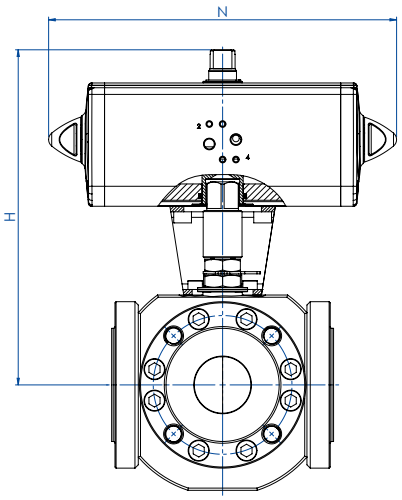
| MISURA *SIZE* | | PN | 316 *Stainless steel - "L" BALL* | 316 *Stainless steel - "T" BALL* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 16-40 | V/LM504F00ABA0AAQNV000 | V/LM604F00ABA0AAQNV000 |
| DN 20 | 3/4" | PN 16-40 | V/LM505F00ABA0AAQNV000 | V/LM605F00ABA0AAQNV000 |
| DN 25 | 1" | PN 16-40 | V/LM506F00ABA0AAQNV000 | V/LM606F00ABA0AAQNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LM507F00ABA0AAQNV000 | V/LM607F00ABA0AAQNV000 |
| DN 40 | 1" 1/2 | PN 16-40 | V/LM508F00ABA0AAQNV000 | V/LM608F00ABA0AAQNV000 |
| DN 50 | 2" | PN 16-40 | V/LM509F00ABA0AAQNV000 | V/LM609F00ABA0AAQNV000 |
| DN 65 | 2" 1/2 | PN 16 | V/LM510E00ABA0AAQNV000 | V/LM610E00ABA0AAQNV000 |
| DN 80 | 3" | PN 16 | V/LM511E00ABA0AAQNV000 | V/LM611E00ABA0AAQNV000 |
| DN 100 | 4" | PN 16 | V/LM512E00ABA0AAQNV000 | V/LM612E00ABA0AAQNV000 |

### CODICI VALVOLE IN ACCIAIO INOX ASSE LIBERO (V__) E CON LEVA (L__) -ANSI-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | 316 *Stainless steel - "L" BALL* | 316 *Stainless steel - "T" BALL* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 150 | V/LM504101ABA0AAQNV000 | V/LM604101ABA0AAQNV000 |
| DN 20 | 3/4" | ANSI 150 | V/LM505101ABA0AAQNV000 | V/LM605101ABA0AAQNV000 |
| DN 25 | 1" | ANSI 150 | V/LM506101ABA0AAQNV000 | V/LM606101ABA0AAQNV000 |
| DN 32 | 1" 1/4 | ANSI 150 | V/LM507101ABA0AAQNV000 | V/LM607101ABA0AAQNV000 |
| DN 40 | 1" 1/2 | ANSI 150 | V/LM508101ABA0AAQNV000 | V/LM608101ABA0AAQNV000 |
| DN 50 | 2" | ANSI 150 | V/LM509101ABA0AAQNV000 | V/LM609101ABA0AAQNV000 |
| DN 65 | 2" 1/2 | ANSI 150 | V/LM510101ABA0AAQNV000 | V/LM610101ABA0AAQNV000 |
| DN 80 | 3" | ANSI 150 | V/LM511101ABA0AAQNV000 | V/LM611101ABA0AAQNV000 |
| DN 100 | 4" | ANSI 150 | V/LM512101ABA0AAQNV000 | V/LM612101ABA0AAQNV000 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL* -PN-

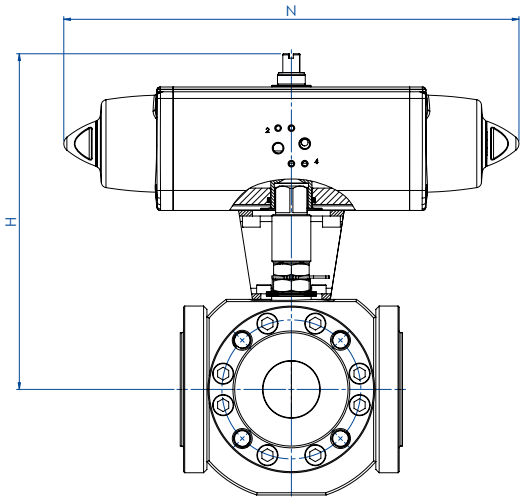
| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | DM504F00ABA0AAQNV000AFEA0 | DM604F00ABA0AAQNV000AFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 16-40 | DM505F00ABA0AAQNV000AFGA0 | DM605F00ABA0AAQNV000AFGA0 | DAN01060411S | KCNBCHD5265 | 237,0 | 211,3 | 13,8 |
| DN 25 | 1" | 16-40 | DM506F00ABA0AAQNV000AFGA0 | DM606F00ABA0AAQNV000AFGA0 | DAN01060411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 16-40 | DM507F00ABA0AAQNV000AFHA0 | DM607F00ABA0AAQNV000AFHA0 | DAN01200411S | KCNCCHD5317 | 244,1 | 227,0 | 24,2 |
| DN 40 | 1" 1/2 | 16-40 | DM508F00ABA0AAQNV000AFIA0 | DM608F00ABA0AAQNV000AFIA0 | DAN01800411S | KCNDDHD5319 | 289,9 | 269,5 | 31,8 |
| DN 50 | 2" | 16-40 | DM509F00ABA0AAQNV000AFKA0 | DM609F00ABA0AAQNV000AFKA0 | DAN03600411S | KCNDDHD5319 | 339,3 | 155,0 | 40,0 |
| DN 65 | 2" 1/2 | 16 | DM510E00ABA0AAQNV000AFKA0 | DM610E00ABA0AAQNV000AFKA0 | DAN03600411S | KCNEEHD5379 | 339,3 | 321,0 | 55,9 |
| DN 80 | 3" | 16 | DM511E00ABA0AAQNV000AFLA0 | DM611E00ABA0AAQNV000AFLA0 | DAN04800411S | KCNEFHD5322 | 387,6 | 305,9 | 70,1 |
| DN 100 | 4" | 16 | DM512E00ABA0AAQNV000AFNA0 | DM612E00ABA0AAQNV000AFNA0 | DAN09600411S | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL* -ANSI-

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DM504101ABA0AAQNV000AFEA0 | DM604101ABA0AAQNV000AFEA0 | DAN00060412S | KCNACHD5378 | 198,0 | 180,4 | 8,9 |
| DN 20 | 3/4" | 150 | DM505101ABA0AAQNV000AFGA0 | DM605101ABA0AAQNV000AFGA0 | DAN01060411S | KCNBCHD5265 | 237,0 | 211,3 | 13,7 |
| DN 25 | 1" | 150 | DM506101ABA0AAQNV000AFGA0 | DM606101ABA0AAQNV000AFGA0 | DAN01060411S | KCNCCHD5317 | 237,0 | 220,3 | 18,5 |
| DN 32 | 1" 1/4 | 150 | DM507101ABA0AAQNV000AFHA0 | DM607101ABA0AAQNV000AFHA0 | DAN01200411S | KCNCCHD5317 | 244,1 | 227,0 | 24,7 |
| DN 40 | 1" 1/2 | 150 | DM508101ABA0AAQNV000AFIA0 | DM608101ABA0AAQNV000AFIA0 | DAN01800411S | KCNDDHD5319 | 289,9 | 269,5 | 32,1 |
| DN 50 | 2" | 150 | DM509101ABA0AAQNV000AFKA0 | DM609101ABA0AAQNV000AFKA0 | DAN03600411S | KCNDDHD5319 | 339,3 | 155,0 | 40,2 |
| DN 65 | 2" 1/2 | 150 | DM510101ABA0AAQNV000AFKA0 | DM610101ABA0AAQNV000AFKA0 | DAN03600411S | KCNEEHD5379 | 339,3 | 321,0 | 54,9 |
| DN 80 | 3" | 150 | DM511101ABA0AAQNV000AFLA0 | DM611101ABA0AAQNV000AFLA0 | DAN04800411S | KCNEFHD5322 | 387,6 | 305,9 | 70,7 |
| DN 100 | 4" | 150 | DM512101ABA0AAQNV000AFNA0 | DM612101ABA0AAQNV000AFNA0 | DAN09600411S | KCNEFHD5380 | 479,3 | 402,0 | 129,6 |

# MAGNUM SPLIT WAFER 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL* -PN-

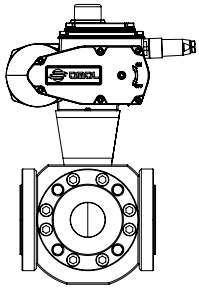
| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | SM504F00ABA0AAQNV000AFHA0 | SM604F00ABA0AAQNV000AFHA0 | SRN00060401S | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 16-40 | SM505F00ABA0AAQNV000AFIA0 | SM605F00ABA0AAQNV000AFIA0 | SRN00090401S | KCNBDHD5382 | 393,7 | 245,5 | 17,4 |
| DN 25 | 1" | 16-40 | SM506F00ABA0AAQNV000AFIA0 | SM606F00ABA0AAQNV000AFIA0 | SRN00090401S | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 16-40 | SM507F00ABA0AAQNV000AFJA0 | SM607F00ABA0AAQNV000AFJA0 | SRN01120401S | KCNCDHD5329 | 409,6 | 261,1 | 28,7 |
| DN 40 | 1" 1/2 | 16-40 | SM508F00ABA0AAQNV000AFKA0 | SM608F00ABA0AAQNV000AFKA0 | SRN01180401S | KCNDDHD5383 | 474,0 | 280,0 | 36,1 |
| DN 50 | 2" | 16-40 | SM509F00ABA0AAQNV000AFMA0 | SM609F00ABA0AAQNV000AFMA0 | SRN03604015 | KCNDEHD5330 | 613,0 | 339,0 | 50,7 |
| DN 65 | 2" 1/2 | 16 | SM510E00ABA0AAQNV000AFMA0 | SM610E00ABA0AAQNV000AFMA0 | SRN03604015 | KCNEFHD5322 | 613,0 | 351,0 | 66,7 |
| DN 80 | 3" | 16 | SM511E00ABA0AAQNV000AFNA0 | SM611E00ABA0AAQNV000AFNA0 | SRN04804015 | KCNEFHD5392 | 648,2 | 339,0 | 83,7 |
| DN 100 | 4" | 16 | SM512E00ABA0AAQNV000AFRA0 | SM612E00ABA0AAQNV000AFRA0 | SRN09604015 | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL* -ANSI-

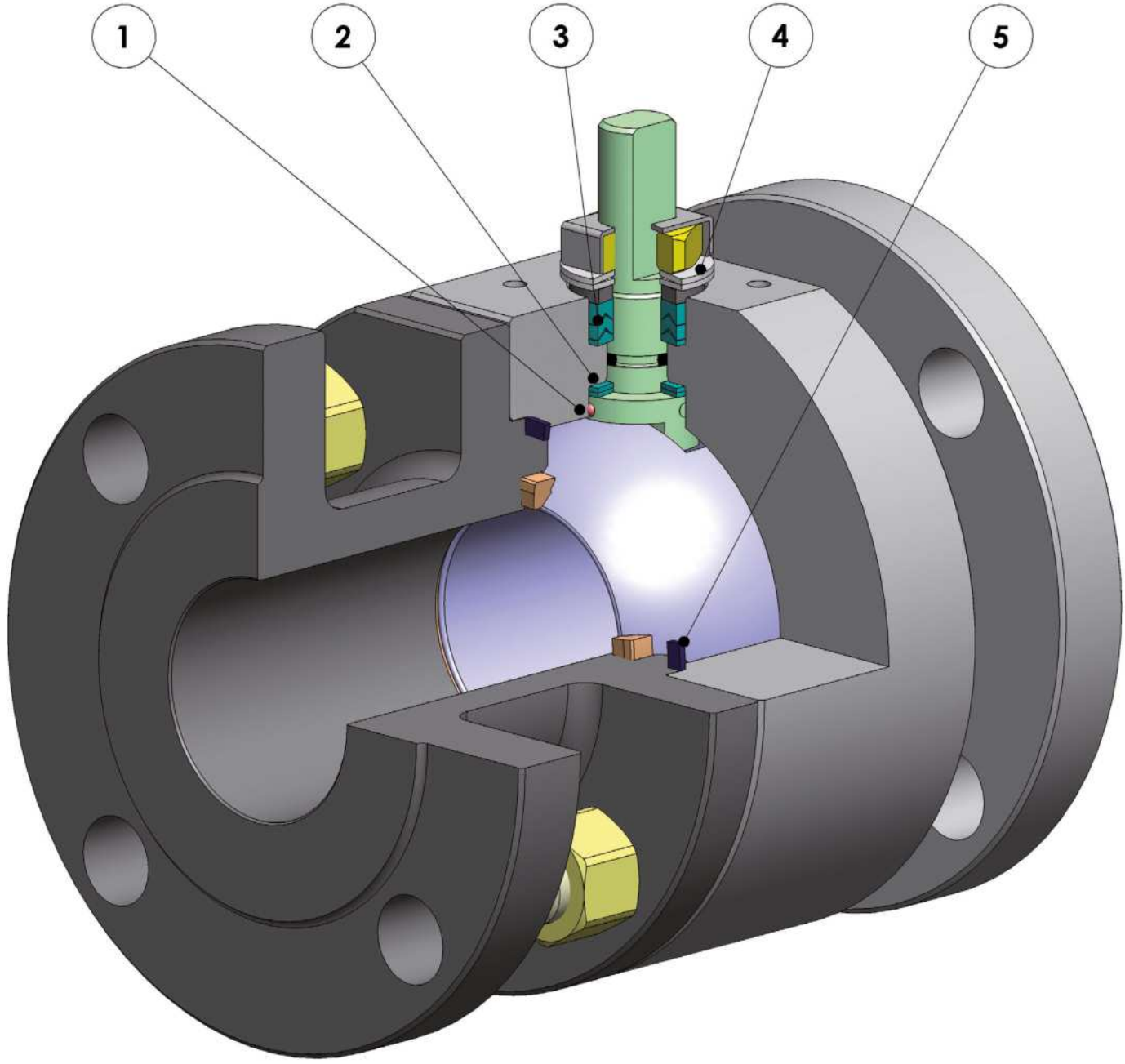
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | SM504101ABA0AAQNV000AFHA0 | SM604101ABA0AAQNV000AFHA0 | SRN00604015 | KCNACHD5381 | 338,5 | 197,0 | 10,7 |
| DN 20 | 3/4" | 150 | SM505101ABA0AAQNV000AFIA0 | SM605101ABA0AAQNV000AFIA0 | SRN00904015 | KCNBDHD5382 | 393,7 | 245,5 | 17,3 |
| DN 25 | 1" | 150 | SM506101ABA0AAQNV000AFIA0 | SM606101ABA0AAQNV000AFIA0 | SRN00904015 | KCNCDHD5329 | 393,7 | 254,5 | 22,2 |
| DN 32 | 1" 1/4 | 150 | SM507101ABA0AAQNV000AFJA0 | SM607101ABA0AAQNV000AFJA0 | SRN01204015 | KCNCDHD5329 | 409,6 | 261,1 | 29,2 |
| DN 40 | 1" 1/2 | 150 | SM508101ABA0AAQNV000AFKA0 | SM608101ABA0AAQNV000AFKA0 | SRN01804015 | KCNDDHD5383 | 474,0 | 280,0 | 36,4 |
| DN 50 | 2" | 150 | SM509101ABA0AAQNV000AFMA0 | SM609101ABA0AAQNV000AFMA0 | SRN03604015 | KCNDEHD5330 | 613,0 | 339,0 | 50,9 |
| DN 65 | 2" 1/2 | 150 | SM510101ABA0AAQNV000AFMA0 | SM610101ABA0AAQNV000AFMA0 | SRN03604015 | KCNEFHD5322 | 613,0 | 351,0 | 65,7 |
| DN 80 | 3" | 150 | SM511101ABA0AAQNV000AFNA0 | SM611101ABA0AAQNV000AFNA0 | SRN04804015 | KCNEFHD5392 | 648,2 | 339,0 | 84,3 |
| DN 100 | 4" | 150 | SM512101ABA0AAQNV000AFRA0 | SM612101ABA0AAQNV000AFRA0 | SRN09604015 | KCNEGHD5384 | 828,0 | 441,7 | 155,2 |

A richiesta, articoli disponibili anche con attuatore elettrico:
*On request, items available also with electric actuator:*





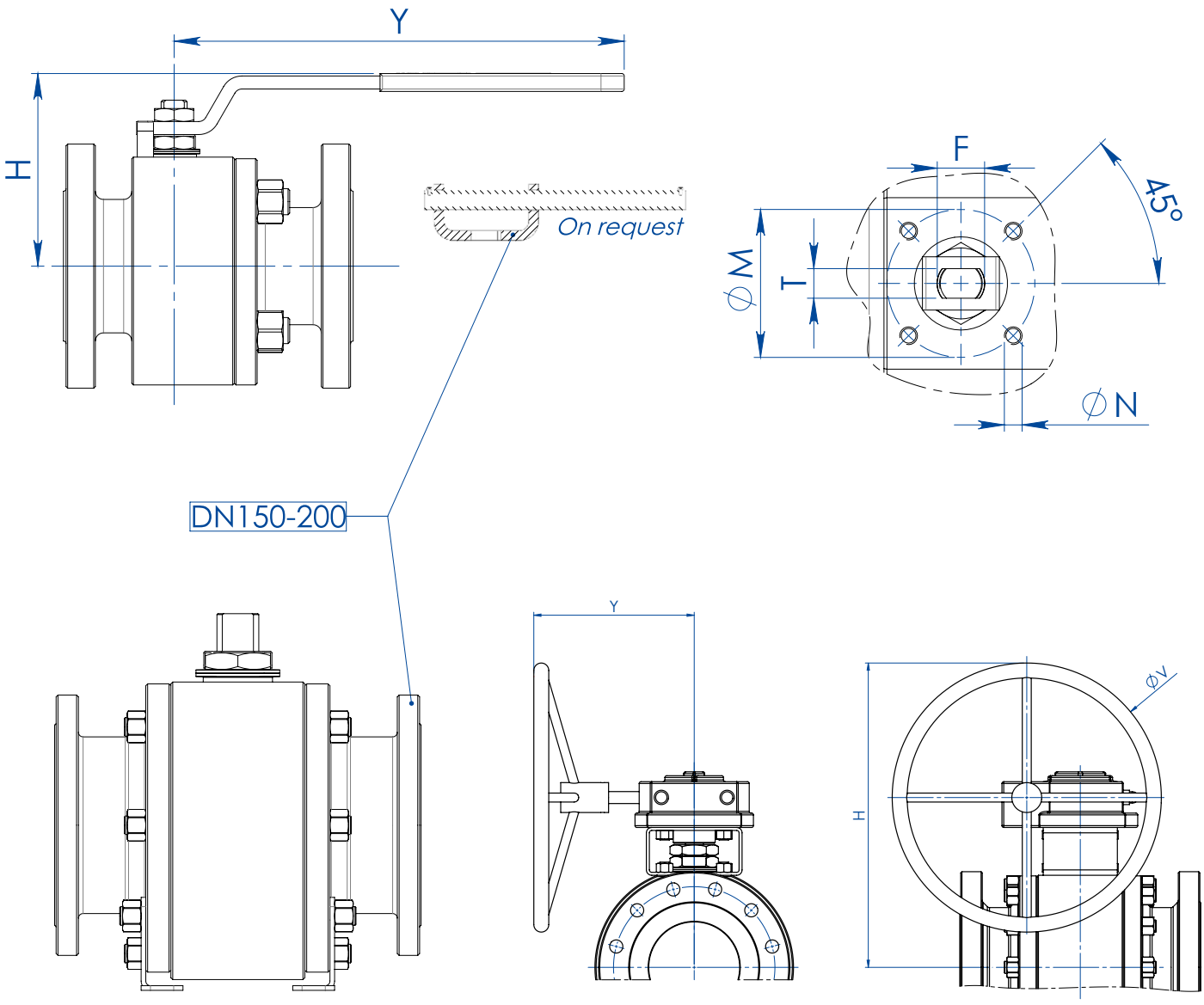
# THOR SPLIT BODY



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device (electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Breakaway Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "v" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite vero l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizoini tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less breakaway torque* |
| | Facile manutenibilità direttamente sull'impianto<br>*Easy maintainance directly on site* | Contenimento dei costi durante la fase di manutenzione<br>*Reduced maintainance costs* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato API6D<br>*API6D Certificate* | Possono essere utilizzate nei settori Oil&Gas e Petrlchimico<br>*Can be used in Oil & Gas and Petrochemical applications* |
| | | Massima tracciabilità del processo e del prodotto.<br>*Max traceability of the manufacturing process and of the Product itself.* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

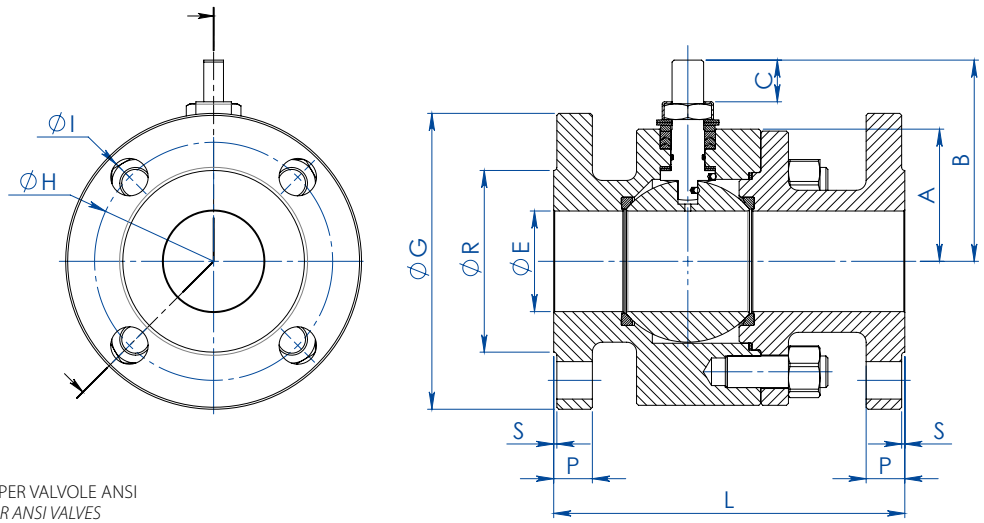
# THOR SPLIT BODY PN 16-40 ANSI 150-300




| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **H** | **Y** | **∅V** | **∅M** | **∅N** | **F/T** | **ATT. ISO** | **KIT LEVA** *LEVER KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | |
| DN 15 | 1/2" | 71 | 140 | --- | 36 | M5 | 10/6 | F03 | KLV58004 |
| DN 20 | 3/4" | 73 | 140 | --- | 36 | M5 | 10/6 | F03 | KLV58004 |
| DN 25 | 1" | 87 | 150 | --- | 42 | M5 | 12/8 | F04 | KLV58006 |
| DN 32 | 1" 1/4 | 91 | 150 | --- | 42 | M5 | 12/8 | F04 | KLV58006 |
| DN 40 | 1" 1/2 | 108 | 275 | --- | 50 | M6 | 16/10 | F05 | KLV58008 |
| DN 50 | 2" | 118 | 275 | --- | 50 | M6 | 16/10 | F05 | KLV58008 |
| DN 65 | 2" 1/2 | 143 | 350 | --- | 70 | M8 | 22/14 | F07 | KLV58010 |
| DN 80 | 3" | 150 | 350 | --- | 70 | M8 | 22/14 | F07 | KLV58010 |
| DN 100 | 4" | 198 | 450 | --- | 102 | M10 | 30/18 | F10 | KLV58012 |
| DN 125 | 5" | 208 | 450 | --- | 102 | M10 | 30/18 | F10 | KLV58012 |
| DN 150 PN16 - ANSI150 (*) | 6" | 522 | 326 | 400 | 140 | M16 | 45/30 | F14 | --- |
| DN 150 PN25-40 - ANSI300 | 6" | 522 | 347,5 | 600 | 140 | M16 | 45/30 | F14 | --- |
| DN 200 PN16-PN25-ANSI150 (*) | 8" | 516 | 347 | 500 | 140 | M16 | 52/35 | F14 | --- |
| DN 200 PN40 | 8" | 614 | 348 | 500 | 140 | M16 | 52/35 | F14 | --- |

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY PN 16-40 ANSI 150-300




CERTIFICATO API 6D SOLO PER VALVOLE ANSI
*API 6D CERTIFICATE ONLY FOR ANSI VALVES*

## DIMENSIONI *DIMENSIONS* -PN-

| MISURA *SIZE* DN [mm] | [inch] | ØE | PN | A | B | C | ØG | ØR | S | P | ØH | N° FORI *HOLES N°* | ØI | Kg | L | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 13 | PN 16-40 | 32 | 52 | 10 | 95 | 45 | 2 | 16 | 65 | 4 | 14 | 3,0 | 115 (1) | KGBV485040 |
| DN 20 | 3/4" | 19 | PN 16-40 | 35 | 55 | 10 | 105 | 58 | 2 | 18 | 75 | 4 | 14 | 3,8 | 120 (1) | KGBV485050 |
| DN 25 | 1" | 25 | PN 16-40 | 42 | 68 | 15 | 115 | 68 | 2 | 18 | 85 | 4 | 14 | 5,2 | 125 (1) | KGBV485060 |
| DN 32 | 1" 1/4 | 32 | PN 16-40 | 47 | 73 | 15 | 140 | 78 | 2 | 18 | 100 | 4 | 18 | 7,6 | 130 (1) | KGBV485070 |
| DN 40 | 1" 1/2 | 38 | PN 16-40 | 58 | 93 | 21 | 150 | 88 | 3 | 18 | 110 | 4 | 18 | 10 | 140 (1) | KGBV485080 |
| DN 50 | 2" | 51 | PN 16-40 | 67 | 102 | 21 | 165 | 102 | 3 | 20 | 125 | 4 | 18 | 14,3 | 150 (1) | KGBV485090 |
| DN 65 | 2" 1/2 | 64 | PN 16 | 83 | 130,5 | 28,4 | 185 | 122 | 3 | 18 | 145 | 4 | 18 | 20,2 | 170 (1) | KGBV485100 |
| DN 65 | 2" 1/2 | 64 | PN 25-40 | 83 | 130,5 | 28,4 | 185 | 122 | 3 | 22 | 145 | 8 | 18 | 28,2 | 270 (2) | KGBV485100 |
| DN 80 | 3" | 76 | PN 16-40 | 90 | 137,5 | 28,4 | 200 | 138 | 3 | 24 | 160 | 8 | 18 | 25,4 | 180 (1) | KGBV485110 |
| DN 100 | 4" | 102 | PN 16 | 111 | 172 | 35 | 220 | 158 | 3 | 20 | 180 | 8 | 18 | 38 | 190 (1) | KGBV485120 |
| DN 100 | 4" | 102 | PN 25-40 | 111 | 172 | 35 | 235 | 162 | 3 | 24 | 190 | 8 | 22 | 57,8 | 300 (2) | KGBV485120 |
| DN 125 | 5" | 118 | PN 16 | 117 | 182 | 35 | 250 | 188 | 3 | 22 | 210 | 8 | 18 | 68 | 325 (2) | KGBV485130 |
| DN 150(*) | 6" | 152 | PN 16 | 154 | 227,5 | 40,5 | 285 | 212 | 3 | 23 | 240 | 8 | 22 | 121 | 350 (2) | KGBV485140 |
| DN 150 | 6" | 152 | PN 25-40 | 154 | 227,5 | 40,5 | 300 | 218 | 3 | 28 | 250 | 8 | 26 | 125 | 350 | KGBV48514D |
| DN 200(*) | 8" | 203 | PN 16 | 188 | 274 | 44,8 | 340 | 268 | 3 | 24 | 295 | 12 | 22 | 198 | 400 (2) | KGBV485150 |
| DN 200(*) | 8" | 203 | PN 25 | 188 | 274 | 44,8 | 360 | 310 | 3 | 30 | 310 | 12 | 26 | 220 | 457 | KGBV485150 |
| DN 200 | 8" | 203 | PN 40 | 195 | 274 | 44,8 | 375 | 285 | 3 | 34 | 320 | 12 | 30 | 250 | 502 | KGBV48515D |

## DIMENSIONI *DIMENSIONS* -ANSI-

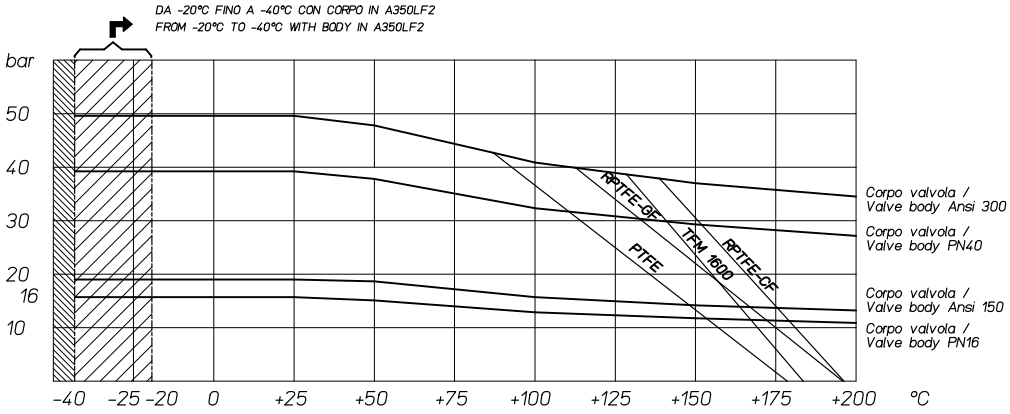
| MISURA *SIZE* DN [mm] | [inch] | ØE | ANSI | A | B | C | ØG | ØR | S | P | ØH | N° FORI *HOLES N°* | ØI | Kg | L | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 13 | ANSI 150 | 32 | 52 | 10 | 90 | 35 | 1,6 | 11,2 | 60,3 | 4 | 16 | 3,0 | 108 (3) | KGBV485040 |
| DN 15 | 1/2" | 13 | ANSI 300 | 32 | 52 | 10 | 95 | 35 | 1,6 | 14,5 | 66,7 | 4 | 16 | 2,7 | 140 (3) | KGBV485040 |
| DN 20 | 3/4" | 19 | ANSI 150 | 35 | 55 | 10 | 100 | 43 | 1,6 | 13 | 69,9 | 4 | 16 | 3,1 | 117(3) | KGBV485050 |
| DN 20 | 3/4" | 19 | ANSI 300 | 35 | 55 | 10 | 115 | 43 | 1,6 | 16,6 | 82,6 | 4 | 19 | 4,2 | 152(3) | KGBV485050 |
| DN 25 | 1" | 25 | ANSI 150 | 42 | 68 | 15 | 110 | 51 | 1,6 | 14,5 | 79,4 | 4 | 16 | 4,5 | 127 (3) | KGBV485060 |
| DN 25 | 1" | 25 | ANSI 300 | 42 | 68 | 15 | 125 | 51 | 1,6 | 18 | 88,9 | 4 | 19 | 5,9 | 165 (3) | KGBV485060 |
| DN 32 | 1" 1/4 | 32 | ANSI 150 | 47 | 73 | 15 | 115 | 63,5 | 1,6 | 16,1 | 88,9 | 4 | 16 | 6,2 | 140 (3) | KGBV485070 |
| DN 32 | 1" 1/4 | 32 | ANSI 300 | 47 | 73 | 15 | 135 | 63,5 | 1,6 | 19,5 | 98,4 | 4 | 19 | 8,7 | 178 (3) | KGBV485070 |
| DN 40 | 1" 1/2 | 38 | ANSI 150 | 58 | 93 | 21 | 125 | 73 | 1,6 | 18 | 98,4 | 4 | 16 | 9,4 | 165 (3) | KGBV485080 |
| DN 40 | 1" 1/2 | 38 | ANSI 300 | 58 | 93 | 21 | 155 | 73 | 1,6 | 21 | 114,3 | 4 | 22 | 12 | 190 (3) | KGBV485080 |
| DN 50 | 2" | 51 | ANSI 150 | 67 | 102 | 21 | 150 | 92 | 1,6 | 19,6 | 120,7 | 4 | 19 | 13,3 | 178 (4) | KGBV485090 |
| DN 50 | 2" | 51 | ANSI 300 | 67 | 102 | 21 | 165 | 92 | 1,6 | 22,6 | 127,0 | 8 | 19 | 16,5 | 216 (4) | KGBV485090 |
| DN 65 | 2" 1/2 | 64 | ANSI 150 | 83 | 130,5 | 28,4 | 180 | 104,8 | 1,6 | 22,6 | 139,7 | 4 | 19 | 23,1 | 191 (4) | KGBV485100 |
| DN 65 | 2" 1/2 | 64 | ANSI 300 | 83 | 130,5 | 28,4 | 190 | 104,8 | 1,6 | 26,1 | 149,2 | 8 | 22 | 27,3 | 241 (4) | KGBV485100 |
| DN 80 | 3" | 76 | ANSI 150 | 90 | 137,5 | 28,4 | 190 | 127 | 1,6 | 24 | 152,4 | 4 | 19 | 27 | 203 (4) | KGBV485110 |
| DN 80 | 3" | 76 | ANSI 300 | 96 | 137,5 | 28,4 | 209 | 127 | 1,6 | 29 | 168,3 | 8 | 22 | 38,1 | 282 (4) | KGBV485110 |
| DN 100 | 4" | 102 | ANSI 150 | 111 | 172 | 35 | 230 | 157,2 | 1,6 | 24,6 | 190,5 | 8 | 19 | 46 | 229 (4) | KGBV485120 |
| DN 100 | 4" | 102 | ANSI 300 | 111 | 172 | 35 | 255 | 157,2 | 1,6 | 32,6 | 200,0 | 8 | 22 | 67,7 | 305 (4) | KGBV485120 |
| DN 125 | 5" | 118 | ANSI 150 | 117 | 182 | 35 | 255 | 185,7 | 1,6 | 24,5 | 215,9 | 8 | 22 | 62 | 254 (3) | KGBV485130 |
| DN 125 | 5" | 118 | ANSI 300 | 125 | 182 | 35 | 280 | 185,7 | 1,6 | 36,6 | 235 | 8 | 22 | 94 | 381 (3) | KGBV485130 |
| DN 150(*) | 6" | 152 | ANSI 150 | 154 | 227,5 | 40,5 | 280 | 216 | 1,6 | 25,6 | 241,3 | 8 | 22 | 126 | 394 (4) | KGBV485140 |
| DN 150 | 6" | 152 | ANSI 300 | 154 | 227,5 | 40,5 | 320 | 216 | 1,6 | 37,6 | 269,9 | 12 | 22 | 147 | 403 | KGBV48514D |
| DN 200(*) | 8" | 203 | ANSI 150 | 188 | 274 | 44,8 | 345 | 269,9 | 1,6 | 29,5 | 298,5 | 8 | 22 | 210 | 457 (4) | KGBV485150 |

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

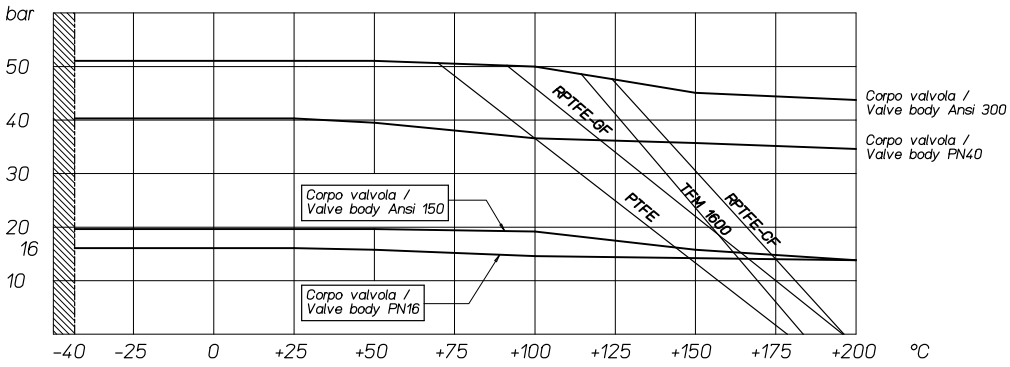
**(1)** EN558 TAB. 2 COL. 14 / DIN 3202-1 F4 **(2)** EN558 TAB. 2 COL. 15 / DIN 3202-1 F5 **(3)** ANSI B16.10 **(4)** B16.10 / API6D

# THOR SPLIT BODY PN 16-40 ANSI 150-300

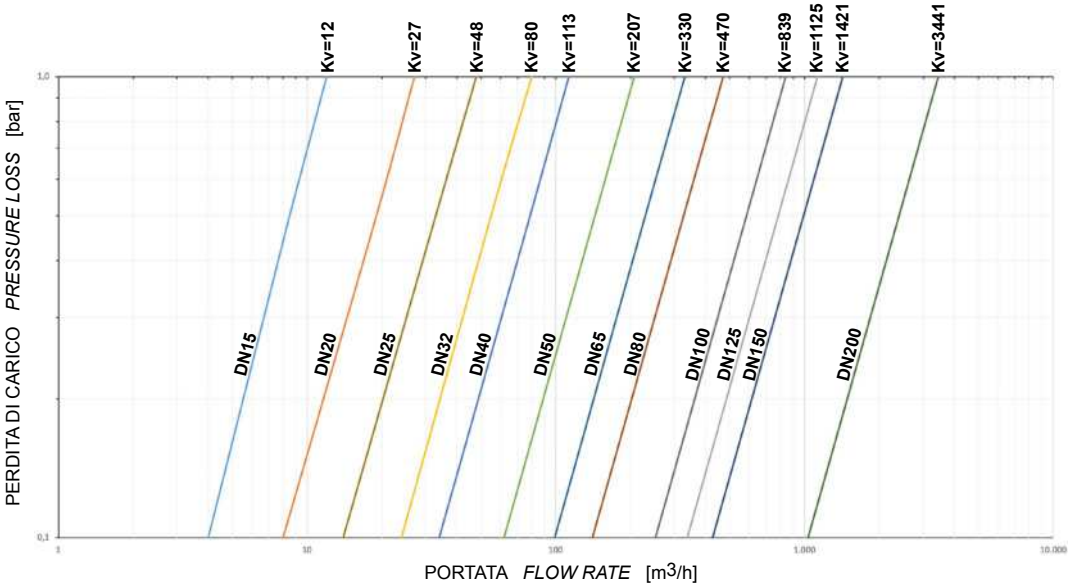
## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*




## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# THOR SPLIT BODY PN 16-40 ANSI 150-300

| COPPIE DI SPUNTO IN Nm CON SEGGIO IN TFM 1600 E CON FLUIDO INTERCETTATO ACQUA (*)<br>*BREAKAWAY TORQUE IN Nm WITH TFM 1600 SEAT AND WATER INTERCEPTED FLUID (*)* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| misura size | DN 15 | DN 20 | DN 25 | DN 32 | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 |
| 0 bar | | | | | | | | | | | | |
| PN16 bar | 8 | 13 | 19 | 28 | 42 | 61 | 85 | 128 | 220 | 245 | 405 | 690 |
| PN25 bar | 9,5 | 14,5 | 20 | 29 | 43 | 66 | 98 | 158 | 252 | 383 | | |
| PN40 bar | 11 | 16 | 21 | 31 | 44 | 72 | 108 | 165 | 292 | 510 | | |
| Ansi 150-20 bar | 9 | 14 | 19,5 | 30 | 43 | 65 | 96 | 153 | 243 | 360 | 480 | 750 |
| Ansi 300-50 bar | 12 | 18 | 22 | 32 | 46 | 80 | 115 | 180 | 302 | 570 | | |

*(*): qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto riportato in tabella*
*(*): If not lubricated fluids and/or fluids containing solid particles are intercepted, torques could be higher than those in the table.*

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4. Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied. Torque can drop on high frequency of operation.*

**Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.**
**The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.**

# THOR SPLIT BODY PN 16-40 ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale. Disponibili versioni a passaggio ridotto.
- Tenuta soft-seat TFM 1600.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

## *STANDARD FEATURES*
- *Floating ball, full bore. Available reduce bore version.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN16-40; ANSI 150-300.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-ring packing.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40 C° in LF2.
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva,Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40 C°).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-compensating hole in the ball.*
- *Stainless steel lever.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating ,epoxy coating.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

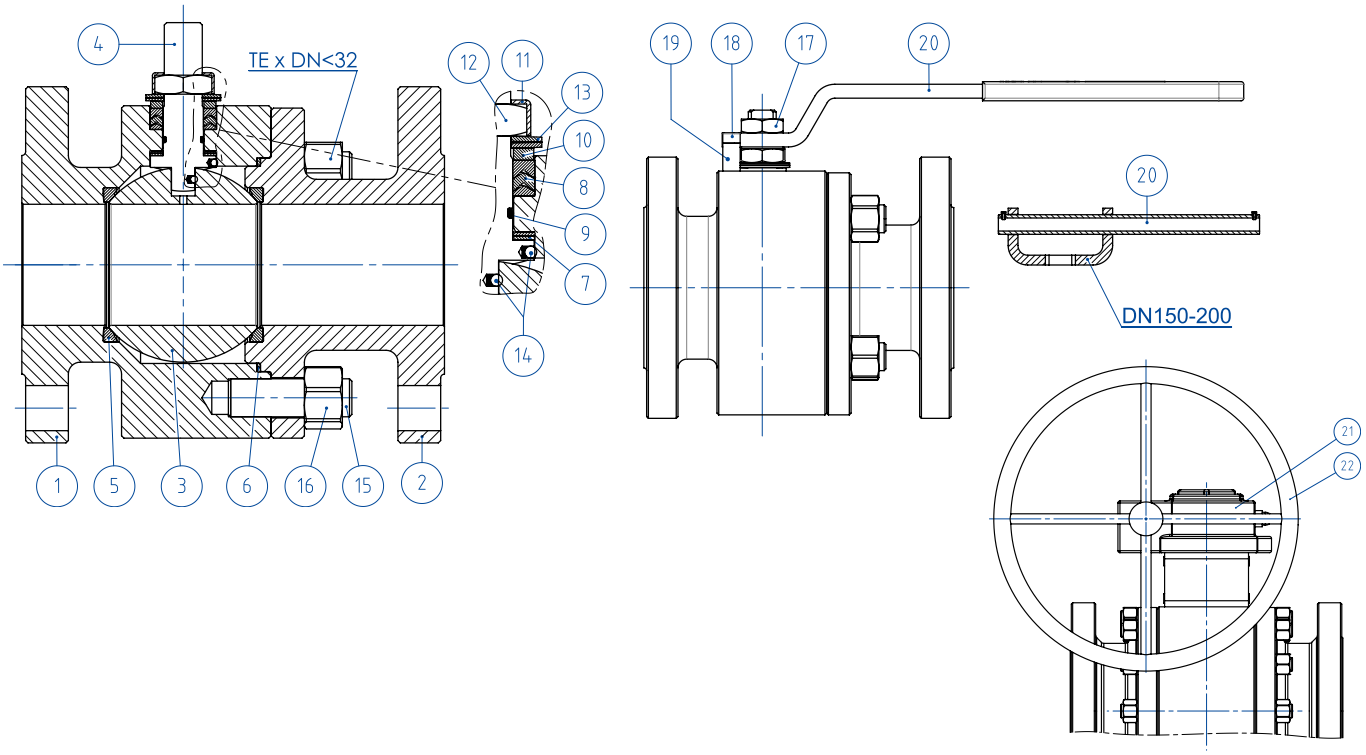
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- API 6D: certificato n°6D-1007 solo per valvole con scartamento ANSI.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *API 6D: certificato n°6D-1007 only for valves with ANSI Face to face.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- **API 6D.**
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- ***API 6D.***
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# THOR SPLIT BODY - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY PN16-40 ANSI 150-300 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8 (*) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8 (*) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | ASTM A182F6A / A479 Tp.410 (**) | ASTM A182F6A / A479 Tp.410 (**) |
| 5* | Seggio *Seat* | TFM1600 (.) (2) | TFM1600 (.) (2) |
| 6* | Guarnizione corpo-terminale *Body-connector gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Tiranti *Stud bolt* | A193-B7 | A320-L7M |
| 16 | Dadi *Nut* | A194-Gr.2H | A194-Gr.7M |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) |
| 20 | Leva *Lever* | Fe37 zincato-*Galvanized* (x) | Fe37 zincato-*Galvanized* (x) |
| 21 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* | Ghisa (verniciato) *Cast iron (painted)* |
| 22 | Volantino *Handwheel* | Fe 42 UNI 7091 | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): A564 TP.630 (17-4PH)
(x): 304 s.s.
(xx): 301 s.s.
(1): per DN150 & 200 disponibile solo in 304 S.S. *for DN150 & 200 available only in 304 S.S.*
(2) DEVLON per DN150 PN25-40 - ANSI300, DN200 PN40 *DEVLON for DN150 PN25-40 - ANSI300, DN200 PN40*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE IN ACCIAIO AL CARBONIO: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -PN-
### *CARBON STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -PN-*

| MISURA *SIZE* | | PN | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 16-40 | V/LT104F03CAB0BFQNV00B | V/LT104F03CBB0BHQNV00B |
| DN 20 | 3/4" | PN 16-40 | V/LT105F03CAB0BFQNV00B | V/LT105F03CBB0BHQNV00B |
| DN 25 | 1" | PN 16-40 | V/LT106F03CAB0BFQNV00B | V/LT106F03CBB0BHQNV00B |
| DN 32 | 1" 1/4 | PN 16-40 | V/LT107F03CAB0BFQNV00B | V/LT107F03CBB0BHQNV00B |
| DN 40 | 1" 1/2 | PN 16-40 | V/LT108F03CAB0BGQNV00B | V/LT108F03CBB0BIQNV00B |
| DN 50 | 2" | PN 16-40 | V/LT109F03CAB0BGQNV00B | V/LT109F03CBB0BIQNV00B |
| DN 65 | 2" 1/2 | PN 16 | V/LT110E03CAB0BGQNV00B | V/LT110E03CBB0BIQNV00B |
| DN 65 | 2" 1/2 | PN 25-40 | V/LT110I03CAB0BGQNV00B | V/LT110I03CBB0BIQNV00B |
| DN 80 | 3" | PN 16-40 | V/LT111F03CAB0BGQNV00B | V/LT111F03CBB0BIQNV00B |
| DN 100 | 4" | PN 16 | V/LT112E03CAB0BGQNV00B | V/LT112E03CBB0BIQNV00B |
| DN 100 | 4" | PN 25-40 | V/LT112I03CAB0BGQNV00B | V/LT112I03CBB0BIQNV00B |
| DN 125 | 5" | PN 16 | V/LT113E03CAB0BGQNV00B | V/LT113E03CBB0BIQNV00B |
| DN150(*) | 6" | PN 16 | V/RT114E03CAB0BGQNV00B | V/RT114E03CBB0BIQNV00B |
| DN150 | 6" | PN 25/40 | V/RT114I03CAB0BGMNV00B | V/RT114I03CBB0BIMNV00B |
| DN200(*) | 8" | PN 16 | V/RT115E03CAB0BGQNV00B | V/RT115E03CBB0BIQNV00B |
| DN200(*) | 8" | PN 25 | V/RT115H03CAB0BGQNV00B | V/RT115H03CBB0BIQNV00B |
| DN200 | 8" | PN 40 | V/RT115J03CAB0BGMNV00B | V/RT115J03CBB0BIMNV00B |

### CODICI VALVOLE IN ACCIAIO AL CARBONIO: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -ANSI-
### *CARBON STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -ANSI-*

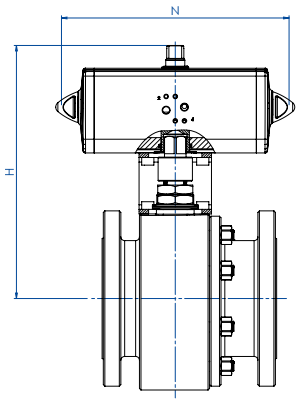
| MISURA *SIZE* | | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 150 | V/LT104104CAB0BFQNV00B | V/LT104104CBB0BHQNV00B |
| DN 15 | 1/2" | ANSI 300 | V/LT104204CAB0BFQNV00B | V/LT104204CBB0BHQNV00B |
| DN 20 | 3/4" | ANSI 150 | V/LT105104CAB0BFQNV00B | V/LT105104CBB0BHQNV00B |
| DN 20 | 3/4" | ANSI 300 | V/LT105204CAB0BFQNV00B | V/LT105204CBB0BHQNV00B |
| DN 25 | 1" | ANSI 150 | V/LT106104CAB0BFQNV00B | V/LT106104CBB0BHQNV00B |
| DN 25 | 1" | ANSI 300 | V/LT106204CAB0BFQNV00B | V/LT106204CBB0BHQNV00B |
| DN 32 | 1" 1/4 | ANSI 150 | V/LT107104CAB0BFQNV00B | V/LT107104CBB0BHQNV00B |
| DN 32 | 1" 1/4 | ANSI 300 | V/LT107204CAB0BGQNV00B | V/LT107204CBB0BIQNV00B |
| DN 40 | 1" 1/2 | ANSI 150 | V/LT108104CAB0BGQNV00B | V/LT108104CBB0BIQNV00B |
| DN 40 | 1" 1/2 | ANSI 300 | V/LT108204CAB0BGQNV00B | V/LT108204CBB0BIQNV00B |
| DN 50 | 2" | ANSI 150 | V/LT109104CAB0BGQNV00B | V/LT109104CBB0BIQNV00B |
| DN 50 | 2" | ANSI 300 | V/LT109204CAB0BGQNV00B | V/LT109204CBB0BIQNV00B |
| DN 65 | 2" 1/2 | ANSI 150 | V/LT110104CAB0BGQNV00B | V/LT110104CBB0BIQNV00B |
| DN 65 | 2" 1/2 | ANSI 300 | V/LT110204CAB0BGQNV00B | V/LT110204CBB0BIQNV00B |
| DN 80 | 3" | ANSI 150 | V/LT111104CAB0BGQNV00B | V/LT111104CBB0BIQNV00B |
| DN 80 | 3" | ANSI 300 | V/LT111204CAB0BGQNV00B | V/LT111204CBB0BIQNV00B |
| DN 100 | 4" | ANSI 150 | V/LT112104CAB0BGQNV00B | V/LT112104CBB0BIQNV00B |
| DN 100 | 4" | ANSI 300 | V/LT112204CAB0BGQNV00B | V/LT112204CBB0BIQNV00B |
| DN 125 | 5" | ANSI 150 | V/LT113104CAB0BGQNV00B | V/LT113104CBB0BIQNV00B |
| DN 125 | 5" | ANSI 300 | V/LT113204CAB0BGQNV00B | V/LT113204CBB0BIQNV00B |
| DN150(*) | 6" | ANSI 150 | V/RT114104CAB0BGQNV00B | V/RT114104CBB0BIQNV00B |
| DN150 | 6" | ANSI 300 | V/RT114204CAB0BGMNV00B | V/RT114204CBB0BIMNV00B |
| DN200(*) | 8" | ANSI 150 | V/RT115104CAB0BGQNV00B | V/RT115104CBB0BIQNV00B |

DN200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

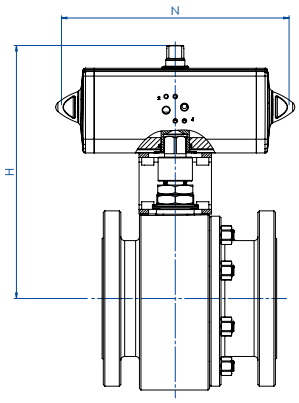
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DT104E03CAB0BFQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | PN 25-40 | DT104I03CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,4 |
| DN 20 | 3/4" | PN 16-40 | DT105F03CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,2 |
| DN 25 | 1" | PN 16-40 | DT106F03CAB0BFQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,6 |
| DN 32 | 1" 1/4 | PN 16-40 | DT107F03CAB0BFQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,4 |
| DN 40 | 1" 1/2 | PN 16-40 | DT108F03CAB0BGQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 12,3 |
| DN 50 | 2" | PN 16 | DT109E03CAB0BGQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 17,6 |
| DN 50 | 2" | PN 25-40 | DT109I03CAB0BGQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | DT110E03CAB0BGQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | DT110I03CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,9 |
| DN 80 | 3" | PN 16 | DT111E03CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 31,0 |
| DN 80 | 3" | PN 25-40 | DT111I03CAB0BGQNV00BAFJA0 | DAN0240411S | KCNDDHD5387 | 313,6 | 291,1 | 33,4 |
| DN 100 | 4" | PN 16 | DT112E03CAB0BGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 46,3 |
| DN 100 | 4" | PN 25-40 | DT112I03CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 70,0 |
| DN 125 | 5" | PN 16 | DT113E03CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 80,2 |
| DN 150 | 6" | PN 16 | DT114E03CAB0BGQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 137,8 |
| DN 150 | 6" | PN 25-40 | DT114I03CAB0BGMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 163,9 |
| DN 200 | 8" | PN 16 | DT115E03CAB0BGQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 226,2 |
| DN 200 | 8" | PN 25 | DT115H03CAB0BGQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 248,2 |
| DN 200 | 8" | PN 40 | DT115J03CAB0BGMNV00BAFSA0 | DA2880E16D0A | KCNGHHD5367 | 667,0 | 647,0 | 311,6 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DT104E03CBB0BHQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | PN 25-40 | DT104I03CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,4 |
| DN 20 | 3/4" | PN 16-40 | DT105F03CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,2 |
| DN 25 | 1" | PN 16-40 | DT106F03CBB0BHQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,6 |
| DN 32 | 1" 1/4 | PN 16-40 | DT107F03CBB0BHQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,4 |
| DN 40 | 1" 1/2 | PN 16-40 | DT108F03CBB0BIQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 12,3 |
| DN 50 | 2" | PN 16 | DT109E03CBB0BIQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 17,6 |
| DN 50 | 2" | PN 25-40 | DT109I03CBB0BIQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | DT110E03CBB0BIQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | DT110I03CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,9 |
| DN 80 | 3" | PN 16 | DT111E03CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 31,0 |
| DN 80 | 3" | PN 25-40 | DT111I03CBB0BIQNV00BAFJA0 | DAN0240411S | KCNDDHD5387 | 313,6 | 291,1 | 33,4 |
| DN 100 | 4" | PN 16 | DT112E03CBB0BIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 46,3 |
| DN 100 | 4" | PN 25-40 | DT112I03CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 70,0 |
| DN 125 | 5" | PN 16 | DT113E03CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 80,2 |
| DN 150 | 6" | PN 16 | DT114E03CBB0BIQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 137,8 |
| DN 150 | 6" | PN 25-40 | DT114I03CBB0BIMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 163,9 |
| DN 200 | 8" | PN 16 | DT115E03CBB0BIQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 226,2 |
| DN 200 | 8" | PN 25 | DT115H03CBB0BIQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 248,2 |
| DN 200 | 8" | PN 40 | DT115J03CBB0BIMNV00BAFSA0 | DA2880E16D0A | KCNGHHD5367 | 667,0 | 647,0 | 311,6 |

# THOR SPLIT BODY - ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

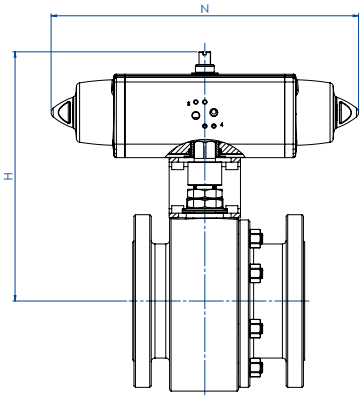
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DT104104CAB0BFQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | ANSI 300 | DT104204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,1 |
| DN 20 | 3/4" | ANSI 150 | DT105104CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 4,5 |
| DN 20 | 3/4" | ANSI 300 | DT105204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,6 |
| DN 25 | 1" | ANSI 150 | DT106104CAB0BFQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,1 |
| DN 25 | 1" | ANSI 300 | DT106204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 150 | DT107104CAB0BFQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 8,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DT107204CAB0BGQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 10,5 |
| DN 40 | 1" 1/2 | ANSI 150 | DT108104CAB0BGQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 11,7 |
| DN 40 | 1" 1/2 | ANSI 300 | DT108204CAB0BGQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,3 |
| DN 50 | 2" | ANSI 150 | DT109104CAB0BGQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 16,6 |
| DN 50 | 2" | ANSI 300 | DT109204CAB0BGQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 19,9 |
| DN 65 | 2" 1/2 | ANSI 150 | DT110104CAB0BGQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 26,6 |
| DN 65 | 2" 1/2 | ANSI 300 | DT110204CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,0 |
| DN 80 | 3" | ANSI 150 | DT111104CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 32,7 |
| DN 80 | 3" | ANSI 300 | DT111204CAB0BGQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 45,2 |
| DN 100 | 4" | ANSI 150 | DT112104CAB0BGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 54,3 |
| DN 100 | 4" | ANSI 300 | DT112204CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 79,9 |
| DN 125 | 5" | ANSI 150 | DT113104CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 74,2 |
| DN 125 | 5" | ANSI 300 | DT113204CAB0BGQNV00BAFMA0 | DAN0720411S | KCNEFHD5348 | 433,1 | 383,0 | 108,7 |
| DN 150 | 6" | ANSI 150 | DT114104CAB0BGQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 142,8 |
| DN 150 | 6" | ANSI 300 | DT114204CAB0BGMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 185,9 |
| DN 200 | 8" | ANSI 150 | DT115104CAB0BGQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 238,2 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DT104104CBB0BHQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | ANSI 300 | DT104204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,1 |
| DN 20 | 3/4" | ANSI 150 | DT105104CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 4,5 |
| DN 20 | 3/4" | ANSI 300 | DT105204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,6 |
| DN 25 | 1" | ANSI 150 | DT106104CBB0BHQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,1 |
| DN 25 | 1" | ANSI 300 | DT106204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 150 | DT107104CBB0BHQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 8,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DT107204CBB0BIQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 10,5 |
| DN 40 | 1" 1/2 | ANSI 150 | DT108104CBB0BIQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 11,7 |
| DN 40 | 1" 1/2 | ANSI 300 | DT108204CBB0BIQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,3 |
| DN 50 | 2" | ANSI 150 | DT109104CBB0BIQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 16,6 |
| DN 50 | 2" | ANSI 300 | DT109204CBB0BIQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 19,9 |
| DN 65 | 2" 1/2 | ANSI 150 | DT110104CBB0BIQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 26,6 |
| DN 65 | 2" 1/2 | ANSI 300 | DT110204CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,0 |
| DN 80 | 3" | ANSI 150 | DT111104CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 32,7 |
| DN 80 | 3" | ANSI 300 | DT111204CBB0BIQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 45,2 |
| DN 100 | 4" | ANSI 150 | DT112104CBB0BIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 54,3 |
| DN 100 | 4" | ANSI 300 | DT112204CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 79,9 |
| DN 125 | 5" | ANSI 150 | DT113104CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 74,2 |
| DN 125 | 5" | ANSI 300 | DT113204CBB0BIQNV00BAFMA0 | DAN0720411S | KCNEFHD5348 | 433,1 | 383,0 | 108,7 |
| DN 150 | 6" | ANSI 150 | DT114104CBB0BIQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 142,8 |
| DN 150 | 6" | ANSI 300 | DT114204CBB0BIMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 185,9 |
| DN 200 | 8" | ANSI 150 | DT115104CBB0BIQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 238,2 |

# THOR SPLIT BODY - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

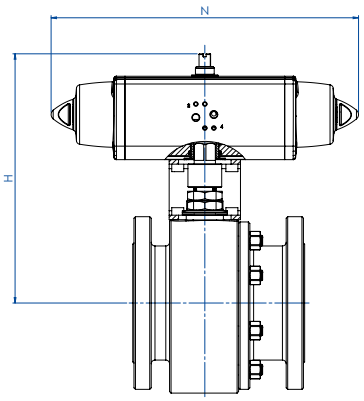
| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | ST104E03CAB0BFQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | PN 25-40 | ST104I03CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | ST105F03CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN 25 | 1" | PN 16-40 | ST106F03CAB0BFQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,8 |
| DN 32 | 1" 1/4 | PN 16-40 | ST107F03CAB0BFQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,3 |
| DN 40 | 1" 1/2 | PN 16-40 | ST108F03CAB0BGQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 14,1 |
| DN 50 | 2" | PN 16 | ST109E03CAB0BGQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 21,3 |
| DN 50 | 2" | PN 25-40 | ST109I03CAB0BGQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 22,2 |
| DN 65 | 2" 1/2 | PN 16 | ST110E03CAB0BGQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 28,1 |
| DN 65 | 2" 1/2 | PN 25-40 | ST110I03CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 38,2 |
| DN 80 | 3" | PN 16 | ST111E03CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 35,3 |
| DN 80 | 3" | PN 25-40 | ST111I03CAB0BGQNV00BAFLA0 | SRN0240401S | KCNDEHD5388 | 520,5 | 335,0 | 39,0 |
| DN 100 | 4" | PN 16 | ST112E03CAB0BGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 57,1 |
| DN 100 | 4" | PN 25-40 | ST112I03CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 83,6 |
| DN 125 | 5" | PN 16 | ST113E03CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 93,8 |
| DN 150 | 6" | PN 16 | ST114E03CAB0BGQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 159,6 |
| DN 150 | 6" | PN 25-40 | ST114I03CAB0BGMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 198,2 |
| DN 200 | 8" | PN 16 | ST115E03CAB0BGQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 278,2 |
| DN 200 | 8" | PN 25 | ST115H03CAB0BGQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 300,2 |
| DN 200 | 8" | PN 40 | ST115J03CAB0BGMNV00BAFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 373,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | ST104E03CBB0BHQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | PN 25-40 | ST104I03CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | ST105F03CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN 25 | 1" | PN 16-40 | ST106F03CBB0BHQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,8 |
| DN 32 | 1" 1/4 | PN 16-40 | ST107F03CBB0BHQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,3 |
| DN 40 | 1" 1/2 | PN 16-40 | ST108F03CBB0BIQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 14,1 |
| DN 50 | 2" | PN 16 | ST109E03CBB0BIQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 21,3 |
| DN 50 | 2" | PN 25-40 | ST109I03CBB0BIQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 22,2 |
| DN 65 | 2" 1/2 | PN 16 | ST110E03CBB0BIQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 28,1 |
| DN 65 | 2" 1/2 | PN 25-40 | ST110I03CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 38,2 |
| DN 80 | 3" | PN 16 | ST111E03CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 35,3 |
| DN 80 | 3" | PN 25-40 | ST111I03CBB0BIQNV00BAFLA0 | SRN0240401S | KCNDEHD5388 | 520,5 | 335,0 | 39,0 |
| DN 100 | 4" | PN 16 | ST112E03CBB0BIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 57,1 |
| DN 100 | 4" | PN 25-40 | ST112I03CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 83,6 |
| DN 125 | 5" | PN 16 | ST113E03CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 93,8 |
| DN 150 | 6" | PN 16 | ST114E03CBB0BIQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 159,6 |
| DN 150 | 6" | PN 25-40 | ST114I03CBB0BIMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 198,2 |
| DN 200 | 8" | PN 16 | ST115E03CBB0BIQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 278,2 |
| DN 200 | 8" | PN 25 | ST115H03CBB0BIQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 300,2 |
| DN 200 | 8" | PN 40 | ST115J03CBB0BIMNV00BAFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 373,3 |

# THOR SPLIT BODY - ANSI 150-300
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

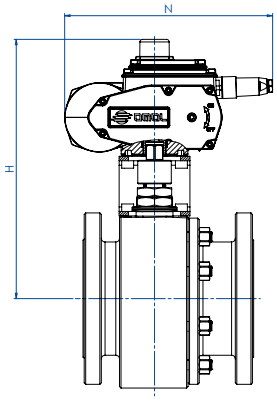
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | ST104104CAB0BFQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | ANSI 300 | ST104204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 5,2 |
| DN 20 | 3/4" | ANSI 150 | ST105104CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 5,6 |
| DN 20 | 3/4" | ANSI 300 | ST105204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,7 |
| DN 25 | 1" | ANSI 150 | ST106104CAB0BFQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,1 |
| DN 25 | 1" | ANSI 300 | ST106204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 8,5 |
| DN 32 | 1" 1/4 | ANSI 150 | ST107104CAB0BFQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 9,9 |
| DN 32 | 1" 1/4 | ANSI 300 | ST107204CAB0BGQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 12,4 |
| DN 40 | 1" 1/2 | ANSI 150 | ST108104CAB0BGQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 13,5 |
| DN 40 | 1" 1/2 | ANSI 300 | ST108204CAB0BGQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 16,1 |
| DN 50 | 2" | ANSI 150 | ST109104CAB0BGQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 20,3 |
| DN 50 | 2" | ANSI 300 | ST109204CAB0BGQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 150 | ST110104CAB0BGQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 30,9 |
| DN 65 | 2" 1/2 | ANSI 300 | ST110204CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 37,3 |
| DN 80 | 3" | ANSI 150 | ST111104CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 37,0 |
| DN 80 | 3" | ANSI 300 | ST111204CAB0BGQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 51,8 |
| DN 100 | 4" | ANSI 150 | ST112104CAB0BGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 65,1 |
| DN 100 | 4" | ANSI 300 | ST112204CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 93,5 |
| DN 125 | 5" | ANSI 150 | ST113104CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 87,8 |
| DN 125 | 5" | ANSI 300 | ST113204CAB0BGQNV00BAFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 130,6 |
| DN 150 | 6" | ANSI 150 | ST114104CAB0BGQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 164,6 |
| DN 150 | 6" | ANSI 300 | ST114204CAB0BGMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 220,9 |
| DN 200 | 8" | ANSI 150 | ST115104CAB0BGQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 537,2 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | ST104104CBB0BHQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | ANSI 300 | ST104204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 5,2 |
| DN 20 | 3/4" | ANSI 150 | ST105104CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 5,6 |
| DN 20 | 3/4" | ANSI 300 | ST105204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,7 |
| DN 25 | 1" | ANSI 150 | ST106104CBB0BHQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,1 |
| DN 25 | 1" | ANSI 300 | ST106204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 8,5 |
| DN 32 | 1" 1/4 | ANSI 150 | ST107104CBB0BHQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 9,9 |
| DN 32 | 1" 1/4 | ANSI 300 | ST107204CBB0BIQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 12,4 |
| DN 40 | 1" 1/2 | ANSI 150 | ST108104CBB0BIQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 13,5 |
| DN 40 | 1" 1/2 | ANSI 300 | ST108204CBB0BIQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 16,1 |
| DN 50 | 2" | ANSI 150 | ST109104CBB0BIQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 20,3 |
| DN 50 | 2" | ANSI 300 | ST109204CBB0BIQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 150 | ST110104CBB0BIQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 30,9 |
| DN 65 | 2" 1/2 | ANSI 300 | ST110204CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 37,3 |
| DN 80 | 3" | ANSI 150 | ST111104CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 37,0 |
| DN 80 | 3" | ANSI 300 | ST111204CBB0BIQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 51,8 |
| DN 100 | 4" | ANSI 150 | ST112104CBB0BIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 65,1 |
| DN 100 | 4" | ANSI 300 | ST112204CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 93,5 |
| DN 125 | 5" | ANSI 150 | ST113104CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 87,8 |
| DN 125 | 5" | ANSI 300 | ST113204CBB0BIQNV00BAFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 130,6 |
| DN 150 | 6" | ANSI 150 | ST114104CBB0BIQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 164,6 |
| DN 150 | 6" | ANSI 300 | ST114204CBB0BIMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 220,9 |
| DN 200 | 8" | ANSI 150 | ST115104CBB0BIQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 537,2 |

# THOR SPLIT BODY - PN16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | ET104F03CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 20 | 3/4" | PN 16-40 | ET105F03CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,8 |
| DN 25 | 1" | PN 16-40 | ET106F03CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,4 |
| DN 32 | 1" 1/4 | PN 16-40 | ET107F03CAB0BFQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,0 |
| DN 40 | 1" 1/2 | PN 16-40 | ET108F03CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 14,5 |
| DN 50 | 2" | PN 16-40 | ET109F03CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 22,3 |
| DN 65 | 2" 1/2 | PN 16 | ET110E03CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 28,3 |
| DN 65 | 2" 1/2 | PN 25-40 | ET110I03CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 36,8 |
| DN 80 | 3" | PN 16-40 | ET111F03CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 33,9 |
| DN 100 | 4" | PN 16 | ET112E03CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 49,0 |
| DN 100 | 4" | PN 25-40 | ET112I03CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 68,8 |
| DN 125 | 5" | PN 16 | ET113E03CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 79,0 |
| DN 150 | 6" | PN 16 | ET114E03CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 148,2 |
| DN 150 | 6" | PN 25-40 | ET114I03CAB0BGMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 153,7 |
| DN 200 | 8" | PN 16 | ET115E03CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 225,1 |
| DN 200 | 8" | PN 25 | ET115H03CAB0BGQNV00BAMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 248,0 |
| DN 200 | 8" | PN 40 | ET115J03CAB0BGMNV00BAMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 278,0 |

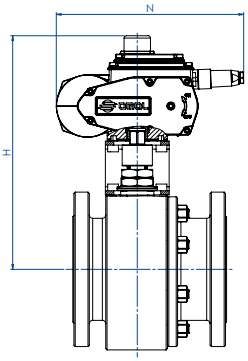
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16-40 | ET104F03CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 20 | 3/4" | PN 16-40 | ET105F03CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,8 |
| DN 25 | 1" | PN 16-40 | ET106F03CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,4 |
| DN 32 | 1" 1/4 | PN 16-40 | ET107F03CBB0BHQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,0 |
| DN 40 | 1" 1/2 | PN 16-40 | ET108F03CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 14,5 |
| DN 50 | 2" | PN 16-40 | ET109F03CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 22,3 |
| DN 65 | 2" 1/2 | PN 16 | ET110E03CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 28,3 |
| DN 65 | 2" 1/2 | PN 25-40 | ET110I03CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 36,8 |
| DN 80 | 3" | PN 16-40 | ET111F03CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 33,9 |
| DN 100 | 4" | PN 16 | ET112E03CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 49,0 |
| DN 100 | 4" | PN 25-40 | ET112I03CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 68,8 |
| DN 125 | 5" | PN 16 | ET113E03CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 79,0 |
| DN 150 | 6" | PN 16 | ET114E03CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 148,2 |
| DN 150 | 6" | PN 25-40 | ET114I03CBB0BIMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 153,7 |
| DN 200 | 8" | PN 16 | ET115E03CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 225,1 |
| DN 200 | 8" | PN 25 | ET115H03CBB0BIQNV00BAMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 248,0 |
| DN 200 | 8" | PN 40 | ET115J03CBB0BIMNV00BAMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 278,0 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY - ANSI 150-300
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | ET104104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 15 | 1/2" | ANSI 300 | ET104204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,9 |
| DN 20 | 3/4" | ANSI 150 | ET105104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,3 |
| DN 20 | 3/4" | ANSI 300 | ET105204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,4 |
| DN 25 | 1" | ANSI 150 | ET106104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 8,7 |
| DN 25 | 1" | ANSI 300 | ET106204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 10,1 |
| DN 32 | 1" 1/4 | ANSI 150 | ET107104CAB0BFQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 10,6 |
| DN 32 | 1" 1/4 | ANSI 300 | ET107204CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 13,1 |
| DN 40 | 1" 1/2 | ANSI 150 | ET108104CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,9 |
| DN 40 | 1" 1/2 | ANSI 300 | ET108204CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,5 |
| DN 50 | 2" | ANSI 150 | ET109104CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 21,3 |
| DN 50 | 2" | ANSI 300 | ET109204CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 24,5 |
| DN 65 | 2" 1/2 | ANSI 150 | ET110104CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 31,2 |
| DN 65 | 2" 1/2 | ANSI 300 | ET110204CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 35,9 |
| DN 80 | 3" | ANSI 150 | ET111104CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 35,6 |
| DN 80 | 3" | ANSI 300 | ET111204CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 47,3 |
| DN 100 | 4" | ANSI 150 | ET112104CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 57,0 |
| DN 100 | 4" | ANSI 300 | ET112204CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,7 |
| DN 125 | 5" | ANSI 150 | ET113104CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 73,0 |
| DN 125 | 5" | ANSI 300 | ET113204CAB0BGQNV00BAMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 118,1 |
| DN 150 | 6" | ANSI 150 | ET114104CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 153,2 |
| DN 150 | 6" | ANSI 300 | ET114204CAB0BGMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 175,7 |
| DN 200 | 8" | ANSI 150 | ET115104CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 237,1 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | ET104104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 15 | 1/2" | ANSI 300 | ET104204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,9 |
| DN 20 | 3/4" | ANSI 150 | ET105104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,3 |
| DN 20 | 3/4" | ANSI 300 | ET105204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,4 |
| DN 25 | 1" | ANSI 150 | ET106104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 8,7 |
| DN 25 | 1" | ANSI 300 | ET106204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 10,1 |
| DN 32 | 1" 1/4 | ANSI 150 | ET107104CBB0BHQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 10,6 |
| DN 32 | 1" 1/4 | ANSI 300 | ET107204CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 13,1 |
| DN 40 | 1" 1/2 | ANSI 150 | ET108104CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,9 |
| DN 40 | 1" 1/2 | ANSI 300 | ET108204CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,5 |
| DN 50 | 2" | ANSI 150 | ET109104CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 21,3 |
| DN 50 | 2" | ANSI 300 | ET109204CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 24,5 |
| DN 65 | 2" 1/2 | ANSI 150 | ET110104CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 31,2 |
| DN 65 | 2" 1/2 | ANSI 300 | ET110204CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 35,9 |
| DN 80 | 3" | ANSI 150 | ET111104CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 35,6 |
| DN 80 | 3" | ANSI 300 | ET111204CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 47,3 |
| DN 100 | 4" | ANSI 150 | ET112104CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 57,0 |
| DN 100 | 4" | ANSI 300 | ET112204CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,7 |
| DN 125 | 5" | ANSI 150 | ET113104CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 73,0 |
| DN 125 | 5" | ANSI 300 | ET113204CBB0BIQNV00BAMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 118,1 |
| DN 150 | 6" | ANSI 150 | ET114104CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 153,2 |
| DN 150 | 6" | ANSI 300 | ET114204CBB0BIMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 175,7 |
| DN 200 | 8" | ANSI 150 | ET115104CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 237,1 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY PN 16-40 ANSI 150-300
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale. Disponibili versioni a passaggio ridotto.
- Tenuta soft-seat TFM 1600.
- Norme per flange d'attacco EN 1092-1; ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: PN16-40; ANSI 150-300.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

## *STANDARD FEATURES*
- *Floating ball, full bore. Available reduce bore version.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN 1092-1; ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: PN16-40 - ANSI 150-300.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-ring packing.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

## ESECUZIONE A RICHIESTA
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *Stainless steel Stem nuts and springs.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

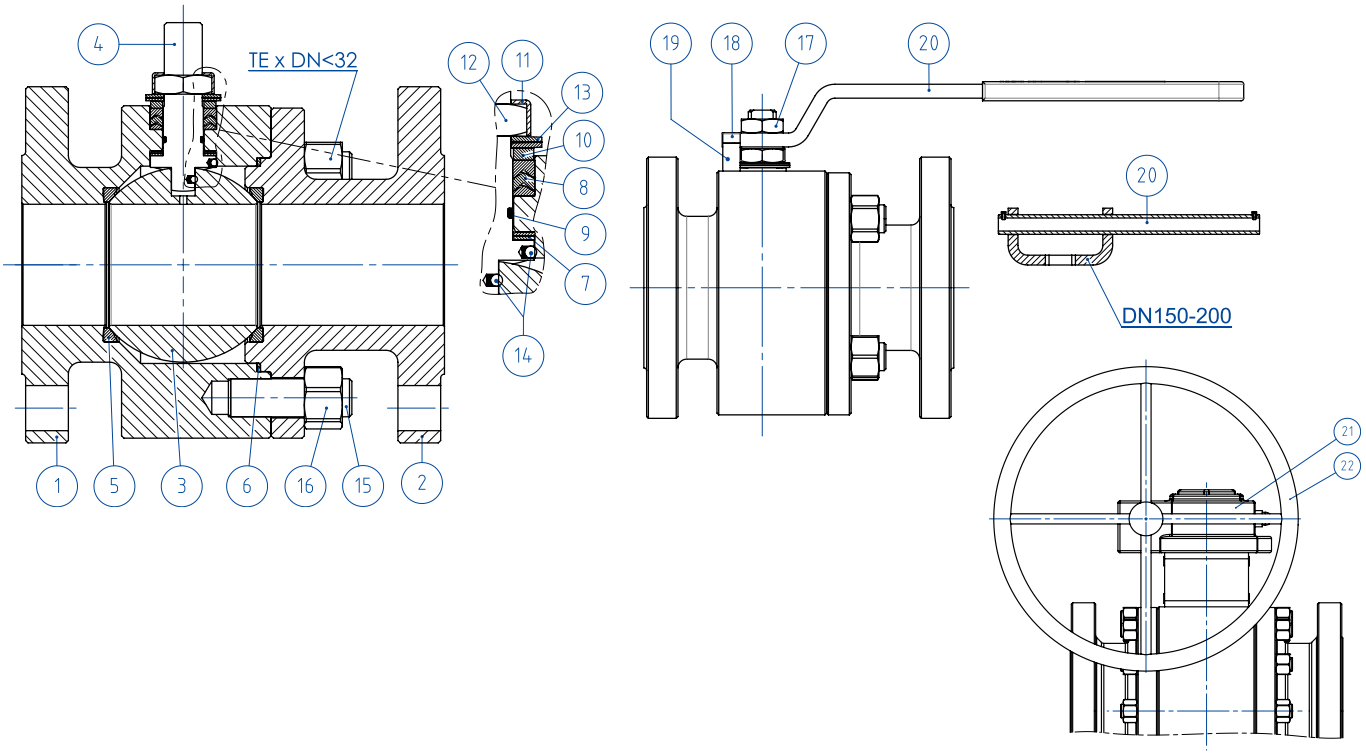
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- API 6D: certificato n°6D-1007 solo per valvole con scartamento ANSI.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *API 6D: certificate no 6D-1007 only for valves with ANSI face to face.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- **API 6D.**
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- ***API 6D.***
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# THOR SPLIT BODY - PN16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* PN16-40 ANSI 150-300 DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (.) (2) |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 16 | Dadi *Nut* | ASTM A194-Gr.8 |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato(x) *Carbon steel galvanized (x)* |
| 20 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| 21 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* |
| 22 | Volantino *Handwheel* | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
(2) DEVLON per DN150 PN25-40 - ANSI300, DN200 PN40 *DEVLON for DN150 PN25-40 - ANSI300, DN200 PN40*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - PN16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE IN ACCIAIO INOX: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -PN-
### *STAINLESS STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -PN-*

| MISURA *SIZE* | | PN | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | PN 16-40 | V/LT104F03ABA0ADQNV000 |
| DN 20 | 3/4" | PN 16-40 | V/LT105F03ABA0ADQNV000 |
| DN 25 | 1" | PN 16-40 | V/LT106F03ABA0ADQNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LT107F03ABA0ADQNV000 |
| DN 40 | 1" 1/2 | PN 16-40 | V/LT108F03ABA0AEQNV000 |
| DN 50 | 2" | PN 16-40 | V/LT109F03ABA0AEQNV000 |
| DN 65 | 2" 1/2 | PN 16 | V/LT110E03ABA0AEQNV000 |
| DN 65 | 2" 1/2 | PN 25-40 | V/LT110I03ABA0AEQNV000 |
| DN 80 | 3" | PN 16-40 | V/LT111F03ABA0AEQNV000 |
| DN 100 | 4" | PN 16 | V/LT112E03ABA0AEQNV000 |
| DN 100 | 4" | PN 25-40 | V/LT112I03ABA0AEQNV000 |
| DN 125 | 5" | PN 16 | V/LT113E03ABA0AEQNV000 |
| DN150(*) | 6" | PN 16 | V/RT114E03ABA0AEQNV000 |
| DN150 | 6" | PN 25/40 | V/RT114I03ABA0AEMNV000 |
| DN200(*) | 8" | PN 16 | V/RT115E03ABA0AEQNV000 |
| DN200(*) | 8" | PN 25 | V/RT115H03ABA0AEQNV000 |
| DN200 | 8" | PN 40 | V/RT115J03ABA0AEMNV000 |

### CODICI VALVOLE IN ACCIAIO INOX: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__) -ANSI-
### *STAINLESS STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__) -ANSI-*

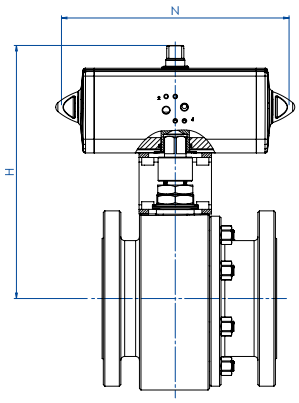
| MISURA *SIZE* | | ANSI | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 15 | 1/2" | ANSI 150 | V/LT104104ABA0ADQNV000 |
| DN 15 | 1/2" | ANSI 300 | V/LT104204ABA0ADQNV000 |
| DN 20 | 3/4" | ANSI 150 | V/LT105104ABA0ADQNV000 |
| DN 20 | 3/4" | ANSI 300 | V/LT105204ABA0ADQNV000 |
| DN 25 | 1" | ANSI 150 | V/LT106104ABA0ADQNV000 |
| DN25 | 1" | ANSI 300 | V/LT106204ABA0ADQNV000 |
| DN 32 | 1" 1/4 | ANSI 150 | V/LT107104ABA0ADQNV000 |
| DN 32 | 1" 1/4 | ANSI 300 | V/LT107204ABA0AEQNV000 |
| DN 40 | 1" 1/2 | ANSI 150 | V/LT108104ABA0AEQNV000 |
| DN 40 | 1" 1/2 | ANSI 300 | V/LT108204ABA0AEQNV000 |
| DN 50 | 2" | ANSI 150 | V/LT109104ABA0AEQNV000 |
| DN 50 | 2" | ANSI 300 | V/LT109204ABA0AEQNV000 |
| DN 65 | 2" 1/2 | ANSI 150 | V/LT110104ABA0AEQNV000 |
| DN 65 | 2" 1/2 | ANSI 300 | V/LT110204ABA0AEQNV000 |
| DN 80 | 3" | ANSI 150 | V/LT111104ABA0AEQNV000 |
| DN 80 | 3" | ANSI 300 | V/LT111204ABA0AEQNV000 |
| DN 100 | 4" | ANSI 150 | V/LT112104ABA0AEQNV000 |
| DN 100 | 4" | ANSI 300 | V/LT112204ABA0AEQNV000 |
| DN 125 | 5" | ANSI 150 | V/LT113104ABA0AEQNV000 |
| DN 125 | 5" | ANSI 300 | V/LT113204ABA0AEQNV000 |
| DN150(*) | 6" | ANSI 150 | V/RT114104ABA0AEQNV000 |
| DN150 | 6" | ANSI 300 | V/RT114204ABA0AEMNV000 |
| DN200(*) | 8" | ANSI 150 | V/RT115104ABA0AEQNV000 |

DN200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY - PN16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

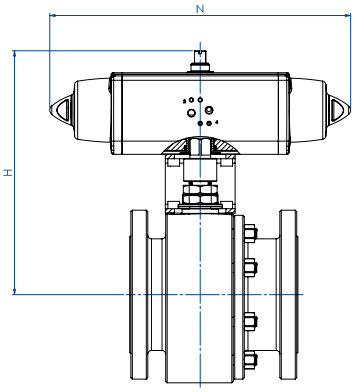
| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 16 | DT104E03ABA0ADQNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | PN 25-40 | DT104I03ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,4 |
| DN 20 | 3/4" | PN 16-40 | DT105F03ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,2 |
| DN 25 | 1" | PN 16-40 | DT106F03ABA0ADQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,6 |
| DN 32 | 1" 1/4 | PN 16-40 | DT107F03ABA0ADQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,4 |
| DN 40 | 1" 1/2 | PN 16-40 | DT108F03ABA0AEQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 12,3 |
| DN 50 | 2" | PN 16 | DT109E03ABA0AEQNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 17,6 |
| DN 50 | 2" | PN 25-40 | DT109I03ABA0AEQNV000AFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 17,7 |
| DN 65 | 2" 1/2 | PN 16 | DT110E03ABA0AEQNV000AFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 23,7 |
| DN 65 | 2" 1/2 | PN 25-40 | DT110I03ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,9 |
| DN 80 | 3" | PN 16 | DT111E03ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 31,0 |
| DN 80 | 3" | PN 25-40 | DT111I03ABA0AEQNV000AFJA0 | DAN0240411S | KCNDDHD5387 | 313,6 | 291,1 | 33,4 |
| DN 100 | 4" | PN 16 | DT112E03ABA0AEQNV000AFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 46,3 |
| DN 100 | 4" | PN 25-40 | DT112I03ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 70,0 |
| DN 125 | 5" | PN 16 | DT113E03ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 80,2 |
| DN 150 | 6" | PN 16 | DT114E03ABA0AEQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 137,8 |
| DN 150 | 6" | PN 25-40 | DT114I03ABA0AEMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 163,9 |
| DN 200 | 8" | PN 16 | DT115E03ABA0AEQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 226,2 |
| DN 200 | 8" | PN 25 | DT115H03ABA0AEQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 248,2 |
| DN 200 | 8" | PN 40 | DT115J03ABA0AEMNV000AFSA0 | DA2880E16D06A | KCNGHHD5367 | 667,0 | 647,0 | 311,6 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 150 | DT104104ABA0ADQNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,1 |
| DN 15 | 1/2" | ANSI 300 | DT104204ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 4,1 |
| DN 20 | 3/4" | ANSI 150 | DT105104ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 4,5 |
| DN 20 | 3/4" | ANSI 300 | DT105204ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,6 |
| DN 25 | 1" | ANSI 150 | DT106104ABA0ADQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,1 |
| DN 25 | 1" | ANSI 300 | DT106204ABA0ADQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 7,5 |
| DN 32 | 1" 1/4 | ANSI 150 | DT107104ABA0ADQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 8,0 |
| DN 32 | 1" 1/4 | ANSI 300 | DT107204ABA0AEQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 10,5 |
| DN 40 | 1" 1/2 | ANSI 150 | DT108104ABA0AEQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 11,7 |
| DN 40 | 1" 1/2 | ANSI 300 | DT108204ABA0AEQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,3 |
| DN 50 | 2" | ANSI 150 | DT109104ABA0AEQNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 16,6 |
| DN 50 | 2" | ANSI 300 | DT109204ABA0AEQNV000AFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 19,9 |
| DN 65 | 2" 1/2 | ANSI 150 | DT110104ABA0AEQNV000AFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 26,6 |
| DN 65 | 2" 1/2 | ANSI 300 | DT110204ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 280,5 | 33,0 |
| DN 80 | 3" | ANSI 150 | DT111104ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5387 | 289,9 | 287,5 | 32,7 |
| DN 80 | 3" | ANSI 300 | DT111204ABA0AEQNV000AFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 45,2 |
| DN 100 | 4" | ANSI 150 | DT112104ABA0AEQNV000AFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 54,3 |
| DN 100 | 4" | ANSI 300 | DT112204ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 79,9 |
| DN 125 | 5" | ANSI 150 | DT113104ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5332 | 387,6 | 361,9 | 74,2 |
| DN 125 | 5" | ANSI 300 | DT113204ABA0AEQNV000AFMA0 | DAN0720411S | KCNEFHD5348 | 433,1 | 383,0 | 108,7 |
| DN 150 | 6" | ANSI 150 | DT114104ABA0AEQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 142,8 |
| DN 150 | 6" | ANSI 300 | DT114204ABA0AEMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 185,9 |
| DN 200 | 8" | ANSI 150 | DT115104ABA0AEQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 238,2 |

# THOR SPLIT BODY - PN16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

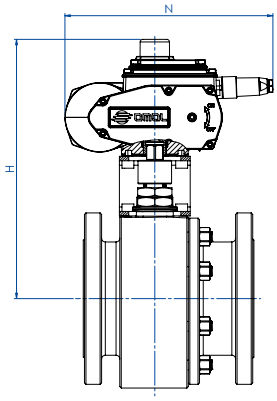
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16 | ST104E03ABA0ADQNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | PN 25-40 | ST104I03ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,3 |
| DN 20 | 3/4" | PN 16-40 | ST105F03ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN 25 | 1" | PN 16-40 | ST106F03ABA0ADQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,8 |
| DN 32 | 1" 1/4 | PN 16-40 | ST107F03ABA0ADQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,3 |
| DN 40 | 1" 1/2 | PN 16-40 | ST108F03ABA0AEQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 14,1 |
| DN 50 | 2" | PN 16 | ST109E03ABA0AEQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 21,3 |
| DN 50 | 2" | PN 25-40 | ST109I03ABA0AEQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 22,2 |
| DN 65 | 2" 1/2 | PN 16 | ST110E03ABA0AEQNV000AFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 28,1 |
| DN 65 | 2" 1/2 | PN 25-40 | ST110I03ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 38,2 |
| DN 80 | 3" | PN 16 | ST111E03ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 35,3 |
| DN 80 | 3" | PN 25-40 | ST111I03ABA0AEQNV000AFLA0 | SRN0240401S | KCNDEHD5388 | 520,5 | 335,0 | 39,0 |
| DN 100 | 4" | PN 16 | ST112E03ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 57,1 |
| DN 100 | 4" | PN 25-40 | ST112I03ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 83,6 |
| DN 125 | 5" | PN 16 | ST113E03ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 93,8 |
| DN 150 | 6" | PN 16 | ST114E03ABA0AEQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 159,6 |
| DN 150 | 6" | PN 25-40 | ST114I03ABA0AEMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 198,2 |
| DN 200 | 8" | PN 16 | ST115E03ABA0AEQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 278,2 |
| DN 200 | 8" | PN 25 | ST115H03ABA0AEQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 300,2 |
| DN 200 | 8" | PN 40 | ST115J03ABA0AEMNV000AFWA0 | SR2880E16D8A | KCNGHHD5367 | 1201,0 | 654,0 | 373,3 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | ST104104ABA0ADQNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,6 |
| DN 15 | 1/2" | ANSI 300 | ST104204ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 5,2 |
| DN 20 | 3/4" | ANSI 150 | ST105104ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 5,6 |
| DN 20 | 3/4" | ANSI 300 | ST105204ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,7 |
| DN 25 | 1" | ANSI 150 | ST106104ABA0ADQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,1 |
| DN 25 | 1" | ANSI 300 | ST106204ABA0ADQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 8,5 |
| DN 32 | 1" 1/4 | ANSI 150 | ST107104ABA0ADQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 9,9 |
| DN 32 | 1" 1/4 | ANSI 300 | ST107204ABA0AEQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 12,4 |
| DN 40 | 1" 1/2 | ANSI 150 | ST108104ABA0AEQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 13,5 |
| DN 40 | 1" 1/2 | ANSI 300 | ST108204ABA0AEQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 16,1 |
| DN 50 | 2" | ANSI 150 | ST109104ABA0AEQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 20,3 |
| DN 50 | 2" | ANSI 300 | ST109204ABA0AEQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 24,4 |
| DN 65 | 2" 1/2 | ANSI 150 | ST110104ABA0AEQNV000AFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 30,9 |
| DN 65 | 2" 1/2 | ANSI 300 | ST110204ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 291,0 | 37,3 |
| DN 80 | 3" | ANSI 150 | ST111104ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5387 | 474,0 | 298,0 | 37,0 |
| DN 80 | 3" | ANSI 300 | ST111204ABA0AEQNV000AFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 51,8 |
| DN 100 | 4" | ANSI 150 | ST112104ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 65,1 |
| DN 100 | 4" | ANSI 300 | ST112204ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 93,5 |
| DN 125 | 5" | ANSI 150 | ST113104ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5333 | 648,2 | 395,0 | 87,8 |
| DN 125 | 5" | ANSI 300 | ST113204ABA0AEQNV000AFQA0 | SRN0720401S | KCNEGHD5356 | 798,0 | 421,0 | 130,6 |
| DN 150 | 6" | ANSI 150 | ST114104ABA0AEQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 164,6 |
| DN 150 | 6" | ANSI 300 | ST114204ABA0AEMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 220,9 |
| DN 200 | 8" | ANSI 150 | ST115104ABA0AEQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 537,2 |

# THOR SPLIT BODY - PN16-40 ANSI 150-300
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

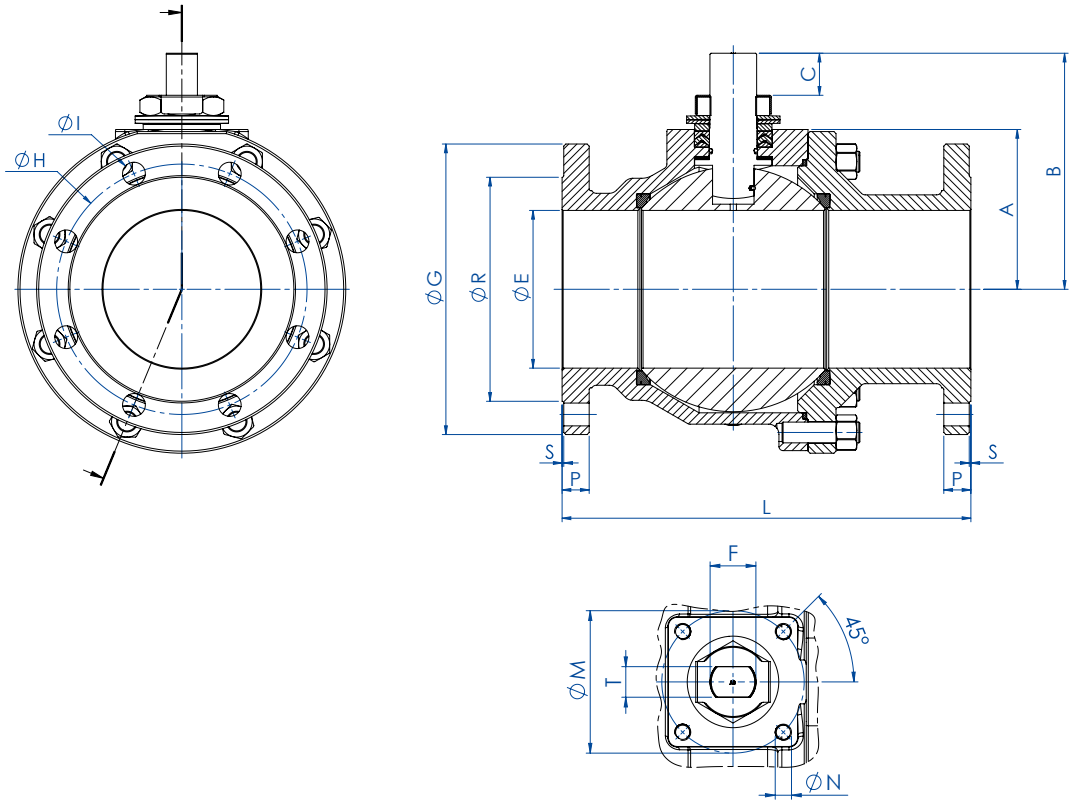
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 16-40 | ET104F03ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 20 | 3/4" | PN 16-40 | ET105F03ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,8 |
| DN 25 | 1" | PN 16-40 | ET106F03ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,4 |
| DN 32 | 1" 1/4 | PN 16-40 | ET107F03ABA0ADQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,0 |
| DN 40 | 1" 1/2 | PN 16-40 | ET108F03ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 14,5 |
| DN 50 | 2" | PN 16-40 | ET109F03ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 22,3 |
| DN 65 | 2" 1/2 | PN 16 | ET110E03ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 28,3 |
| DN 65 | 2" 1/2 | PN 25-40 | ET110I03ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 36,8 |
| DN 80 | 3" | PN 16-40 | ET111F03ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 33,9 |
| DN 100 | 4" | PN 16 | ET112E03ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 49,0 |
| DN 100 | 4" | PN 25-40 | ET112I03ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 378,0 | 68,8 |
| DN 125 | 5" | PN 16 | ET113E03ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 79,0 |
| DN 150 | 6" | PN 16 | ET114E03ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 148,2 |
| DN 150 | 6" | PN 25-40 | ET114I03ABA0AEMNV000AMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 153,7 |
| DN 200 | 8" | PN 16 | ET115E03ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 225,1 |
| DN 200 | 8" | PN 25 | ET115H03ABA0AEQNV000AMXA0 | AE160200 | KCNGGHV5376 | 381,0 | 522,0 | 248,0 |
| DN 200 | 8" | PN 40 | ET115J03ABA0AEMNV000AMXA0 | AE160200 | KCNGGHV5377 | 381,0 | 529,0 | 278,0 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | ET104104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,2 |
| DN 15 | 1/2" | ANSI 300 | ET104204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 6,9 |
| DN 20 | 3/4" | ANSI 150 | ET105104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 7,3 |
| DN 20 | 3/4" | ANSI 300 | ET105204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,4 |
| DN 25 | 1" | ANSI 150 | ET106104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 8,7 |
| DN 25 | 1" | ANSI 300 | ET106204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 10,1 |
| DN 32 | 1" 1/4 | ANSI 150 | ET107104ABA0ADQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 10,6 |
| DN 32 | 1" 1/4 | ANSI 300 | ET107204ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 13,1 |
| DN 40 | 1" 1/2 | ANSI 150 | ET108104ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 13,9 |
| DN 40 | 1" 1/2 | ANSI 300 | ET108204ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,5 |
| DN 50 | 2" | ANSI 150 | ET109104ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 21,3 |
| DN 50 | 2" | ANSI 300 | ET109204ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 24,5 |
| DN 65 | 2" 1/2 | ANSI 150 | ET110104ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 31,2 |
| DN 65 | 2" 1/2 | ANSI 300 | ET110204ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 300,5 | 35,9 |
| DN 80 | 3" | ANSI 150 | ET111104ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5387 | 280,0 | 307,5 | 35,6 |
| DN 80 | 3" | ANSI 300 | ET111204ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 47,3 |
| DN 100 | 4" | ANSI 150 | ET112104ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 57,0 |
| DN 100 | 4" | ANSI 300 | ET112204ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,7 |
| DN 125 | 5" | ANSI 150 | ET113104ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5336 | 256,5 | 382,0 | 73,0 |
| DN 125 | 5" | ANSI 300 | ET113204ABA0AEQNV000AMRA0 | AE160060 | KCNEEHV5362 | 381,0 | 439,0 | 118,1 |
| DN 150 | 6" | ANSI 150 | ET114104ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 153,2 |
| DN 150 | 6" | ANSI 300 | ET114204ABA0AEMNV000AMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 175,7 |
| DN 200 | 8" | ANSI 150 | ET115104ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 237,1 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

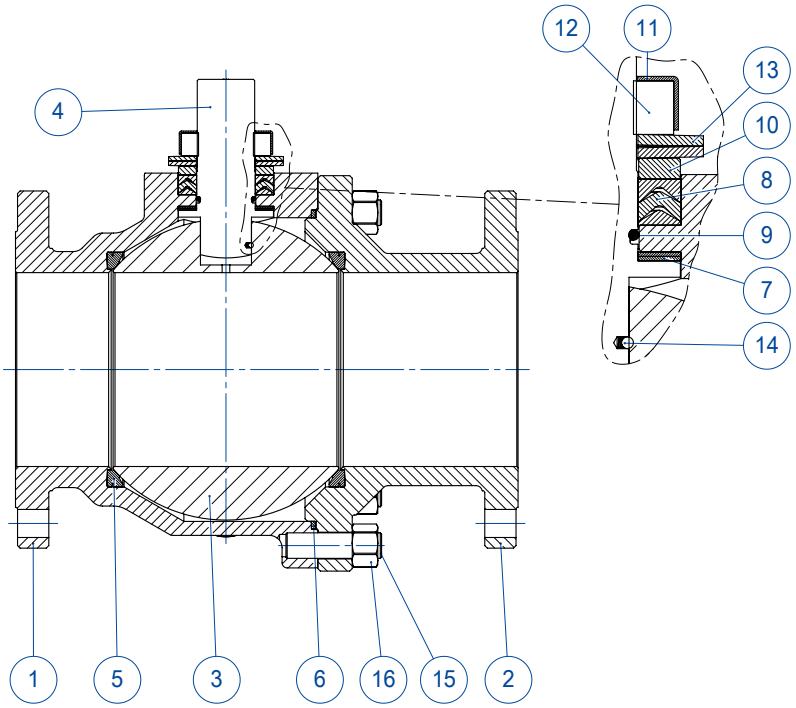
# THOR SPLIT BODY ANSI 150-300
# ACCIAIO INOX DA FUSIONE *CASTING STAINLESS STEEL*

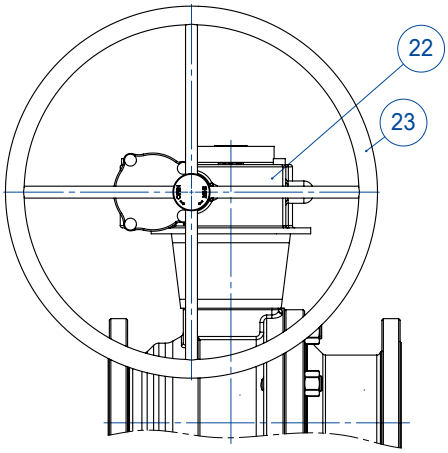


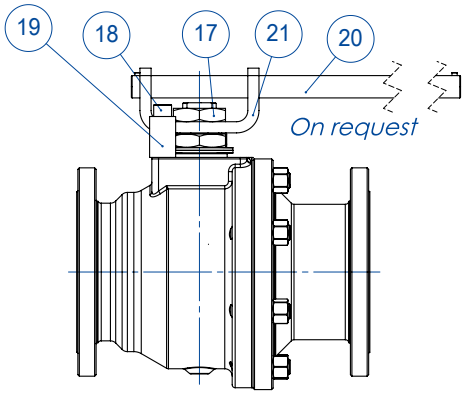

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **A** | **B** | **C** | **ØG** | **ØR** | **S** | **P** | **ØH** | **N° FORI** *HOLES N°* | **ØI** | **L** | **H** | **Y** | **ØV** | **ØM** | **ØN** | **F/T** | **ATT. ISO** | **Kg** | **KIT GUARNIZIONI** *SEALS KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | | | | | | | | | | |
| DN 150 | 6" | ANSI 150 | 154 | 227,5 | 40,5 | 280 | 216 | 1,6 | 25,6 | 241,3 | 8 | 22 | 394 (4) | 522 | 326 | 400 | 140 | M16 | 45/30 | F14 | 126 | KGBVVT1140 |
| DN 150 | 6" | ANSI 300 | 154 | 227,5 | 40,5 | 320 | 216 | 1,6 | 37,6 | 269,9 | 12 | 22 | 403 | 522 | 347,5 | 600 | 140 | M16 | 45/30 | F14 | 147 | KGBVVT114D |
| DN 200 | 8" | ANSI 150 | 188 | 274 | 44,8 | 345 | 269,9 | 1,6 | 29,5 | 298,5 | 8 | 22 | 457 (4) | 516 | 347 | 500 | 140 | M16 | 52/35 | F14 | 210 | KGBVVT1150 |

**(4)** B16.10 / API6D

# THOR SPLIT BODY - ANSI 150-300
## ACCIAIO INOX DA FUSIONE *CASTING STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* ANSI 150-300 DA FUSIONE *CASTING* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **CF8M *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (.) (2) |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 16 | Dadi *Nut* | ASTM A194-Gr.8 |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato(x) *Carbon steel galvanized (x)* |
| 20 | Tubo *Pipe* | Fe37 Zincato-*Galvanized* (x) |
| 21 | Sede tubo *Pipe seat* | Fe37 Zincato-*Galvanized* (x) |
| 22 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* |
| 23 | Volantino *Handwheel* | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
(2) DEVLON per DN150 - ANSI300 *DEVLON for DN150 - ANSI300*
(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - ANSI 150-300
## ACCIAIO INOX DA FUSIONE *CASTING STAINLESS STEEL*
## ASSE LIBERO E CON RIDUTTORE *FREE SHAFT AND WITH GEAR BOX*



**CODICI VALVOLE ASSE LIBERO (V__) E CON RIDUTTORE (R__) IN ACCIAIO INOX DA FUSIONE**
***CASTING STAINLESS STEEL BARE SHAFT (V__) AND WITH GEAR BOX (R__) OPERATED VALVE CODE***

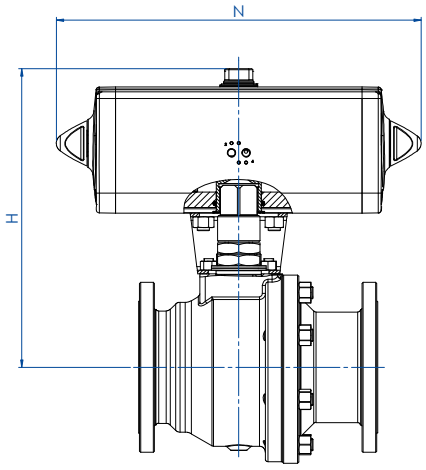
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -CF8M- *ITEM CODE -CF8M-* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 150(*) | 6” | ANSI 150 | V/RT114104AEA0AEQNV000 |
| DN 150 | 6” | ANSI 300 | V/RT114204AEA0AEMNV000 |
| DN 200(*) | 8” | ANSI 150 | V/RT115104AEA0AEQNV000 |

DN200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN150 e DN200. *STANDARD version with manual gearbox for DN150 and DN200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

## THOR SPLIT BODY - ANSI 150-300
## ACCIAIO INOX DA FUSIONE *CASTING STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*



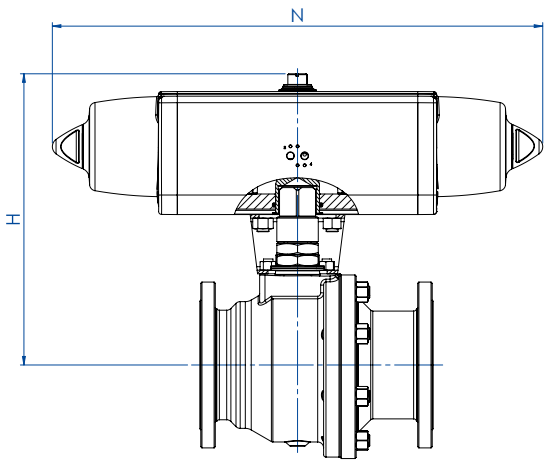



**CODICI ARTICOLI IN CF8M ACCIAIO INOX** *ITEM CODES IN CF8M STAINLESS STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 150 | 6" | ANSI 150 | DT114104AEA0AEQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 142,8 |
| DN 150 | 6" | ANSI 300 | DT114204AEA0AEMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 604,0 | 491,7 | 185,9 |
| DN 200 | 8" | ANSI 150 | DT115104AEA0AEQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 238,2 |

## THOR SPLIT BODY ANSI 150-300
## ACCIAIO INOX DA FUSIONE *CASTING STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*

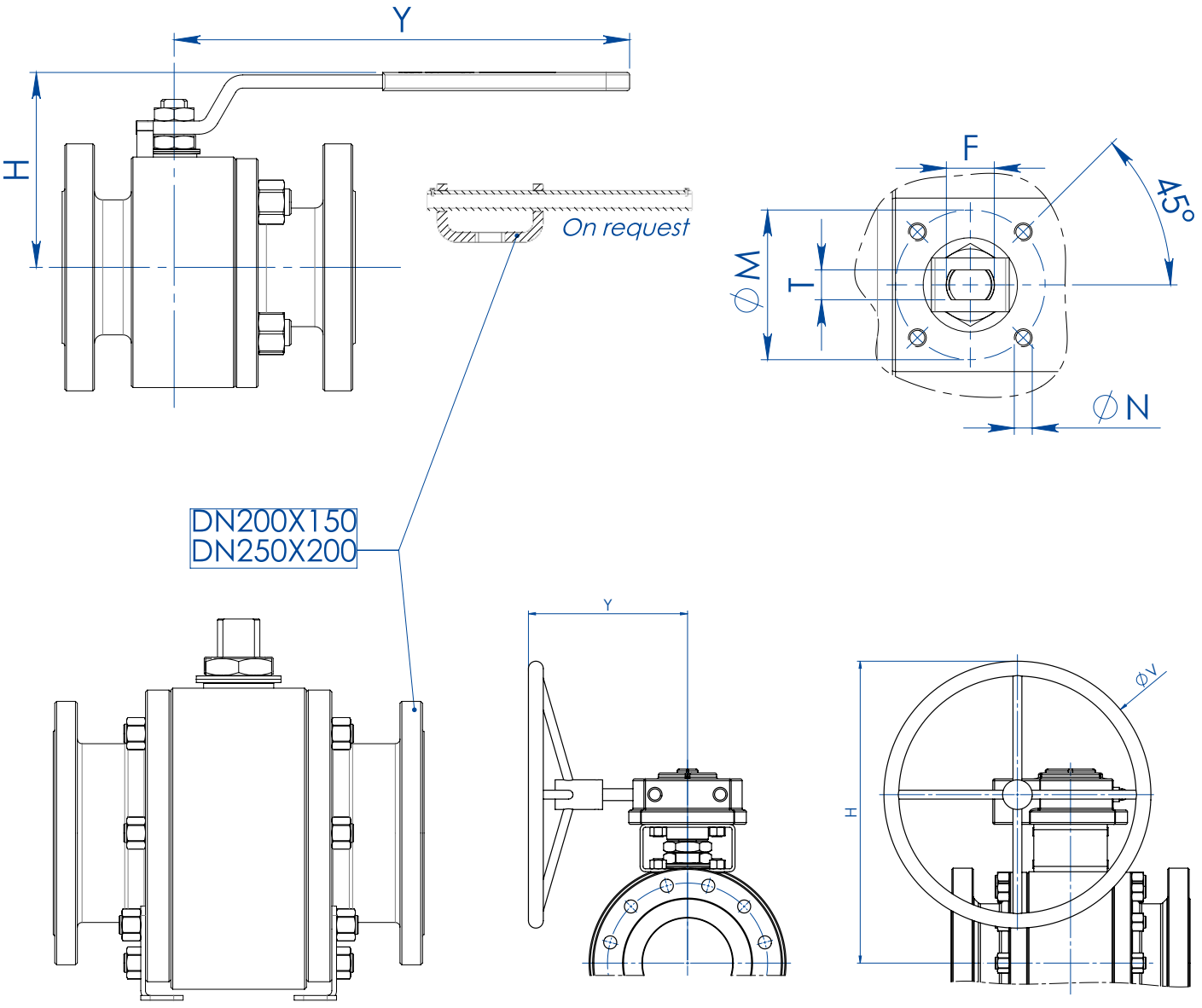





**CODICI ARTICOLI IN CF8M ACCIAIO INOX** *ITEM CODES IN CF8M STAINLESS STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 150 | 6" | ANSI 150 | ST114104AEA0AEQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 164,6 |
| DN 150 | 6" | ANSI 300 | ST114204AEA0AEMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 220,9 |
| DN 200 | 8" | ANSI 150 | ST115104AEA0AEQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 537,2 |

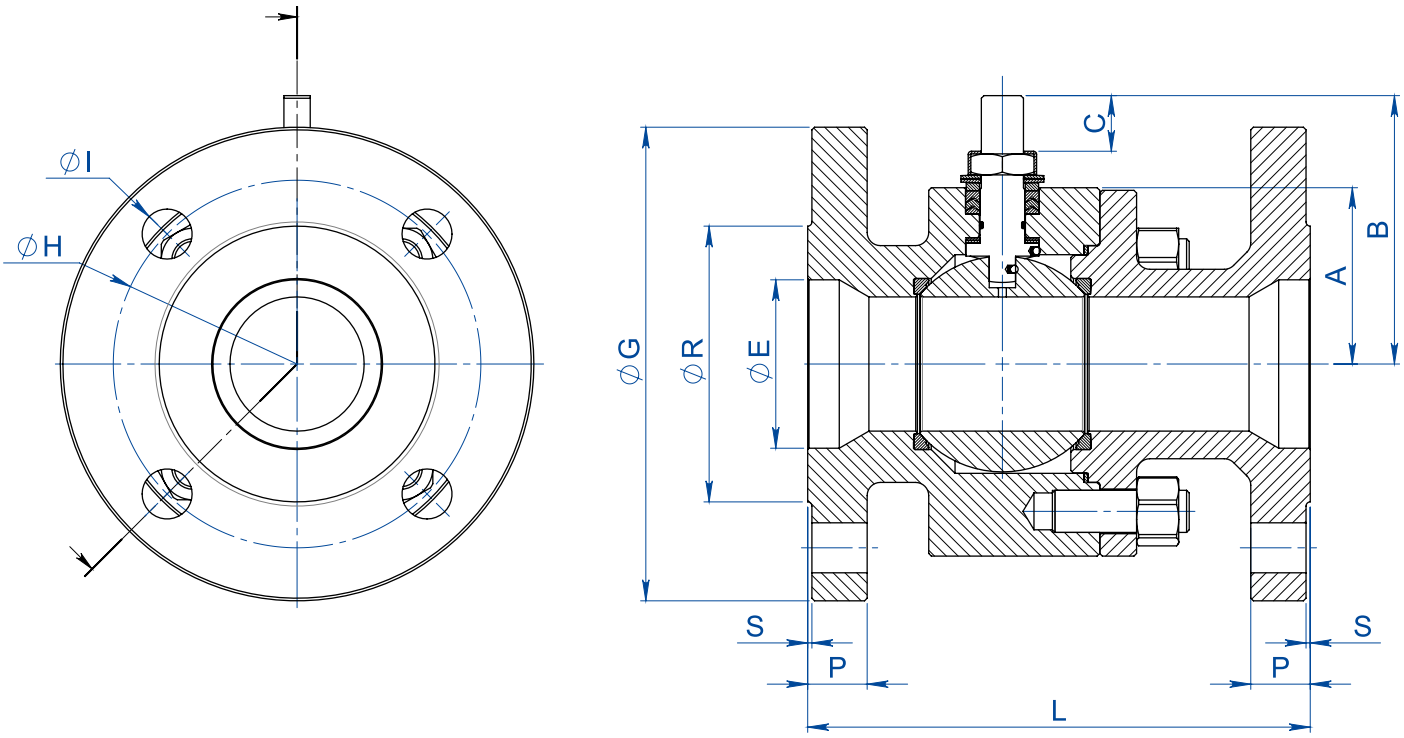
# THOR SPLIT BODY ANSI 150-300
# PASSAGGIO RIDOTTO *REDUCED BORE*




| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | H | Y | ØV | ØM | ØN | F/T | ATT. ISO | KIT LEVA *LEVER KIT* |
| DN [mm] | [inch] | | | | | | | | |
| DN 20x15 | 3/4" x 1/2" | 71 | 140 | --- | 36 | M5 | 10/6 | F03 | KLV58004 |
| DN 25x20 | 1" x 3/4" | 73 | 140 | --- | 36 | M5 | 10/6 | F03 | KLV58004 |
| DN 32x25 | 1" 1/4 x 1" | 87 | 150 | --- | 42 | M5 | 12/8 | F04 | KLV58006 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | 91 | 150 | --- | 42 | M5 | 12/8 | F04 | KLV58006 |
| DN 50x40 | 2" x 1" 1/2 | 108 | 275 | --- | 50 | M6 | 16/10 | F05 | KLV58008 |
| DN 65x50 | 2" 1/2 x 2" | 118 | 275 | --- | 50 | M6 | 16/10 | F05 | KLV58008 |
| DN 80x65 | 3" x 2" 1/2 | 143 | 350 | --- | 70 | M8 | 22/14 | F07 | KLV58010 |
| DN 100x80 | 4" x 3" | 150 | 350 | --- | 70 | M8 | 22/14 | F07 | KLV58010 |
| DN 125x100 | 5" x 4" | 198 | 450 | --- | 102 | M10 | 30/18 | F10 | KLV58012 |
| DN 150x100 | 6" x 4" | 208 | 450 | --- | 102 | M10 | 30/18 | F10 | KLV58012 |
| DN 200x150 ANSI 150 (*) | 8" x 6" | 522 | 326 | 400 | 140 | M16 | 45/30 | F14 | --- |
| DN 200x150 ANSI 300 | 8" x 6" | 522 | 347,5 | 600 | 140 | M16 | 45/30 | F14 | --- |
| DN 250x200 ANSI 150 (*) | 10" x 8" | 516 | 347 | 500 | 140 | M16 | 52/35 | F14 | --- |

Versione STANDARD con riduttore manuale per DN200x150 e DN250x200. *STANDARD version with manual gearbox for DN200x150 and DN250x200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY ANSI 150-300
# PASSAGGIO RIDOTTO *REDUCED BORE*

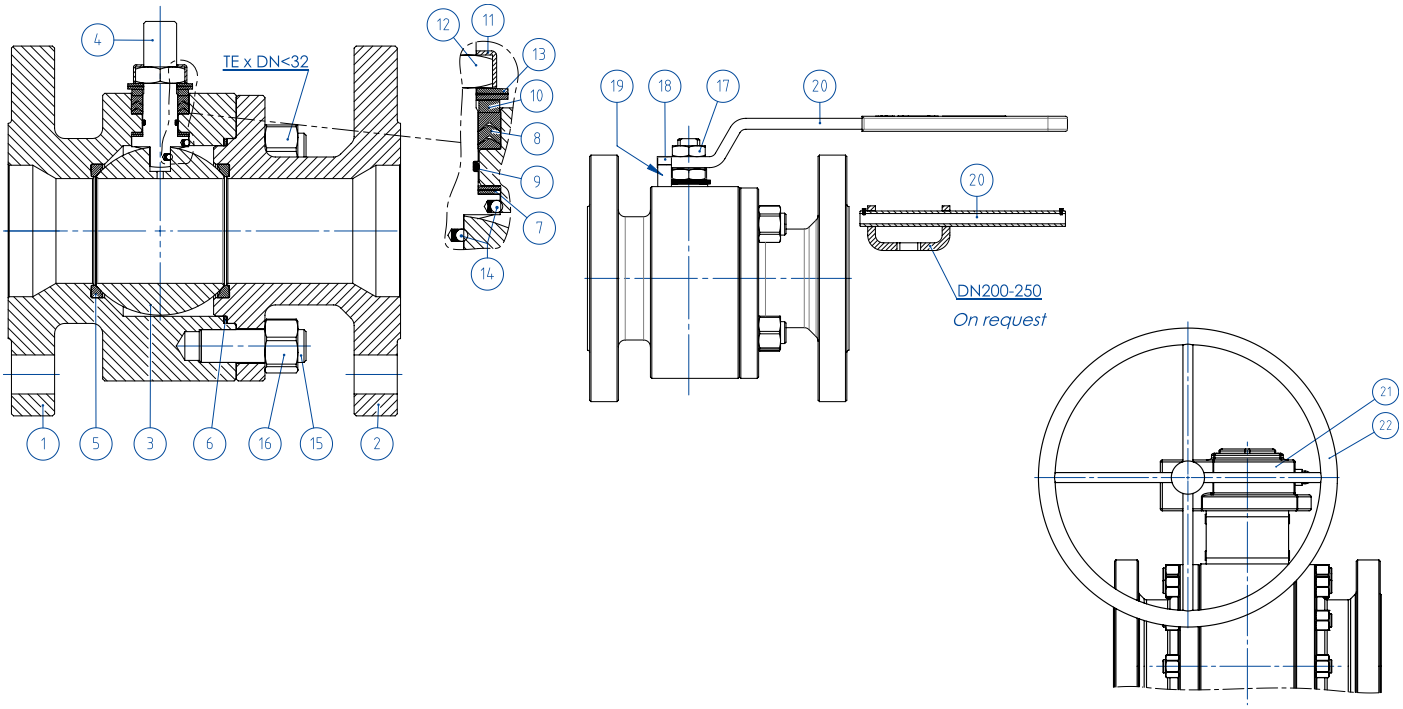



| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | ANSI | ∅E | A | B | C | ∅G | ∅R | S | P | ∅H | N°FORI *HOLES N°* | ∅I | Kg | L | KIT GUARNIZIONI *SEALS KIT* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | |
| DN 20x15 | 3/4" x 1/2" | 150 | 19 | 32 | 52 | 10 | 100 | 42,9 | 1,6 | 13 | 69,9 | 4 | 16 | 2,9 | 117 (3) | KGBV485040 |
| DN 20x15 | 3/4" x 1/2" | 300 | 19 | 32 | 52 | 10 | 115 | 42,9 | 1,6 | 16,6 | 82,6 | 4 | 19 | 4,1 | 152 (3) | KGBV485040 |
| DN 25x20 | 1" x 3/4" | 150 | 25 | 35 | 55 | 10 | 110 | 50,8 | 1,6 | 14,5 | 79,4 | 4 | 16 | 3,9 | 127 (3) | KGBV485050 |
| DN 25x20 | 1" x 3/4" | 300 | 25 | 35 | 55 | 10 | 125 | 50,8 | 1,6 | 18 | 88,9 | 4 | 19 | 5,2 | 165 (3) | KGBV485050 |
| DN 32x25 | 1" 1/4 x 1" | 150 | 32 | 42 | 68 | 15 | 115 | 63,5 | 1,6 | 16,1 | 88,9 | 4 | 16 | 5,1 | 140 (3) | KGBV485060 |
| DN 32x25 | 1" 1/4 x 1" | 300 | 32 | 42 | 68 | 15 | 135 | 63,5 | 1,6 | 19,5 | 98,4 | 4 | 19 | 7 | 178 (3) | KGBV485060 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | 150 | 38 | 47 | 73 | 15 | 125 | 73 | 1,6 | 18 | 98,4 | 4 | 16 | 7,7 | 165 (3) | KGBV485070 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | 300 | 38 | 47 | 73 | 15 | 155 | 73 | 1,6 | 21 | 114,3 | 4 | 22 | 10,8 | 190 (3) | KGBV485070 |
| DN 50x40 | 2" x 1" 1/2 | 150 | 51 | 58 | 93 | 21 | 150 | 92,1 | 1,6 | 19,6 | 120,7 | 4 | 19 | 11,8 | 178 (4) | KGBV485080 |
| DN 50x40 | 2" x 1" 1/2 | 300 | 51 | 58 | 93 | 21 | 165 | 92,1 | 1,6 | 22,6 | 127 | 8 | 19 | 14,1 | 216 (4) | KGBV485080 |
| DN 65x50 | 2" 1/2 x 2" | 150 | 64 | 67 | 102 | 21 | 180 | 104,8 | 1,6 | 22,6 | 139,7 | 4 | 19 | 18,3 | 191 (4) | KGBV485090 |
| DN 65x50 | 2" 1/2 x 2" | 300 | 64 | 67 | 102 | 21 | 190 | 104,8 | 1,6 | 26,1 | 149,2 | 8 | 22 | 21,5 | 241 (4) | KGBV485090 |
| DN 80x65 | 3" x 2" 1/2 | 150 | 76 | 83 | 130,5 | 28,4 | 190 | 127 | 1,6 | 24 | 152,4 | 4 | 19 | 25,6 | 203 (4) | KGBV485100 |
| DN 80x65 | 3" x 2" 1/2 | 300 | 76 | 83 | 130,5 | 28,4 | 210 | 127 | 1,6 | 29 | 168,3 | 8 | 22 | 33,6 | 282 (4) | KGBV485100 |
| DN 100x80 | 4" x 3" | 150 | 102 | 90 | 137,5 | 28,4 | 230 | 157,2 | 1,6 | 24,6 | 190,5 | 8 | 19 | 35,9 | 229 (4) | KGBV485110 |
| DN 100x80 | 4" x 3" | 300 | 102 | 96 | 137,5 | 28,4 | 255 | 157,2 | 1,6 | 32,6 | 200 | 8 | 22 | 50,5 | 305 (4) | KGBV485110 |
| DN 125x100 | 5" x 4" | 150 | 118 | 111 | 172 | 35 | 255 | 185,7 | 1,6 | 24 | 215,9 | 8 | 22 | 53 | 254 (3) | KGBV485120 |
| DN 125x100 | 5" x 4" | 300 | 118 | 111 | 172 | 35 | 280 | 185,7 | 1,6 | 36,6 | 235 | 8 | 22 | 78,9 | 381 (3) | KGBV485120 |
| DN 150x100 | 6" x 4" | 150 | 152 | 111 | 172 | 35 | 280 | 215,9 | 1,6 | 25,6 | 241,3 | 8 | 22 | 67,7 | 394 (4) | KGBV485120 |
| DN 150x100 | 6" x 4" | 300 | 152 | 111 | 172 | 35 | 320 | 215,9 | 1,6 | 37,6 | 269,9 | 12 | 22 | 91,4 | 403 (4) | KGBV485120 |
| DN 200x150(*) | 8" x 6" | 150 | 203 | 154 | 227,5 | 40,5 | 345 | 269,9 | 1,6 | 29 | 298,5 | 8 | 22 | 151,5 | 457 (4) | KGBV485140 |
| DN 200X150 | 8" x 6" | 300 | 203 | 154 | 227,5 | 40,5 | 380 | 269,9 | 1,6 | 42,5 | 330,2 | 12 | 25,4 | 184 | 502 | KGBV48514D |
| DN 250x200(*) | 10" x 8" | 150 | 254 | 188 | 274 | 44,8 | 405 | 323,8 | 1,6 | 31 | 362 | 12 | 25,4 | 246 | 533 (4) | KGBV485150 |

Versione STANDARD con riduttore manuale per DN200x150 e DN250x200. *STANDARD version with manual gearbox for DN200x150 and DN250x200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

**(3) ANSI B16.10**
**(4) B16.10 / API6D**

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY ANSI 150-300 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8 (*) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8 (*) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | ASTM A182F6A / A479 Tp.410 (**) | ASTM A182F6A / A479 Tp.410 (**) |
| 5* | Seggio *Seat* | TFM1600 (2) | TFM1600 (2) |
| 6* | Guarnizione corpo-terminale *Body-connector gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) | TFM1600 (.) |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B7 | A320-L7M |
| 16 | Dadi *Nut* | ASTM A194-Gr.2H | A194-Gr.7M |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato *Carbon steel galvanized* (x) | Acciaio al carbonio zincato *Carbon steel galvanized* (x) (1) |
| 20 | Leva *Lever* | Fe37 zincato-*Galvanized* (x) | Fe37 zincato-*Galvanized* (x) |
| 21 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* | Ghisa (verniciato) *Cast iron (painted)* |
| 22 | Volantino *Handwheel* | Fe 42 UNI 7091 | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*
(*): A351 CF8M
(**): A564 TP.630 (17-4PH)
(x): 304 s.s.
(xx): 301 s.s.
(1): per DN200x150 & DN250x200 disponibile solo in 304 S.S. *for DN200x150 & DN250x200 available only in 304 S.S.*
(2) DEVLON per DN200X150 ANSI300 *DEVLON for DN200x150 ANSI300*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



## CODICI VALVOLE IN ACCIAIO AL CARBONIO: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__)
## *CARBON STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__)*

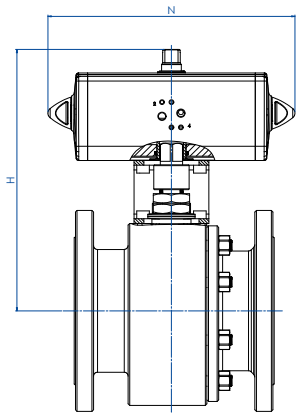
| MISURA *SIZE* | | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 20x15 | 3/4" x 1/2" | ANSI 150 | V/LT135104CAB0BFQNV00B | V/LT135104CBB0BHQNV00B |
| DN 20x15 | 3/4" x 1/2" | ANSI 300 | V/LT135204CAB0BFQNV00B | V/LT135204CBB0BHQNV00B |
| DN 25x20 | 1" x 3/4" | ANSI 150 | V/LT136104CAB0BFQNV00B | V/LT136104CBB0BHQNV00B |
| DN 25x20 | 1" x 3/4" | ANSI 300 | V/LT136204CAB0BFQNV00B | V/LT136204CBB0BHQNV00B |
| DN 32x25 | 1" 1/4 x 1" | ANSI 150 | V/LT137104CAB0BFQNV00B | V/LT137104CBB0BHQNV00B |
| DN 32x25 | 1" 1/4 x 1" | ANSI 300 | V/LT137204CAB0BFQNV00B | V/LT137204CBB0BHQNV00B |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 150 | V/LT138104CAB0BFQNV00B | V/LT138104CBB0BHQNV00B |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 300 | V/LT138204CAB0BGQNV00B | V/LT138204CBB0BIQNV00B |
| DN 50x40 | 2" x 1" 1/2 | ANSI 150 | V/LT139104CAB0BGQNV00B | V/LT139104CBB0BIQNV00B |
| DN 50x40 | 2" x 1" 1/2 | ANSI 300 | V/LT139204CAB0BGQNV00B | V/LT139204CBB0BIQNV00B |
| DN 65x50 | 2" 1/2 x 2" | ANSI 150 | V/LT140104CAB0BGQNV00B | V/LT140104CBB0BIQNV00B |
| DN 65x50 | 2" 1/2 x 2" | ANSI 300 | V/LT140204CAB0BGQNV00B | V/LT140204CBB0BIQNV00B |
| DN 80x65 | 3" x 2" 1/2 | ANSI 150 | V/LT141104CAB0BGQNV00B | V/LT141104CBB0BIQNV00B |
| DN 80x65 | 3" x 2" 1/2 | ANSI 300 | V/LT141204CAB0BGQNV00B | V/LT141204CBB0BIQNV00B |
| DN 100x80 | 4" x 3" | ANSI 150 | V/LT142104CAB0BGQNV00B | V/LT142104CBB0BIQNV00B |
| DN 100x80 | 4" x 3" | ANSI 300 | V/LT142204CAB0BGQNV00B | V/LT142204CBB0BIQNV00B |
| DN 125x100 | 5" x 4" | ANSI 150 | V/LT143104CAB0BGQNV00B | V/LT143104CBB0BIQNV00B |
| DN 125x100 | 5" x 4" | ANSI 300 | V/LT143204CAB0BGQNV00B | V/LT143204CBB0BIQNV00B |
| DN 150x100 | 6" x 4" | ANSI 150 | V/LT174104CAB0BGQNV00B | V/LT174104CBB0BIQNV00B |
| DN 150x100 | 6" x 4" | ANSI 300 | V/LT174204CAB0BGQNV00B | V/LT174204CBB0BIQNV00B |
| DN 200X150(*) | 8" x 6" | ANSI 150 | V/RT145104CAB0BGQNV00B | V/RT145104CBB0BIQNV00B |
| DN 200X150 | 8" x 6" | ANSI 300 | V/RT145204CAB0BGMNV00B | V/RT145204CBB0BIMNV00B |
| DN 250X200(*) | 10" x 8" | ANSI 150 | V/RT146104CAB0BGQNV00B | V/RT146104CBB0BIQNV00B |

DN250X200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN250X200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN200x150 e DN250x200. *STANDARD version with manual gearbox for DN200x150 and DN250x200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

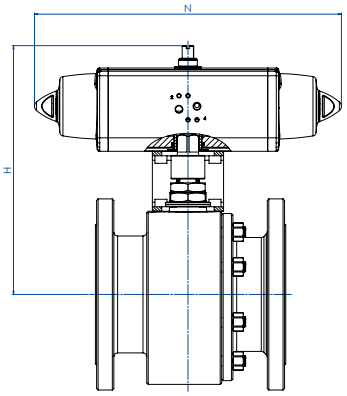
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN20X15 | 3/4" x 1/2" | ANSI 150 | DT135104CAB0BFQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,0 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | DT135204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 5,5 |
| DN25X20 | 1" x 3/4" | ANSI 150 | DT136104CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,3 |
| DN25X20 | 1" x 3/4" | ANSI 300 | DT136204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 6,6 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | DT137104CAB0BFQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | DT137204CAB0BFQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 8,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | DT138104CAB0BFQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,5 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | DT138204CAB0BGQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 12,6 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | DT139104CAB0BGQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,1 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | DT139204CAB0BGQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 16,4 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | DT140104CAB0BGQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 21,6 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | DT140204CAB0BGQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 24,9 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | DT141104CAB0BGQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 29,1 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | DT141204CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 39,3 |
| DN100X80 | 4" x 3" | ANSI 150 | DT142104CAB0BGQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 41,6 |
| DN100X80 | 4" x 3" | ANSI 300 | DT142204CAB0BGQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 57,6 |
| DN125X100 | 5" x 4" | ANSI 150 | DT143104CAB0BGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 61,3 |
| DN125X100 | 5" x 4" | ANSI 300 | DT143204CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 91,1 |
| DN150X100 | 6" x 4" | ANSI 150 | DT174104CAB0BGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 76,0 |
| DN150X100 | 6" x 4" | ANSI 300 | DT174204CAB0BGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 103,6 |
| DN200X150 | 8" x 6" | ANSI 150 | DT145104CAB0BGQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 168,3 |
| DN200X150 | 8" x 6" | ANSI 300 | DT145204CAB0BGMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 222,9 |
| DN250X200 | 10" x 8" | ANSI 150 | DT146104CAB0BGQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 274,2 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN20X15 | 3/4" x 1/2" | ANSI 150 | DT135104CBB0BHQNV00BAFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,0 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | DT135204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 5,5 |
| DN25X20 | 1" x 3/4" | ANSI 150 | DT136104CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,3 |
| DN25X20 | 1" x 3/4" | ANSI 300 | DT136204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 6,6 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | DT137104CBB0BHQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | DT137204CBB0BHQNV00BAFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 8,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | DT138104CBB0BHQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,5 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | DT138204CBB0BIQNV00BAFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 12,6 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | DT139104CBB0BIQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,1 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | DT139204CBB0BIQNV00BAFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 16,4 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | DT140104CBB0BIQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 21,6 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | DT140204CBB0BIQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 24,9 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | DT141104CBB0BIQNV00BAFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 29,1 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | DT141204CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 39,3 |
| DN100X80 | 4" x 3" | ANSI 150 | DT142104CBB0BIQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 41,6 |
| DN100X80 | 4" x 3" | ANSI 300 | DT142204CBB0BIQNV00BAFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 57,6 |
| DN125X100 | 5" x 4" | ANSI 150 | DT143104CBB0BIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 61,3 |
| DN125X100 | 5" x 4" | ANSI 300 | DT143204CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 91,1 |
| DN150X100 | 6" x 4" | ANSI 150 | DT174104CBB0BIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 76,0 |
| DN150X100 | 6" x 4" | ANSI 300 | DT174204CBB0BIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 103,6 |
| DN200X150 | 8" x 6" | ANSI 150 | DT145104CBB0BIQNV00BAFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 168,3 |
| DN200X150 | 8" x 6" | ANSI 300 | DT145204CBB0BIMNV00BAFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 222,9 |
| DN250X200 | 10" x 8" | ANSI 150 | DT146104CBB0BIQNV00BAFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 274,2 |

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

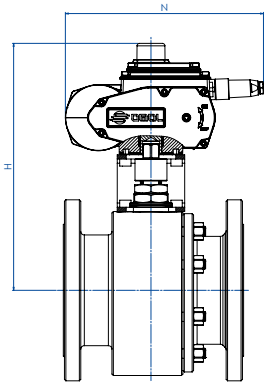
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN20X15 | 3/4" x 1/2" | ANSI 150 | ST135104CAB0BFQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,5 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | ST135204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,6 |
| DN25X20 | 1" x 3/4" | ANSI 150 | ST136104CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,4 |
| DN25X20 | 1" x 3/4" | ANSI 300 | ST136204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | ST137104CAB0BFQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | ST137204CAB0BFQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 9,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | ST138104CAB0BFQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | ST138204CAB0BGQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 14,5 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | ST139104CAB0BGQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 15,9 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | ST139204CAB0BGQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 18,2 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | ST140104CAB0BGQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 25,3 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | ST140204CAB0BGQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 29,4 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | ST141104CAB0BGQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 33,4 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | ST141204CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 43,6 |
| DN100X80 | 4" x 3" | ANSI 150 | ST142104CAB0BGQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 45,9 |
| DN100X80 | 4" x 3" | ANSI 300 | ST142204CAB0BGQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 64,2 |
| DN125X100 | 5" x 4" | ANSI 150 | ST143104CAB0BGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 72,1 |
| DN125X100 | 5" x 4" | ANSI 300 | ST143204CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 104,7 |
| DN150X100 | 6" x 4" | ANSI 150 | ST174104CAB0BGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 86,8 |
| DN150X100 | 6" x 4" | ANSI 300 | ST174204CAB0BGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 117,2 |
| DN200X150 | 8" x 6" | ANSI 150 | ST145104CAB0BGQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 189,5 |
| DN200X150 | 8" x 6" | ANSI 300 | ST145204CAB0BGMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 257,9 |
| DN250X200 | 10" x 8" | ANSI 150 | ST146104CAB0BGQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 326,2 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN20X15 | 3/4" x 1/2" | ANSI 150 | ST135104CBB0BHQNV00BAFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,5 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | ST135204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,6 |
| DN25X20 | 1" x 3/4" | ANSI 150 | ST136104CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,4 |
| DN25X20 | 1" x 3/4" | ANSI 300 | ST136204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | ST137104CBB0BHQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | ST137204CBB0BHQNV00BAFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 9,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | ST138104CBB0BHQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | ST138204CBB0BIQNV00BAFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 14,5 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | ST139104CBB0BIQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 15,9 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | ST139204CBB0BIQNV00BAFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 18,2 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | ST140104CBB0BIQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 25,3 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | ST140204CBB0BIQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 29,4 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | ST141104CBB0BIQNV00BAFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 33,4 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | ST141204CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 43,6 |
| DN100X80 | 4" x 3" | ANSI 150 | ST142104CBB0BIQNV00BAFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 45,9 |
| DN100X80 | 4" x 3" | ANSI 300 | ST142204CBB0BIQNV00BAFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 64,2 |
| DN125X100 | 5" x 4" | ANSI 150 | ST143104CBB0BIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 72,1 |
| DN125X100 | 5" x 4" | ANSI 300 | ST143204CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 104,7 |
| DN150X100 | 6" x 4" | ANSI 150 | ST174104CBB0BIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 86,8 |
| DN150X100 | 6" x 4" | ANSI 300 | ST174204CBB0BIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 117,2 |
| DN200X150 | 8" x 6" | ANSI 150 | ST145104CBB0BIQNV00BAFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 189,5 |
| DN200X150 | 8" x 6" | ANSI 300 | ST145204CBB0BIMNV00BAFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 257,9 |
| DN250X200 | 10" x 8" | ANSI 150 | ST146104CBB0BIQNV00BAFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 326,2 |

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

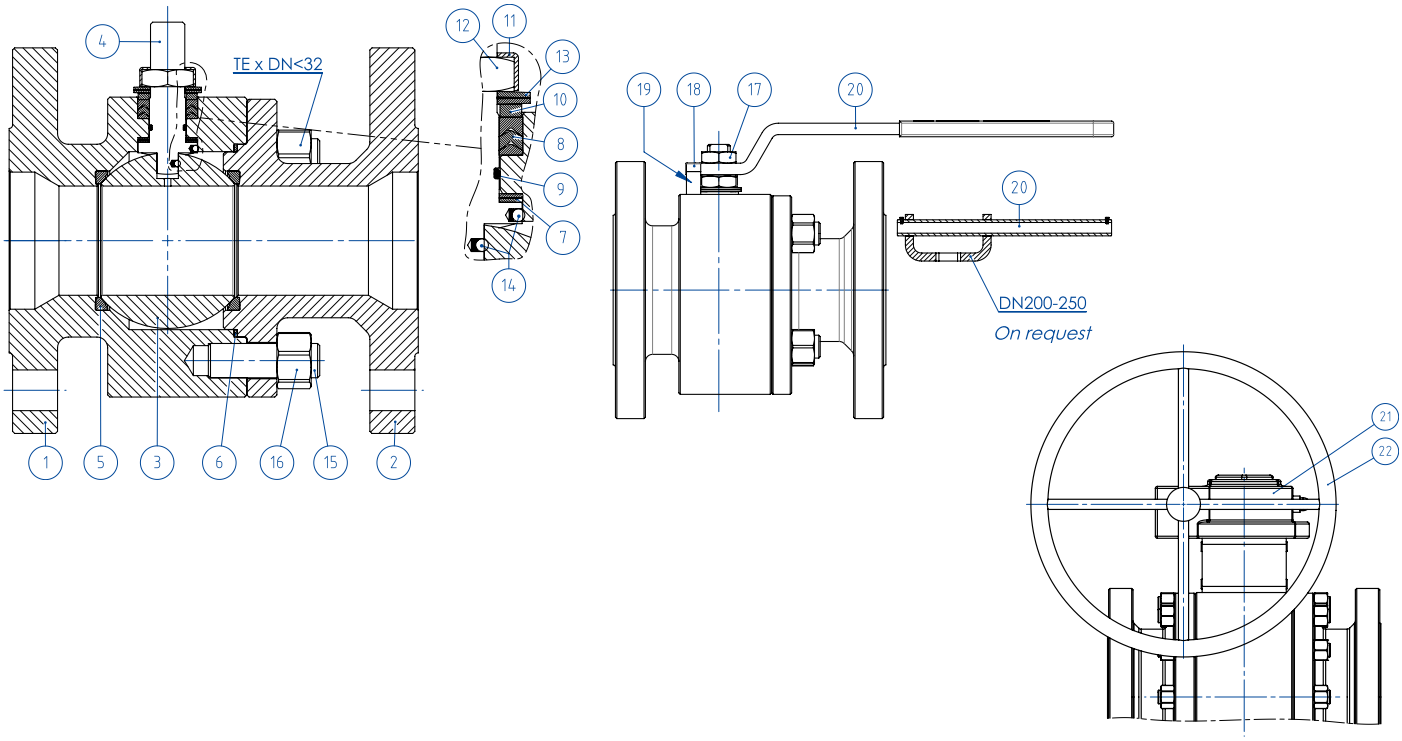
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 150 | ET135104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,1 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | ET135204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 8,3 |
| DN25X20 | 1" x 3/4" | ANSI 150 | ET136104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,1 |
| DN25X20 | 1" x 3/4" | ANSI 300 | ET136204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 9,4 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | ET137104CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,3 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | ET137204CAB0BFQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 11,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | ET138104CAB0BFQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,1 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | ET138204CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 15,2 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | ET139104CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,3 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | ET139204CAB0BGQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 18,6 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | ET140104CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 26,3 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | ET140204CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 29,5 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | ET141104CAB0BGQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 33,7 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | ET141204CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 42,2 |
| DN100X80 | 4" x 3" | ANSI 150 | ET142104CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 44,5 |
| DN100X80 | 4" x 3" | ANSI 300 | ET142204CAB0BGQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 59,7 |
| DN125X100 | 5" x 4" | ANSI 150 | ET143104CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 64,1 |
| DN125X100 | 5" x 4" | ANSI 300 | ET143204CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 90,0 |
| DN150X100 | 6" x 4" | ANSI 150 | ET174104CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,8 |
| DN150X100 | 6" x 4" | ANSI 300 | ET174204CAB0BGQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 102,5 |
| DN200X150 | 8" x 6" | ANSI 150 | ET145104CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 178,7 |
| DN200X150 | 8" x 6" | ANSI 300 | ET145204CAB0BGMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 212,7 |
| DN250X200 | 10" x 8" | ANSI 150 | ET146104CAB0BGQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 272,7 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 150 | ET135104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,1 |
| DN20X15 | 3/4" x 1/2" | ANSI 300 | ET135204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 8,3 |
| DN25X20 | 1" x 3/4" | ANSI 150 | ET136104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,1 |
| DN25X20 | 1" x 3/4" | ANSI 300 | ET136204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 9,4 |
| DN32X25 | 1" 1/4 x 1" | ANSI 150 | ET137104CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,3 |
| DN32X25 | 1" 1/4 x 1" | ANSI 300 | ET137204CBB0BHQNV00BAMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 11,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 150 | ET138104CBB0BHQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,1 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 300 | ET138204CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 15,2 |
| DN50X40 | 2" x 1" 1/2 | ANSI 150 | ET139104CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,3 |
| DN50X40 | 2" x 1" 1/2 | ANSI 300 | ET139204CBB0BIQNV00BAMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 18,6 |
| DN65X50 | 2" 1/2 x 2" | ANSI 150 | ET140104CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 26,3 |
| DN65X50 | 2" 1/2 x 2" | ANSI 300 | ET140204CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 29,5 |
| DN80X65 | 3" x 2" 1/2 | ANSI 150 | ET141104CBB0BIQNV00BAMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 33,7 |
| DN80X65 | 3" x 2" 1/2 | ANSI 300 | ET141204CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 42,2 |
| DN100X80 | 4" x 3" | ANSI 150 | ET142104CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 44,5 |
| DN100X80 | 4" x 3" | ANSI 300 | ET142204CBB0BIQNV00BAMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 59,7 |
| DN125X100 | 5" x 4" | ANSI 150 | ET143104CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 64,1 |
| DN125X100 | 5" x 4" | ANSI 300 | ET143204CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 90,0 |
| DN150X100 | 6" x 4" | ANSI 150 | ET174104CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,8 |
| DN150X100 | 6" x 4" | ANSI 300 | ET174204CBB0BIQNV00BAMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 102,5 |
| DN200X150 | 8" x 6" | ANSI 150 | ET145104CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 178,7 |
| DN200X150 | 8" x 6" | ANSI 300 | ET145204CBB0BIMNV00BAMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 212,7 |
| DN250X200 | 10" x 8" | ANSI 150 | ET146104CBB0BIQNV00BAMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 272,7 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* ANSI 150-300 DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | TFM1600 (2) |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 16 | Dadi *Nut* | ASTM A194-Gr.8 |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato (x) *Carbon steel galvanized (x)* |
| 20 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| 21 | Riduttore *Gear box* | Ghisa (verniciato) *Cast iron (painted)* |
| 22 | Volantino *Handwheel* | Fe 42 UNI 7091 |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
(2) DEVLON per DN200x150 ANSI300 *DEVLON for DN200x150 ANSI300*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



## CODICI VALVOLE IN ACCIAIO INOX: ASSE LIBERO (V__) - CON LEVA (L__) - CON RIDUTTORE (R__)
## *STAINLESS STEEL VALVE CODE: FREE SHAFT (V__) - WITH LEVER (L__) - WITH GEARBOX (R__)*

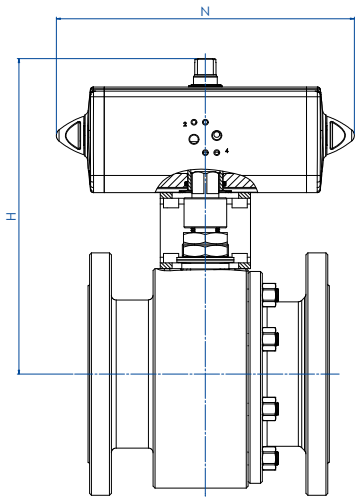
| MISURA *SIZE* | | ANSI | 316 *Stainless steel* |
|---|---|---|---|
| DN [mm] | [inch] | | |
| DN 20x15 | 3/4" x 1/2" | ANSI 150 | V/LT135104ABA0ADQNV000 |
| DN 20x15 | 3/4" x 1/2" | ANSI 300 | V/LT135204ABA0ADQNV000 |
| DN 25x20 | 1" x 3/4" | ANSI 150 | V/LT136104ABA0ADQNV000 |
| DN 25x20 | 1" x 3/4" | ANSI 300 | V/LT136204ABA0ADQNV000 |
| DN 32x25 | 1" 1/4 x 1" | ANSI 150 | V/LT137104ABA0ADQNV000 |
| DN 32x25 | 1" 1/4 x 1" | ANSI 300 | V/LT137204ABA0ADQNV000 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 150 | V/LT138104ABA0ADQNV000 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 300 | V/LT138204ABA0AEQNV000 |
| DN 50x40 | 2" x 1" 1/2 | ANSI 150 | V/LT139104ABA0AEQNV000 |
| DN 50x40 | 2" x 1" 1/2 | ANSI 300 | V/LT139204ABA0AEQNV000 |
| DN 65x50 | 2" 1/2 x 2" | ANSI 150 | V/LT140104ABA0AEQNV000 |
| DN 65x50 | 2" 1/2 x 2" | ANSI 300 | V/LT140204ABA0AEQNV000 |
| DN 80x65 | 3" x 2" 1/2 | ANSI 150 | V/LT141104ABA0AEQNV000 |
| DN 80x65 | 3" x 2" 1/2 | ANSI 300 | V/LT141204ABA0AEQNV000 |
| DN 100x80 | 4" x 3" | ANSI 150 | V/LT142104ABA0AEQNV000 |
| DN 100x80 | 4" x 3" | ANSI 300 | V/LT142204ABA0AEQNV000 |
| DN 125x100 | 5" x 4" | ANSI 150 | V/LT143104ABA0AEQNV000 |
| DN 125x100 | 5" x 4" | ANSI 300 | V/LT143204ABA0AEQNV000 |
| DN 150x100 | 6" x 4" | ANSI 150 | V/LT174104ABA0AEQNV000 |
| DN 150x100 | 6" x 4" | ANSI 300 | V/LT174204ABA0AEQNV000 |
| DN200X150(*) | 8" x 6" | ANSI 150 | V/RT145104ABA0AEQNV000 |
| DN200X150 | 8" x 6" | ANSI 300 | V/RT145204ABA0AEMNV000 |
| DN250X200(*) | 10" x 8" | ANSI 150 | V/RT146104ABA0AEQNV000 |

DN250X200 ANSI300 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN250X200 ANSI300 on stock, check with our sales department for operating conditions.*

Versione STANDARD con riduttore manuale per DN200x150 e DN250x200. *STANDARD version with manual gearbox for DN200x150 and DN250x200.*
(*) A RICHIESTA versione con leva. *ON REQUEST version with manual lever.*

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*



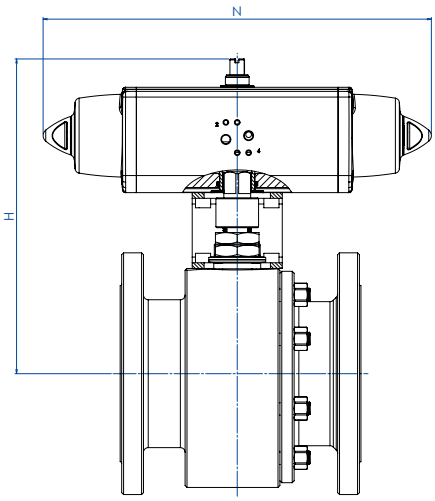



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | 150 | DT135104ABA0ADQNV000AFBA0 | DAN0015411S | KCNAAHD5312 | 159,0 | 154,2 | 4,0 |
| DN20X15 | 3/4" x 1/2" | 300 | DT135204ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 161,2 | 5,5 |
| DN25X20 | 1" x 3/4" | 150 | DT136104ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 5,3 |
| DN25X20 | 1" x 3/4" | 300 | DT136204ABA0ADQNV000AFCA0 | DAN0030411S | KCNAAHD5312 | 174,2 | 164,2 | 6,6 |
| DN32X25 | 1" 1/4 x 1" | 150 | DT137104ABA0ADQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 6,7 |
| DN32X25 | 1" 1/4 x 1" | 300 | DT137204ABA0ADQNV000AFCA0 | DAN0030411S | KCNBCHD5315 | 174,2 | 181,2 | 8,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 150 | DT138104ABA0ADQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 9,5 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 300 | DT138204ABA0AEQNV000AFDA0 | DAN0045412S | KCNBCHD5315 | 188,5 | 191,5 | 12,6 |
| DN50X40 | 2" x 1" 1/2 | 150 | DT139104ABA0AEQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 14,1 |
| DN50X40 | 2" x 1" 1/2 | 300 | DT139204ABA0AEQNV000AFEA0 | DAN0060412S | KCNCCHD5316 | 198,0 | 208,4 | 16,4 |
| DN65X50 | 2" 1/2 x 2" | 150 | DT140104ABA0AEQNV000AFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 230,3 | 21,6 |
| DN65X50 | 2" 1/2 x 2" | 300 | DT140204ABA0AEQNV000AFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 234,0 | 24,9 |
| DN80X65 | 3" x 2" 1/2 | 150 | DT141104ABA0AEQNV000AFHA0 | DAN0120411S | KCNDDHD5386 | 244,1 | 250,0 | 29,1 |
| DN80X65 | 3" x 2" 1/2 | 300 | DT141204ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 280,5 | 39,3 |
| DN100X80 | 4" x 3" | 150 | DT142104ABA0AEQNV000AFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 287,5 | 41,6 |
| DN100X80 | 4" x 3" | 300 | DT142204ABA0AEQNV000AFJA0 | DAN0240411S | KCNDDHD5320 | 313,6 | 297,1 | 57,6 |
| DN125X100 | 5" x 4" | 150 | DT143104ABA0AEQNV000AFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 61,3 |
| DN125X100 | 5" x 4" | 300 | DT143204ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 91,1 |
| DN150X100 | 6" x 4" | 150 | DT174104ABA0AEQNV000AFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 339,0 | 76,0 |
| DN150X100 | 6" x 4" | 300 | DT174204ABA0AEQNV000AFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 355,9 | 103,6 |
| DN200X150 | 8" x 6" | 150 | DT145104ABA0AEQNV000AFMA0 | DAN0720411S | KCNFGHD5364 | 433,1 | 432,0 | 168,3 |
| DN200X150 | 8" x 6" | 300 | DT145204ABA0AEMNV000AFRA0 | DAN1920411S | KCNGGHD5600 | 601,0 | 491,7 | 222,9 |
| DN250X200 | 10" x 8" | 150 | DT146104ABA0AEQNV000AFQA0 | DAN1440411S | KCNGGHD5366 | 567,1 | 504,0 | 274,2 |

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*



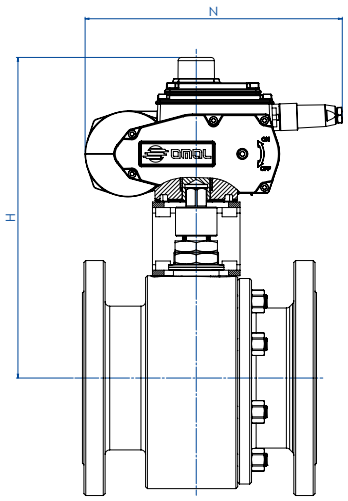



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | 150 | ST135104ABA0ADQNV000AFCA0 | SRN0015401S | KCNAAHD5312 | 233,2 | 161,2 | 4,5 |
| DN20X15 | 3/4" x 1/2" | 300 | ST135204ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 182,4 | 6,6 |
| DN25X20 | 1" x 3/4" | 150 | ST136104ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 6,4 |
| DN25X20 | 1" x 3/4" | 300 | ST136204ABA0ADQNV000AFEA0 | SRN0030402S | KCNACHD5324 | 258,8 | 185,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | 150 | ST137104ABA0ADQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 7,7 |
| DN32X25 | 1" 1/4 x 1" | 300 | ST137204ABA0ADQNV000AFEA0 | SRN0030402S | KCNBCHD5327 | 258,8 | 192,4 | 9,6 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 150 | ST138104ABA0ADQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 11,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 300 | ST138204ABA0AEQNV000AFGA0 | SRN0053401S | KCNBCHD5328 | 304,2 | 210,3 | 14,5 |
| DN50X40 | 2" x 1" 1/2 | 150 | ST139104ABA0AEQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 15,9 |
| DN50X40 | 2" x 1" 1/2 | 300 | ST139204ABA0AEQNV000AFHA0 | SRN0060401S | KCNCCHD5317 | 338,5 | 225,0 | 18,2 |
| DN65X50 | 2" 1/2 x 2" | 150 | ST140104ABA0AEQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 264,5 | 25,3 |
| DN65X50 | 2" 1/2 x 2" | 300 | ST140204ABA0AEQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 268,1 | 29,4 |
| DN80X65 | 3" x 2" 1/2 | 150 | ST141104ABA0AEQNV000AFJA0 | SRN0120401S | KCNDDHD5387 | 409,6 | 284,1 | 33,4 |
| DN80X65 | 3" x 2" 1/2 | 300 | ST141204ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 291,0 | 43,6 |
| DN100X80 | 4" x 3" | 150 | ST142104ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5319 | 474,0 | 298,0 | 45,9 |
| DN100X80 | 4" x 3" | 300 | ST142204ABA0AEQNV000AFLA0 | SRN0240401S | KCNDEHD5331 | 520,5 | 341,0 | 64,2 |
| DN125X100 | 5" x 4" | 150 | ST143104ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 72,1 |
| DN125X100 | 5" x 4" | 300 | ST143204ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 104,7 |
| DN150X100 | 6" x 4" | 150 | ST174104ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 369,0 | 86,8 |
| DN150X100 | 6" x 4" | 300 | ST174204ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 389,0 | 117,2 |
| DN200X150 | 8" x 6" | 150 | ST145104ABA0AEQNV000AFQA0 | SRN0720401S | KCNGGHD5368 | 798,0 | 470,0 | 189,5 |
| DN200X150 | 8" x 6" | 300 | ST145204ABA0AEMNV000AFVA0 | SR1920E1608A | KCNGHHD5349 | 1001,0 | 568,5 | 257,9 |
| DN250X200 | 10" x 8" | 150 | ST146104ABA0AEQNV000AFSA0 | SR1440E16D8A | KCNGHHD5370 | 834,0 | 647,0 | 326,2 |

# THOR SPLIT BODY - ANSI 150-300 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*



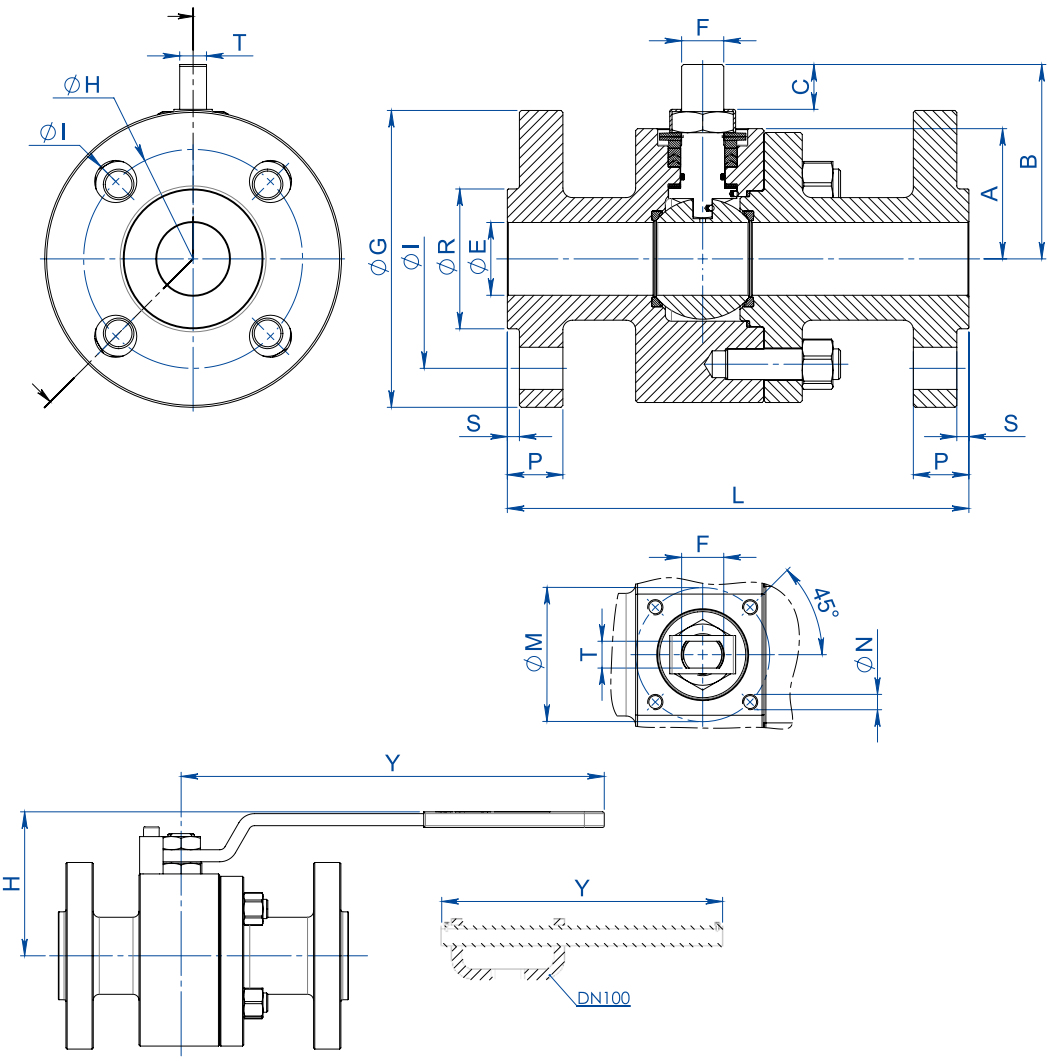



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN20X15 | 3/4" x 1/2" | 150 | ET135104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 7,1 |
| DN20X15 | 3/4" x 1/2" | 300 | ET135204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 229,0 | 8,3 |
| DN25X20 | 1" x 3/4" | 150 | ET136104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 8,1 |
| DN25X20 | 1" x 3/4" | 300 | ET136204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNACHD5324 | 250,0 | 232,0 | 9,4 |
| DN32X25 | 1" 1/4 x 1" | 150 | ET137104ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 9,3 |
| DN32X25 | 1" 1/4 x 1" | 300 | ET137204ABA0ADQNV000AMEG0 | EA0035A5C000 | KCNBCHD5327 | 250,0 | 239,0 | 11,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 150 | ET138104ABA0ADQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 12,1 |
| DN40X32 | 1" 1/2 x 1" 1/4 | 300 | ET138204ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNBCHD5327 | 250,0 | 244,0 | 15,2 |
| DN50X40 | 2" x 1" 1/2 | 150 | ET139104ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 16,3 |
| DN50X40 | 2" x 1" 1/2 | 300 | ET139204ABA0AEQNV000AMGG0 | EA0070A5C000 | KCNCCHD5316 | 250,0 | 255,0 | 18,6 |
| DN65X50 | 2" 1/2 x 2" | 150 | ET140104ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 26,3 |
| DN65X50 | 2" 1/2 x 2" | 300 | ET140204ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNCCHD5317 | 280,0 | 284,5 | 29,5 |
| DN80X65 | 3" x 2" 1/2 | 150 | ET141104ABA0AEQNV000AMIG0 | EA0130A5C000 | KCNDDHD5386 | 280,0 | 300,5 | 33,7 |
| DN80X65 | 3" x 2" 1/2 | 300 | ET141204ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 300,5 | 42,2 |
| DN100X80 | 4" x 3" | 150 | ET142104ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5319 | 280,0 | 307,5 | 44,5 |
| DN100X80 | 4" x 3" | 300 | ET142204ABA0AEQNV000AMKG0 | EA0240A5C000 | KCNDDHD5320 | 280,0 | 313,5 | 59,7 |
| DN125X100 | 5" x 4" | 150 | ET143104ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 64,1 |
| DN125X100 | 5" x 4" | 300 | ET143204ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 90,0 |
| DN150X100 | 6" x 4" | 150 | ET174104ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 78,8 |
| DN150X100 | 6" x 4" | 300 | ET174204ABA0AEQNV000AMNA0 | AE160040 | KCNEEHV5337 | 256,5 | 376,0 | 102,5 |
| DN200X150 | 8" x 6" | 150 | ET145104ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5372 | 381,0 | 488,0 | 178,7 |
| DN200X150 | 8" x 6" | 300 | ET145204ABA0AEMNV000AMXA0 | AE160200 | KCNGGHV5374 | 381,0 | 488,0 | 212,7 |
| DN250X200 | 10" x 8" | 150 | ET146104ABA0AEQNV000AMTA0 | AE160100 | KCNFGHV5375 | 381,0 | 522,0 | 272,7 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY PN 63-100 ANSI 600




## DIMENSIONI *DIMENSIONS* -PN-

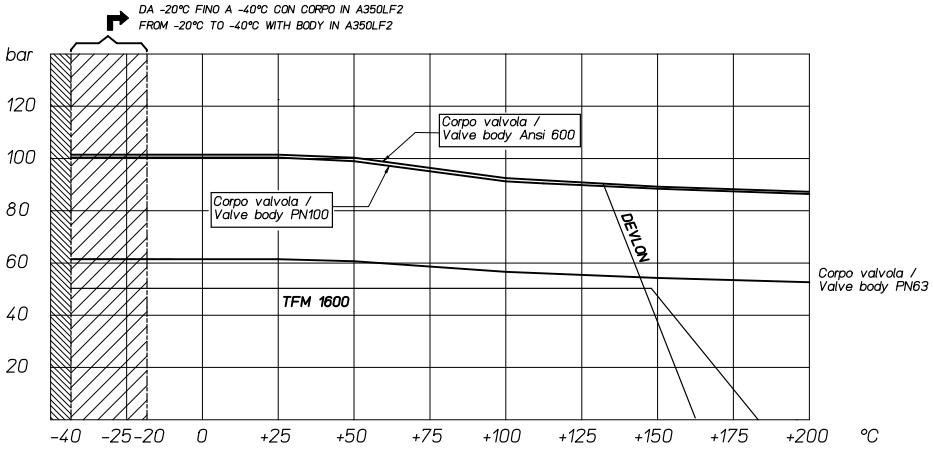
| MISURA *SIZE* DN [mm] | [inch] | PN | ØE | A | B | C | ATT. ISO | ØM | ØN | F/T | ØG | ØR | S | ØH | N° FORI *HOLES N°* | ØI | P | Kg | L | H | Y | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN15 | 1/2" | 63-100 | 13 | 40 | 54,5 | 9,6 | F04 | 42 | M5 | 12/8 | 105 | 45 | 2 | 75 | 4 | 14 | 20 | 6,3 | 165 | 80 | 150 | KLV58006 | KGBV472040 |
| DN20 | 3/4" | 63-100 | 19 | 45 | 57,5 | 9,6 | F04 | 42 | M5 | 12/8 | 130 | 58 | 2 | 90 | 4 | 18 | 22 | 7,9 | 190 | 83 | 150 | KLV58006 | KGBV472050 |
| DN25 | 1" | 63-100 | 25 | 50 | 71,5 | 14,6 | F05 | 50 | M6 | 16/10 | 140 | 68 | 2 | 100 | 4 | 18 | 24 | 11,0 | 216 | 95 | 275 | KLV58008 | KGBV472060 |
| DN32 | 1"1/4 | 63-100 | 32 | 55 | 76,5 | 14,6 | F05 | 50 | M6 | 16/10 | 155 | 78 | 2 | 110 | 4 | 22 | 24 | 13,7 | 229 | 100 | 275 | KLV58008 | KGBV472070 |
| DN40 | 1"1/2 | 63-100 | 38 | 68 | 98,5 | 20,4 | F07 | 70 | M8 | 22/14 | 170 | 88 | 3 | 125 | 4 | 22 | 26 | 20,4 | 241 | 120 | 350 | KLV58010 | KGBV472080 |
| DN50 | 2" | 63 | 51 | 74 | 107,5 | 20,4 | F07 | 70 | M8 | 22/14 | 180 | 102 | 3 | 135 | 4 | 22 | 26 | 25,1 | 292 | 129 | 350 | KLV58010 | KGBV472090 |
| DN50 | 2" | 100 | 51 | 74 | 107,5 | 20,4 | F07 | 70 | M8 | 22/14 | 195 | 102 | 3 | 145 | 4 | 26 | 28 | 27,3 | 292 | 129 | 350 | KLV58010 | KGBV472090 |
| DN65 | 2"1/2 | 63 | 64 | 94 | 144 | 25,1 | F10 | 102 | M10 | 30/18 | 205 | 122 | 3 | 160 | 8 | 22 | 26 | 44,0 | 330 | 180 | 450 | KLV58012 | KGBV472100 |
| DN65 | 2"1/2 | 100 | 64 | 94 | 144 | 25,1 | F10 | 102 | M10 | 30/18 | 220 | 122 | 3 | 170 | 8 | 26 | 30 | 47,0 | 330 | 180 | 450 | KLV58012 | KGBV472100 |
| DN80 | 3" | 63 | 76 | 101,5 | 151,5 | 25,1 | F10 | 102 | M10 | 30/18 | 215 | 138 | 3 | 170 | 8 | 22 | 28 | 51,9 | 356 | 188 | 450 | KLV58012 | KGBV472110 |
| DN80 | 3" | 100 | 76 | 101,5 | 151,5 | 25,1 | F10 | 102 | M10 | 30/18 | 230 | 138 | 3 | 180 | 8 | 26 | 32 | 55,3 | 356 | 188 | 450 | KLV58012 | KGBV472110 |
| DN100 | 4" | 63 | 102 | 126 | 196,5 | 40,5 | F14 | 140 | M16 | 45/30 | 250 | 162 | 3 | 200 | 8 | 26 | 30 | 102 | 432 | 233 | 800 | KLV58014 | KGBV472120 |
| DN100 | 4" | 100 | 102 | 126 | 196,5 | 40,5 | F14 | 140 | M16 | 45/30 | 265 | 162 | 3 | 210 | 8 | 30 | 36 | 106 | 432 | 233 | 800 | KLV58014 | KGBV472120 |

## DIMENSIONI *DIMENSIONS* -ANSI-

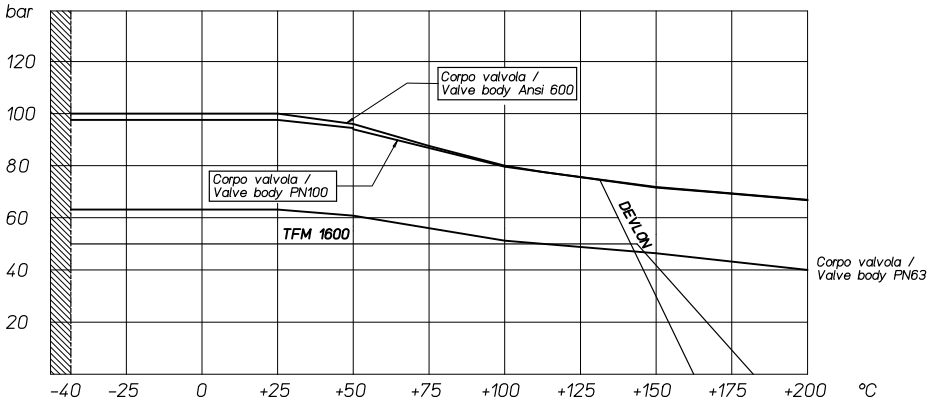
| MISURA *SIZE* DN [mm] | [inch] | ANSI | ØE | A | B | C | ATT. ISO | ØM | ØN | F/T | ØG | ØR | S | ØH | N° FORI *HOLES N°* | ØI | P | Kg | L | H | Y | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN15 | 1/2" | 600 | 13 | 40 | 54,5 | 9,6 | F04 | 42 | M5 | 12/8 | 95 | 34,9 | 6,3 | 66,7 | 4 | 16 | 21 | 5,5 | 165 | 80 | 150 | KLV58006 | KGBV472040 |
| DN20 | 3/4" | 600 | 19 | 45 | 57,5 | 9,6 | F04 | 42 | M5 | 12/8 | 115 | 42,9 | 6,3 | 82,6 | 4 | 19 | 22,5 | 6,5 | 190 | 83 | 150 | KLV58006 | KGBV472050 |
| DN25 | 1" | 600 | 25 | 50 | 71,5 | 14,6 | F05 | 50 | M6 | 16/10 | 125 | 50,8 | 6,3 | 88,9 | 4 | 19 | 24,3 | 9,3 | 216 | 95 | 275 | KLV58008 | KGBV472060 |
| DN32 | 1"1/4 | 600 | 32 | 55 | 76,5 | 14,6 | F05 | 50 | M6 | 16/10 | 135 | 63,5 | 6,3 | 98,4 | 4 | 19 | 27,3 | 12,1 | 229 | 100 | 275 | KLV58008 | KGBV472070 |
| DN40 | 1"1/2 | 600 | 38 | 68 | 98,5 | 20,4 | F07 | 70 | M8 | 22/14 | 155 | 73 | 6,3 | 114,3 | 4 | 22 | 29 | 18,9 | 241 | 120 | 350 | KLV58010 | KGBV472080 |
| DN50 | 2" | 600 | 51 | 74 | 107,5 | 20,4 | F07 | 70 | M8 | 22/14 | 165 | 92,1 | 6,3 | 127 | 8 | 19 | 32 | 23,9 | 292 | 129 | 350 | KLV58010 | KGBV472090 |
| DN65 | 2"1/2 | 600 | 64 | 94 | 144 | 25,1 | F10 | 102 | M10 | 30/18 | 190 | 104,8 | 6,3 | 149,2 | 8 | 22 | 36 | 44,3 | 330 | 180 | 450 | KLV58012 | KGBV472100 |
| DN80 | 3" | 600 | 76 | 101,5 | 151,5 | 25,1 | F10 | 102 | M10 | 30/18 | 210 | 127 | 6,3 | 168,3 | 8 | 22 | 39 | 54,0 | 356 | 188 | 450 | KLV58012 | KGBV472110 |
| DN100 | 4" | 600 | 102 | 126 | 196,5 | 40,5 | F14 | 140 | M16 | 45/30 | 275 | 157,2 | 6,3 | 215,9 | 8 | 25,5 | 45 | 113 | 432 | 233 | 800 | KLV58014 | KGBV472120 |

# THOR SPLIT BODY PN 63-100 ANSI 600

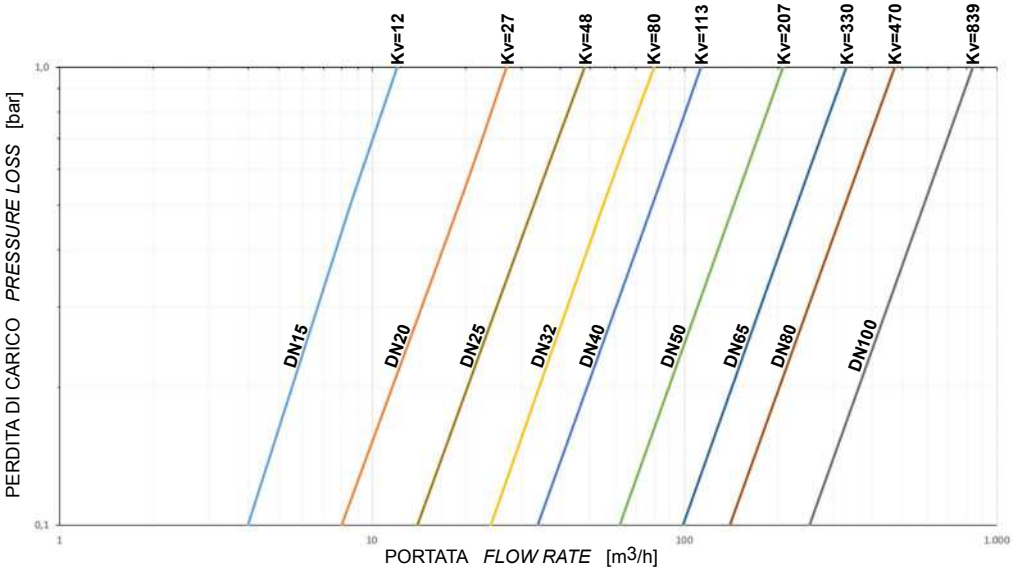
## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*




## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# THOR SPLIT BODY PN 63-100 ANSI 600
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD

- Sfera flottante, passaggio totale. Disponibili versioni a passaggio ridotto.
- Tenuta soft-seat DEVLON.
- Norme per flange d'attacco ASME B16.5; EN1092-1.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: ANSI 600 / PN63-100.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

## *STANDARD FEATURES*

- *Floating ball, full bore. Available reduce bore version.*
- *Soft-seat seal DEVLON.*
- *Standard for connecting flanges: ASME B16.5*; EN1092-1.
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: ANSI 600 / PN63-100.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-ring packing.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

## ESECUZIONI A RICHIESTA

- Esecuzione per temperatura -40 C° in LF2.
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*

- *LF2 carbon steel for low temperature execution (-40 C°).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-compensating hole in the ball*
- *Stainless steel lever.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating ,epoxy coating.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

## CERTIFICAZIONI

- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: EN ISO 10497 / API 607.
- API 6D: certificato n°6D-1007 solo per valvole con flangiatura ANSI.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*

- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: EN ISO 10497 / API 607.*
- *API 6D:certificato n°6D-1007 only for valves with ANSI flange.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

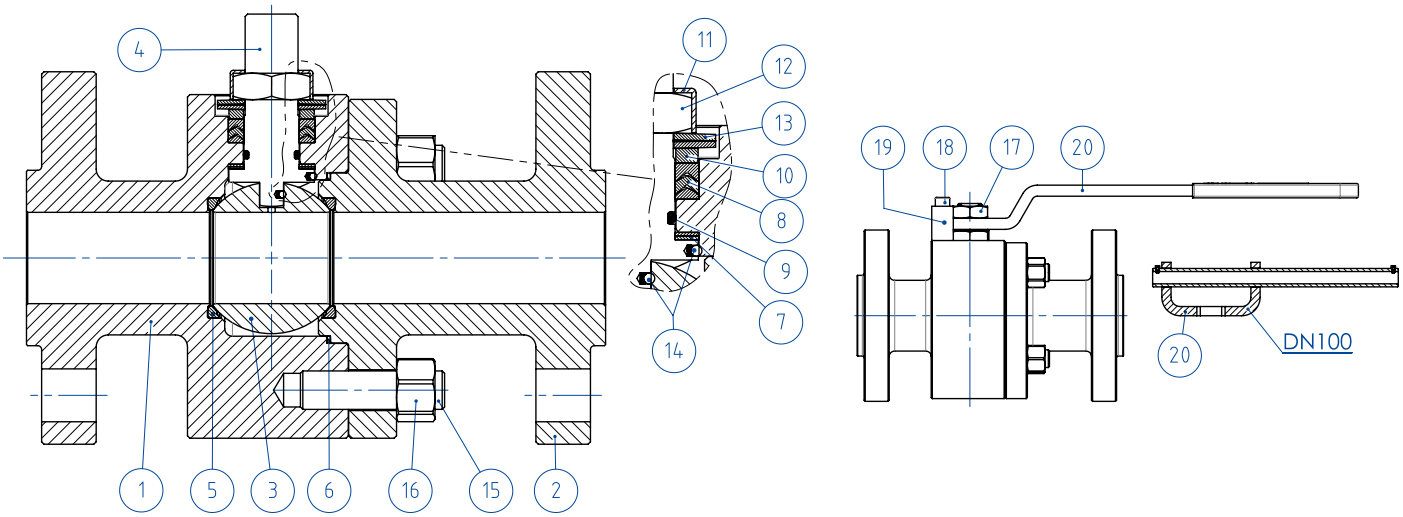
## NORME DI PROGETTAZIONE

- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- **API 6D.**
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*

- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- ***API 6D.***
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# THOR SPLIT BODY - PN 63-100 ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY PN63-100 ANSI 600 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8 (*)(**) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8 (*)(**) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON (.) | DEVLON (.) |
| 6* | Guarnizione corpo-terminale *Body-connector gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) • | TFM1600 (.) • |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B7 | ASTM A320-L7M |
| 16 | Dadi *Nut* | ASTM A194-Gr.2H | ASTM A194-Gr.7M |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 20 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) | Fe37 zincato - *Galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): Per ≤DN32 disponibile solo in CF8M *For ≤DN32 available only in CF8M*
(x): 304 s.s.
(xx): 301 s.s.
• : per ≤DN32 disponibile solo in DEVLON *for ≤DN32 available only in DEVLON*
(1): Per DN100 disponibile solo in 304 *DN100 available only in 304*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - PN 63-100 ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



CERTIFICATO API 6D SOLO PER VALVOLE ANSI
*API 6D CERTIFICATE ONLY FOR ANSI VALVES*

**CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -PN-**
***CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-***

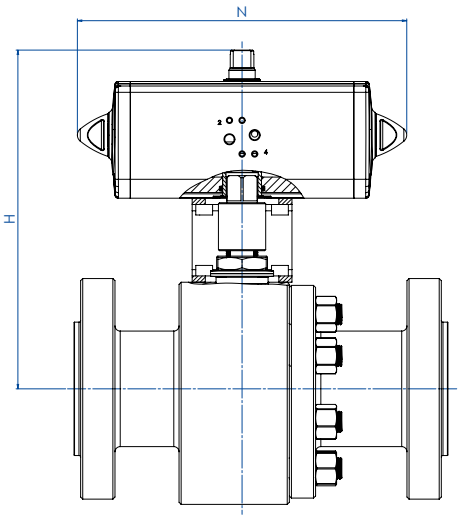
| MISURA *SIZE* DN [mm] | [inch] | PN | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | V/LT104N03CAA0AFMRV00B | V/LT104N03CBA0AHMRV00B |
| DN 20 | 3/4" | PN 63-100 | V/LT105N03CAA0AFMRV00B | V/LT105N03CBA0AHMRV00B |
| DN 25 | 1" | PN63-100 | V/LT106N03CAA0AGMRV00B | V/LT106N03CBA0AIMRV00B |
| DN 32 | 1" 1/4 | PN63-100 | V/LT107N03CAA0AGMRV00B | V/LT107N03CBA0AIMRV00B |
| DN 40 | 1" 1/2 | PN63-100 | V/LT108N03CAB0AGMNV00B | V/LT108N03CBB0AIMNV00B |
| DN 50 | 2" | PN63 | V/LT109K03CAB0AGMNV00B | V/LT109K03CBB0AIMNV00B |
| DN 50 | 2" | PN100 | V/LT109L03CAB0AGMNV00B | V/LT109L03CBB0AIMNV00B |
| DN 65 | 2" 1/2 | PN63 | V/LT110K03CAB0AGMNV00B | V/LT110K03CBB0AIMNV00B |
| DN 65 | 2" 1/2 | PN100 | V/LT110L03CAB0AGMNV00B | V/LT110L03CBB0AIMNV00B |
| DN 80 | 3" | PN63 | V/LT111K03CAB0AGMNV00B | V/LT111K03CBB0AIMNV00B |
| DN 80 | 3" | PN100 | V/LT111L03CAB0AGMNV00B | V/LT111L03CBB0AIMNV00B |
| DN 100 | 4" | PN63 | V/LT112K03CAB0AGMNV00B | V/LT112K03CBB0AIMNV00B |
| DN 100 | 4" | PN100 | V/LT112L03CAB0AGMNV00B | V/LT112L03CBB0AIMNV00B |

**CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO -ANSI-**
***CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-***

| MISURA *SIZE* DN [mm] | [inch] | ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | V/LT104404CAA0AFMRV00B | V/LT104404CBA0AHMRV00B |
| DN 20 | 3/4" | ANSI 600 | V/LT105404CAA0AFMRV00B | V/LT105404CBA0AHMRV00B |
| DN 25 | 1" | ANSI 600 | V/LT106404CAA0AGMRV00B | V/LT106404CBA0AIMRV00B |
| DN 32 | 1" 1/4 | ANSI 600 | V/LT107404CAA0AGMRV00B | V/LT107404CBA0AIMRV00B |
| DN 40 | 1" 1/2 | ANSI 600 | V/LT108404CAB0AGMNV00B | V/LT108404CBB0AIMNV00B |
| DN 50 | 2" | ANSI 600 | V/LT109404CAB0AGMNV00B | V/LT109404CBB0AIMNV00B |
| DN 65 | 2" 1/2 | ANSI 600 | V/LT110404CAB0AGMNV00B | V/LT110404CBB0AIMNV00B |
| DN 80 | 3" | ANSI 600 | V/LT111404CAB0AGMNV00B | V/LT111404CBB0AIMNV00B |
| DN 100 | 4" | ANSI 600 | V/LT112404CAB0AGMNV00B | V/LT112404CBB0AIMNV00B |

# THOR SPLIT BODY - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

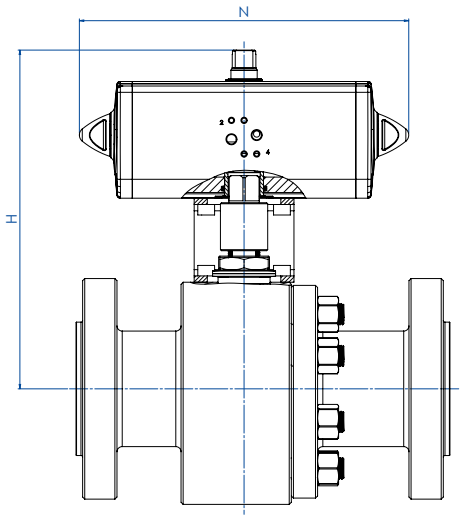
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | DT104N03CAA0AFMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,0 |
| DN 20 | 3/4" | PN 63-100 | DT105N03CAA0AFMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,8 |
| DN 25 | 1" | PN 63-100 | DT106N03CAA0AGMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,4 |
| DN 32 | 1" 1/4 | PN 63-100 | DT107N03CAA0AGMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,0 |
| DN 40 | 1" 1/2 | PN 63-100 | DT108N03CAB0AGMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 24,0 |
| DN 50 | 2" | PN 63 | DT109K03CAB0AGMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 30,9 |
| DN 50 | 2" | PN 100 | DT109L03CAB0AGMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 33,1 |
| DN 65 | 2" 1/2 | PN 63 | DT110K03CAB0AGMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 51,3 |
| DN 65 | 2" 1/2 | PN 100 | DT110L03CAB0AGMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 54,3 |
| DN 80 | 3" | PN 63 | DT111K03CAB0AGMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 60,3 |
| DN 80 | 3" | PN 100 | DT111L03CAB0AGMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 63,3 |
| DN 100 | 4" | PN 63 | DT112K03CAB0AGMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 118,9 |
| DN 100 | 4" | PN 100 | DT112L03CAB0AGMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 122,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | DT104N03CBA0AHMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,0 |
| DN 20 | 3/4" | PN 63-100 | DT105N03CBA0AHMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,8 |
| DN 25 | 1" | PN 63-100 | DT106N03CBA0AIMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,4 |
| DN 32 | 1" 1/4 | PN 63-100 | DT107N03CBA0AIMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,0 |
| DN 40 | 1" 1/2 | PN 63-100 | DT108N03CBB0AIMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 24,0 |
| DN 50 | 2" | PN 63 | DT109K03CBB0AIMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 30,9 |
| DN 50 | 2" | PN 100 | DT109L03CBB0AIMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 33,1 |
| DN 65 | 2" 1/2 | PN 63 | DT110K03CBB0AIMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 51,3 |
| DN 65 | 2" 1/2 | PN 100 | DT110L03CBB0AIMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 54,3 |
| DN 80 | 3" | PN 63 | DT111K03CBB0AIMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 60,3 |
| DN 80 | 3" | PN 100 | DT111L03CBB0AIMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 63,3 |
| DN 100 | 4" | PN 63 | DT112K03CBB0AIMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 118,9 |
| DN 100 | 4" | PN 100 | DT112L03CBB0AIMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 122,9 |

# THOR SPLIT BODY - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

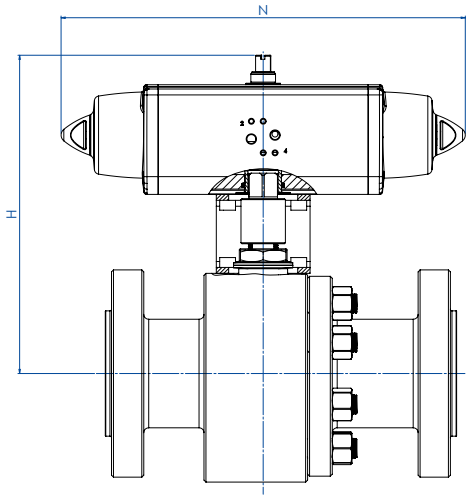
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | DT104404CAA0AFMRV00BAFCA0 | DAN00304115 | KCNBCHD5340 | 174,2 | 179,2 | 7,2 |
| DN 20 | 3/4" | ANSI 600 | DT105404CAA0AFMRV00BAFDA0 | DAN00454125 | KCNBCHD5341 | 188,5 | 189,5 | 8,4 |
| DN 25 | 1" | ANSI 600 | DT106404CAA0AGMRV00BAFEA0 | DAN00604125 | KCNCCHD5342 | 198,0 | 200,4 | 11,7 |
| DN 32 | 1" 1/4 | ANSI 600 | DT107404CAA0AGMRV00BAFGA0 | DAN01064115 | KCNCCHD5343 | 237,0 | 218,3 | 15,4 |
| DN 40 | 1" 1/2 | ANSI 600 | DT108404CAB0AGMNV00BAFHA0 | DAN01204115 | KCNDDHD5344 | 244,1 | 235,0 | 22,5 |
| DN 50 | 2" | ANSI 600 | DT109404CAB0AGMNV00BAFIA0 | DAN01804115 | KCNDDHD5393 | 289,9 | 271,5 | 29,7 |
| DN 65 | 2" 1/2 | ANSI 600 | DT110404CAB0AGMNV00BAFJA0 | DAN02404115 | KCNEEHD5346 | 313,6 | 315,1 | 51,6 |
| DN 80 | 3" | ANSI 600 | DT111404CAB0AGMNV00BAFKA0 | DAN03604115 | KCNEEHD5346 | 339,3 | 329,5 | 62,4 |
| DN 100 | 4" | ANSI 600 | DT112404CAB0AGMNV00BAFMA0 | DAN07204115 | KCNFGHD5365 | 433,1 | 404,0 | 129,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | DT104404CBA0AHMRV00BAFCA0 | DAN00304115 | KCNBCHD5340 | 174,2 | 179,2 | 7,2 |
| DN 20 | 3/4" | ANSI 600 | DT105404CBA0AHMRV00BAFDA0 | DAN00454125 | KCNBCHD5341 | 188,5 | 189,5 | 8,4 |
| DN 25 | 1" | ANSI 600 | DT106404CBA0AIMRV00BAFEA0 | DAN00604125 | KCNCCHD5342 | 198,0 | 200,4 | 11,7 |
| DN 32 | 1" 1/4 | ANSI 600 | DT107404CBA0AIMRV00BAFGA0 | DAN01064115 | KCNCCHD5343 | 237,0 | 218,3 | 15,4 |
| DN 40 | 1" 1/2 | ANSI 600 | DT108404CBB0AIMNV00BAFHA0 | DAN01204115 | KCNDDHD5344 | 244,1 | 235,0 | 22,5 |
| DN 50 | 2" | ANSI 600 | DT109404CBB0AIMNV00BAFIA0 | DAN01804115 | KCNDDHD5393 | 289,9 | 271,5 | 29,7 |
| DN 65 | 2" 1/2 | ANSI 600 | DT110404CBB0AIMNV00BAFJA0 | DAN02404115 | KCNEEHD5346 | 313,6 | 315,1 | 51,6 |
| DN 80 | 3" | ANSI 600 | DT111404CBB0AIMNV00BAFKA0 | DAN03604115 | KCNEEHD5346 | 339,3 | 329,5 | 62,4 |
| DN 100 | 4" | ANSI 600 | DT112404CBB0AIMNV00BAFMA0 | DAN07204115 | KCNFGHD5365 | 433,1 | 404,0 | 129,9 |

# THOR SPLIT BODY - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

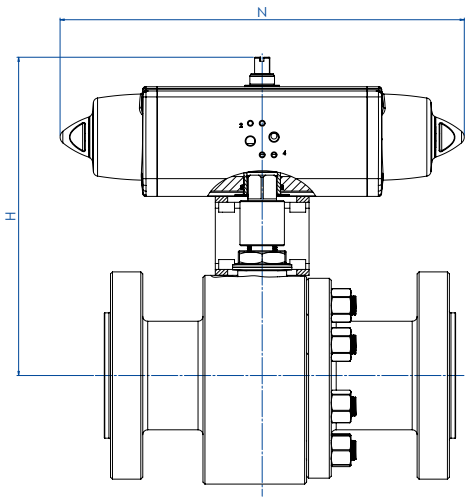
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | ST104N03CAA0AFMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,0 |
| DN 20 | 3/4" | PN 63-100 | ST105N03CAA0AFMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,7 |
| DN 25 | 1" | PN 63-100 | ST106N03CAA0AGMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,2 |
| DN 32 | 1" 1/4 | PN 63-100 | ST107N03CAA0AGMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 20,8 |
| DN 40 | 1" 1/2 | PN 63-100 | ST108N03CAB0AGMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 28,4 |
| DN 50 | 2" | PN 63 | ST109K03CAB0AGMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 35,2 |
| DN 50 | 2" | PN 100 | ST109L03CAB0AGMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 37,4 |
| DN 65 | 2" 1/2 | PN 63 | ST110K03CAB0AGMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 57,7 |
| DN 65 | 2" 1/2 | PN 100 | ST110L03CAB0AGMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 60,7 |
| DN 80 | 3" | PN 63 | ST111K03CAB0AGMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 70,3 |
| DN 80 | 3" | PN 100 | ST111L03CAB0AGMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 73,7 |
| DN 100 | 4" | PN 63 | ST112K03CAB0AGMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 140,7 |
| DN 100 | 4" | PN 100 | ST112L03CAB0AGMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 144,7 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | ST104N03CBA0AHMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,0 |
| DN 20 | 3/4" | PN 63-100 | ST105N03CBA0AHMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,7 |
| DN 25 | 1" | PN 63-100 | ST106N03CBA0AIMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,2 |
| DN 32 | 1" 1/4 | PN 63-100 | ST107N03CBA0AIMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 20,8 |
| DN 40 | 1" 1/2 | PN 63-100 | ST108N03CBB0AIMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 28,4 |
| DN 50 | 2" | PN 63 | ST109K03CBB0AIMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 35,2 |
| DN 50 | 2" | PN 100 | ST109L03CBB0AIMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 37,4 |
| DN 65 | 2" 1/2 | PN 63 | ST110K03CBB0AIMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 57,7 |
| DN 65 | 2" 1/2 | PN 100 | ST110L03CBB0AIMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 60,7 |
| DN 80 | 3" | PN 63 | ST111K03CBB0AIMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 70,3 |
| DN 80 | 3" | PN 100 | ST111L03CBB0AIMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 73,7 |
| DN 100 | 4" | PN 63 | ST112K03CBB0AIMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 140,7 |
| DN 100 | 4" | PN 100 | ST112L03CBB0AIMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 144,7 |

# THOR SPLIT BODY - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

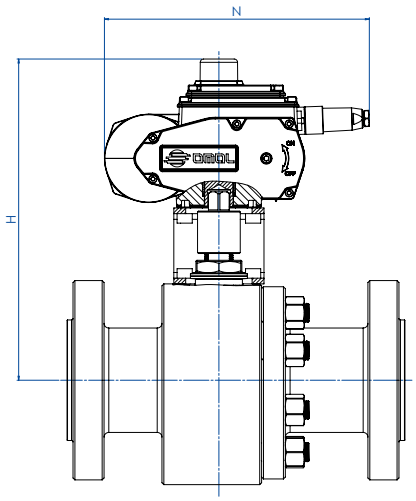
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | ST104404CAA0AFMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 8,2 |
| DN 20 | 3/4" | ANSI 600 | ST105404CAA0AFMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,3 |
| DN 25 | 1" | ANSI 600 | ST106404CAA0AGMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 13,5 |
| DN 32 | 1" 1/4 | ANSI 600 | ST107404CAA0AGMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 19,2 |
| DN 40 | 1" 1/2 | ANSI 600 | ST108404CAB0AGMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 26,9 |
| DN 50 | 2" | ANSI 600 | ST109404CAB0AGMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 34,0 |
| DN 65 | 2" 1/2 | ANSI 600 | ST110404CAB0AGMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 58,0 |
| DN 80 | 3" | ANSI 600 | ST111404CAB0AGMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 72,4 |
| DN 100 | 4" | ANSI 600 | ST112404CAB0AGMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 151,7 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | ST104404CBA0AHMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 8,2 |
| DN 20 | 3/4" | ANSI 600 | ST105404CBA0AHMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,3 |
| DN 25 | 1" | ANSI 600 | ST106404CBA0AIMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 13,5 |
| DN 32 | 1" 1/4 | ANSI 600 | ST107404CBA0AIMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 19,2 |
| DN 40 | 1" 1/2 | ANSI 600 | ST108404CBB0AIMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 26,9 |
| DN 50 | 2" | ANSI 600 | ST109404CBB0AIMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 34,0 |
| DN 65 | 2" 1/2 | ANSI 600 | ST110404CBB0AIMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 58,0 |
| DN 80 | 3" | ANSI 600 | ST111404CBB0AIMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 72,4 |
| DN 100 | 4" | ANSI 600 | ST112404CBB0AIMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 151,7 |

# THOR SPLIT BODY - PN 63-100
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2″ | PN 63-100 | ET104N03CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 10,6 |
| DN 20 | 3/4″ | PN 63-100 | ET105N03CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,3 |
| DN 25 | 1″ | PN 63-100 | ET106N03CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,6 |
| DN 32 | 1″ 1/4 | PN 63-100 | ET107N03CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,3 |
| DN 40 | 1″ 1/2 | PN 63-100 | ET108N03CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 28,6 |
| DN 50 | 2″ | PN 63 | ET109K03CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 33,3 |
| DN 50 | 2″ | PN 100 | ET109L03CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 35,5 |
| DN 65 | 2″ 1/2 | PN 63 | ET110K03CAB0AGMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,4 |
| DN 65 | 2″ 1/2 | PN 100 | ET110L03CAB0AGMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 56,4 |
| DN 80 | 3″ | PN 63 | ET111K03CAB0AGMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 63,0 |
| DN 80 | 3″ | PN 100 | ET111L03CAB0AGMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 66,4 |
| DN 100 | 4″ | PN 63 | ET112K03CAB0AGMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 129,3 |
| DN 100 | 4″ | PN 100 | ET112L03CAB0AGMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 133,3 |

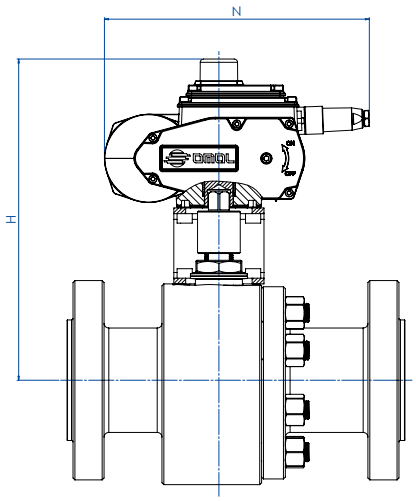
### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2″ | PN 63-100 | ET104N03CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 10,6 |
| DN 20 | 3/4″ | PN 63-100 | ET105N03CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,3 |
| DN 25 | 1″ | PN 63-100 | ET106N03CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,6 |
| DN 32 | 1″ 1/4 | PN 63-100 | ET107N03CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,3 |
| DN 40 | 1″ 1/2 | PN 63-100 | ET108N03CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 28,6 |
| DN 50 | 2″ | PN 63 | ET109K03CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 33,3 |
| DN 50 | 2″ | PN 100 | ET109L03CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 35,5 |
| DN 65 | 2″ 1/2 | PN 63 | ET110K03CBB0AIMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,4 |
| DN 65 | 2″ 1/2 | PN 100 | ET110L03CBB0AIMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 56,4 |
| DN 80 | 3″ | PN 63 | ET111K03CBB0AIMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 63,0 |
| DN 80 | 3″ | PN 100 | ET111L03CBB0AIMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 66,4 |
| DN 100 | 4″ | PN 63 | ET112K03CBB0AIMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 129,3 |
| DN 100 | 4″ | PN 100 | ET112L03CBB0AIMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 133,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY - ANSI 600
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

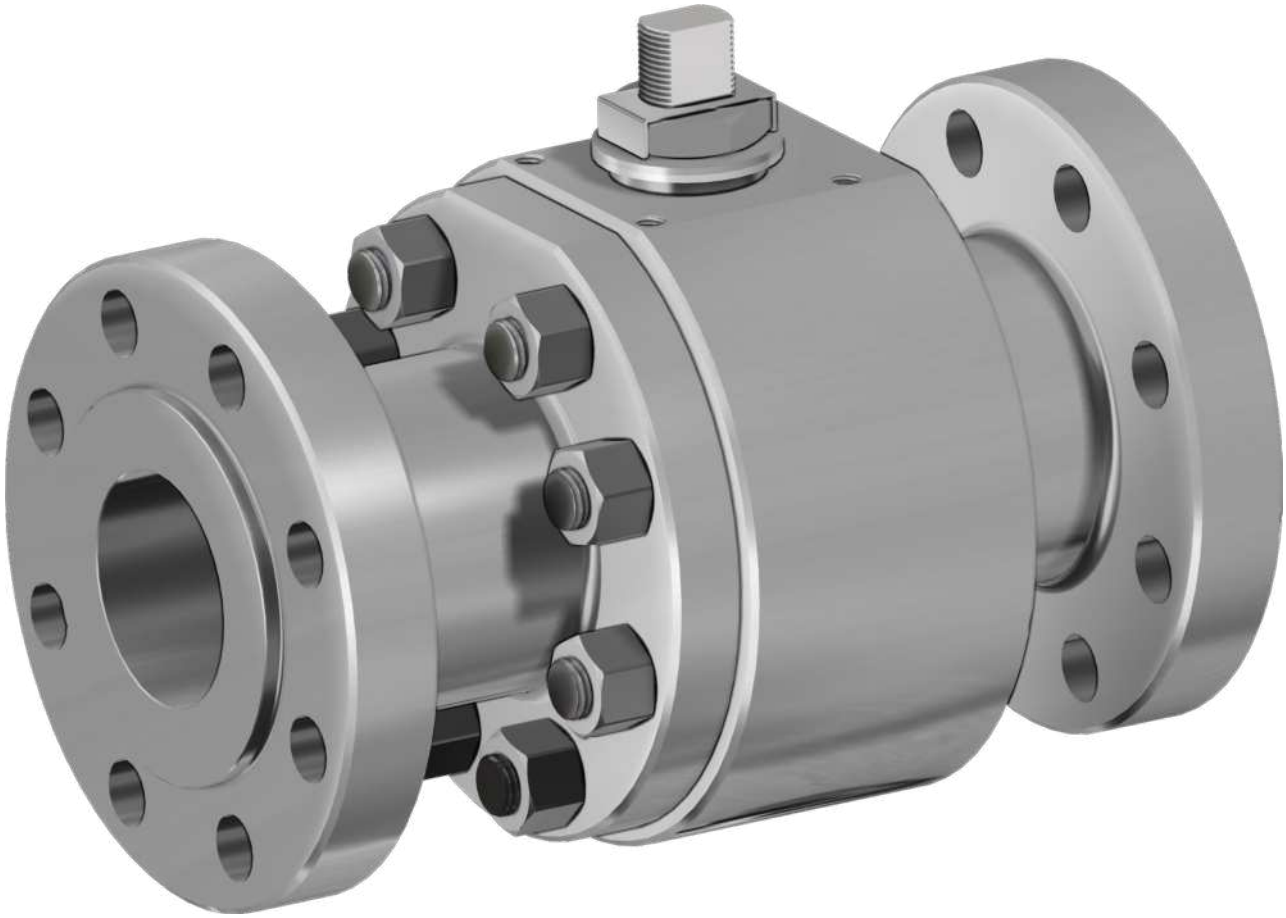
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | ET104404CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 9,8 |
| DN 20 | 3/4" | ANSI 600 | ET105404CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 10,9 |
| DN 25 | 1" | ANSI 600 | ET106404CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 13,9 |
| DN 32 | 1" 1/4 | ANSI 600 | ET107404CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 16,7 |
| DN 40 | 1" 1/2 | ANSI 600 | ET108404CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 27,1 |
| DN 50 | 2" | ANSI 600 | ET109404CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 32,1 |
| DN 65 | 2" 1/2 | ANSI 600 | ET110404CAB0AGMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,7 |
| DN 80 | 3" | ANSI 600 | ET111404CAB0AGMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 65,1 |
| DN 100 | 4" | ANSI 600 | ET112404CAB0AGMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 140,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | ET104404CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 9,8 |
| DN 20 | 3/4" | ANSI 600 | ET105404CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 10,9 |
| DN 25 | 1" | ANSI 600 | ET106404CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 13,9 |
| DN 32 | 1" 1/4 | ANSI 600 | ET107404CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 16,7 |
| DN 40 | 1" 1/2 | ANSI 600 | ET108404CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 27,1 |
| DN 50 | 2" | ANSI 600 | ET109404CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 32,1 |
| DN 65 | 2" 1/2 | ANSI 600 | ET110404CBB0AIMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,7 |
| DN 80 | 3" | ANSI 600 | ET111404CBB0AIMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 65,1 |
| DN 100 | 4" | ANSI 600 | ET112404CBB0AIMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 140,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY PN 63-100 ANSI 600
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD

- Sfera flottante, passaggio totale. Disponibili versioni a passaggio ridotto.
- Tenuta soft-seat: DEVLON.
- Norme per flange d'attacco: ASME B16.5; EN 1092-1.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: ANSI 600 / PN 63-100.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

## *STANDARD FEATURES*

- *Floating ball, full bore. Available reduce bore version.*
- *Soft-seat seal: DEVLON.*
- *Standard for connecting flanges: ASME B16.5;* EN 1092-1.
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: ANSI 600 / PN 63-100.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-ring packing.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

## ESECUZIONI A RICHIESTA

- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in:PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcature e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*

- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass* (RPTFE-GF), *PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever.*
- *Stainless steel Stem nuts and springs.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

## CERTIFICAZIONI

- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- API 6D: certificato n°6D-1007 solo per valvole con flangiatura ANSI.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*

- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- *API 6D: certificate no 6D-1007 only for valves with ANSI flange.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

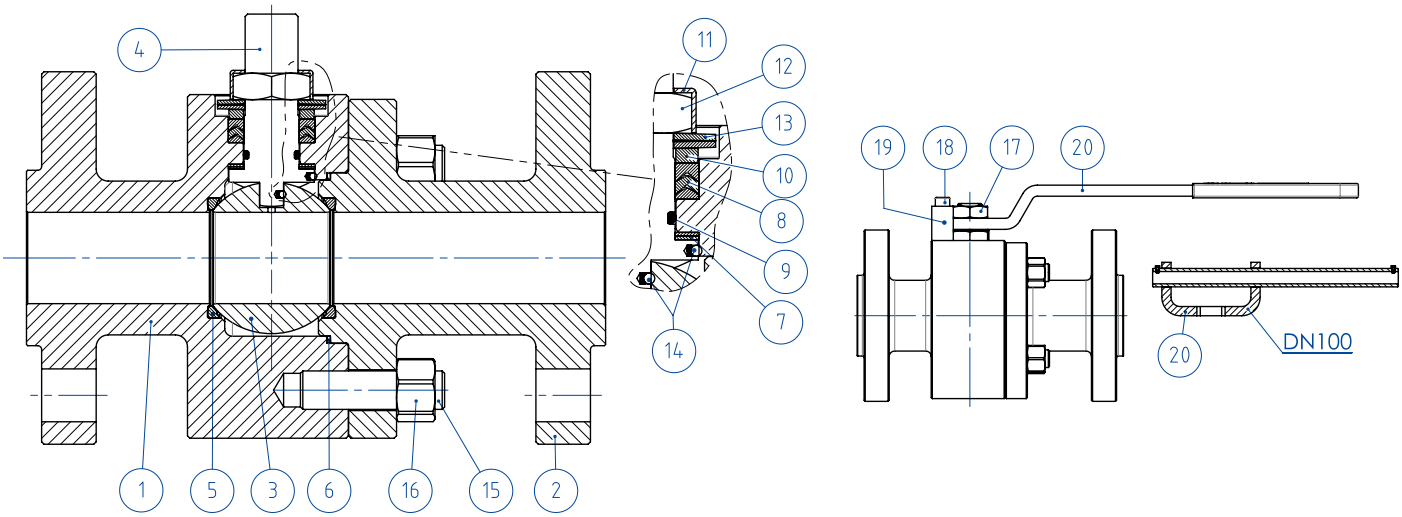
## NORME DI PROGETTAZIONE

- Spessori corpo in accordo a: ASME B16.34,ASME VIII div.1,EN 12516.
- **API 6D.**
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*

- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- ***API 6D.***
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves.*

# THOR SPLIT BODY - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY PN63-100 ANSI 600 DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) ● |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (xx) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 16 | Dadi *Nut* | ASTM A194-Gr.8 |
| 17 | Controdado *Lock nut* | *UNI 3740-1 6S* Zincato-*Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato (x) *Carbon steel galvanized (x)* |
| 20 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
● : per ≤DN32 disponibile solo in DEVLON *for ≤DN32 available only in DEVLON*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

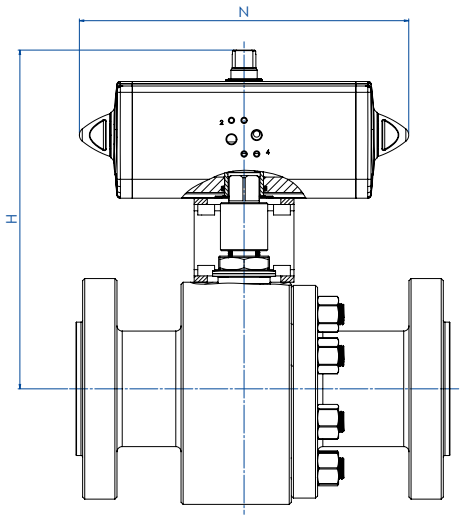


| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -PN-<br>*STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-* | | | |
|---|---|---|---|
| **MISURA** *SIZE* | | **PN** | **316 *Stainless steel*** |
| **DN [mm]** | **[inch]** | | |
| DN 15 | 1/2" | PN 63-100 | V/LT104N03ABA0ADMRV000 |
| DN 20 | 3/4" | PN 63-100 | V/LT105N03ABA0ADMRV000 |
| DN 25 | 1" | PN 63-100 | V/LT106N03ABA0AEMRV000 |
| DN 32 | 1" 1/4 | PN 63-100 | V/LT107N03ABA0AEMRV000 |
| DN 40 | 1" 1/2 | PN 63-100 | V/LT108N03ABA0AEMNV000 |
| DN 50 | 2" | PN63 | V/LT109K03ABA0AEMNV000 |
| DN 50 | 2" | PN100 | V/LT109L03ABA0AEMNV000 |
| DN 65 | 2" 1/2 | PN63 | V/LT110K03ABA0AEMNV000 |
| DN 65 | 2" 1/2 | PN100 | V/LT110L03ABA0AEMNV000 |
| DN 80 | 3" | PN63 | V/LT111K03ABA0AEMNV000 |
| DN 80 | 3" | PN100 | V/LT111L03ABA0AEMNV000 |
| DN 100 | 4" | PN63 | V/LT112K03ABA0AEMNV000 |
| DN 100 | 4" | PN100 | V/LT112L03ABA0AEMNV000 |

| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX -ANSI-<br>*STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-* | | | |
|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **316 *Stainless steel*** |
| **DN [mm]** | **[inch]** | | |
| DN 15 | 1/2" | ANSI 600 | V/LT104404ABA0ADMRV000 |
| DN 20 | 3/4" | ANSI 600 | V/LT105404ABA0ADMRV000 |
| DN 25 | 1" | ANSI 600 | V/LT106404ABA0AEMRV000 |
| DN 32 | 1" 1/4 | ANSI 600 | V/LT107404ABA0AEMRV000 |
| DN 40 | 1" 1/2 | ANSI 600 | V/LT108404ABA0AEMNV000 |
| DN 50 | 2" | ANSI 600 | V/LT109404ABA0AEMNV000 |
| DN 65 | 2" 1/2 | ANSI 600 | V/LT110404ABA0AEMNV000 |
| DN 80 | 3" | ANSI 600 | V/LT111404ABA0AEMNV000 |
| DN 100 | 4" | ANSI 600 | V/LT112404ABA0AEMNV000 |

# THOR SPLIT BODY - PN 63-100 ANSI 600
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

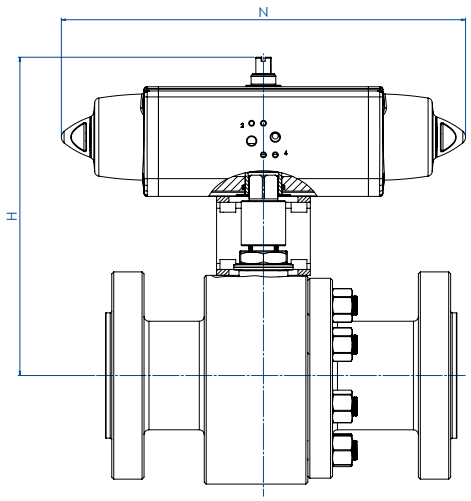
| MISURA *SIZE* | | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | PN 63-100 | DT104N03ABA0ADMRV000AFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,0 |
| DN 20 | 3/4" | PN 63-100 | DT105N03ABA0ADMRV000AFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,8 |
| DN 25 | 1" | PN 63-100 | DT106N03ABA0AEMRV000AFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,4 |
| DN 32 | 1" 1/4 | PN 63-100 | DT107N03ABA0AEMRV000AFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,0 |
| DN 40 | 1" 1/2 | PN 63-100 | DT108N03ABA0AEMNV000AFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 24,0 |
| DN 50 | 2" | PN 63 | DT109K03ABA0AEMNV000AFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 30,9 |
| DN 50 | 2" | PN 100 | DT109L03ABA0AEMNV000AFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 33,1 |
| DN 65 | 2" 1/2 | PN 63 | DT110K03ABA0AEMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 51,3 |
| DN 65 | 2" 1/2 | PN 100 | DT110L03ABA0AEMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 54,3 |
| DN 80 | 3" | PN 63 | DT111K03ABA0AEMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 60,3 |
| DN 80 | 3" | PN 100 | DT111L03ABA0AEMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 63,3 |
| DN 100 | 4" | PN 63 | DT112K03ABA0AEMNV000AFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 118,9 |
| DN 100 | 4" | PN 100 | DT112L03ABA0AEMNV000AFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 122,9 |

## CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 600 | DT104404ABA0ADMRV000AFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 7,2 |
| DN 20 | 3/4" | ANSI 600 | DT105404ABA0ADMRV000AFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 8,4 |
| DN 25 | 1" | ANSI 600 | DT106404ABA0AEMRV000AFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 11,7 |
| DN 32 | 1" 1/4 | ANSI 600 | DT107404ABA0AEMRV000AFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 15,4 |
| DN 40 | 1" 1/2 | ANSI 600 | DT108404ABA0AEMNV000AFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 22,5 |
| DN 50 | 2" | ANSI 600 | DT109404ABA0AEMNV000AFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 29,7 |
| DN 65 | 2" 1/2 | ANSI 600 | DT110404ABA0AEMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,1 | 51,6 |
| DN 80 | 3" | ANSI 600 | DT111404ABA0AEMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 329,5 | 62,4 |
| DN 100 | 4" | ANSI 600 | DT112404ABA0AEMNV000AFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 129,9 |

# THOR SPLIT BODY - PN 63-100 ANSI 600
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

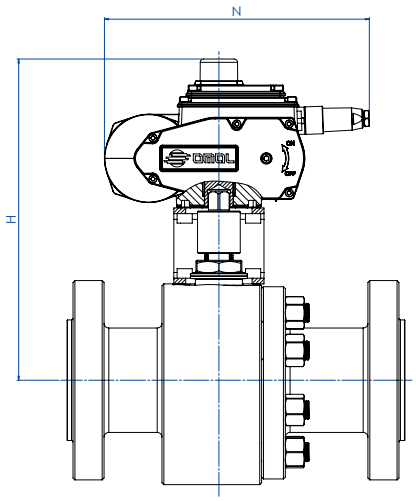
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | ST104N03ABA0ADMRV000AFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,0 |
| DN 20 | 3/4" | PN 63-100 | ST105N03ABA0ADMRV000AFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,7 |
| DN 25 | 1" | PN 63-100 | ST106N03ABA0AEMRV000AFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,2 |
| DN 32 | 1" 1/4 | PN 63-100 | ST107N03ABA0AEMRV000AFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 20,8 |
| DN 40 | 1" 1/2 | PN 63-100 | ST108N03ABA0AEMNV000AFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 28,4 |
| DN 50 | 2" | PN 63 | ST109K03ABA0AEMNV000AFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 35,2 |
| DN 50 | 2" | PN 100 | ST109L03ABA0AEMNV000AFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 37,4 |
| DN 65 | 2" 1/2 | PN 63 | ST110K03ABA0AEMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 57,7 |
| DN 65 | 2" 1/2 | PN 100 | ST110L03ABA0AEMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 60,7 |
| DN 80 | 3" | PN 63 | ST111K03ABA0AEMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 70,3 |
| DN 80 | 3" | PN 100 | ST111L03ABA0AEMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 346,5 | 73,7 |
| DN 100 | 4" | PN 63 | ST112K03ABA0AEMNV000AFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 140,7 |
| DN 100 | 4" | PN 100 | ST112L03ABA0AEMNV000AFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 144,7 |

## CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | ST104404ABA0ADMRV000AFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 8,2 |
| DN 20 | 3/4" | ANSI 600 | ST105404ABA0ADMRV000AFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 10,3 |
| DN 25 | 1" | ANSI 600 | ST106404ABA0AEMRV000AFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 13,5 |
| DN 32 | 1" 1/4 | ANSI 600 | ST107404ABA0AEMRV000AFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 19,2 |
| DN 40 | 1" 1/2 | ANSI 600 | ST108404ABA0AEMNV000AFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,1 | 26,9 |
| DN 50 | 2" | ANSI 600 | ST109404ABA0AEMNV000AFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 34,0 |
| DN 65 | 2" 1/2 | ANSI 600 | ST110404ABA0AEMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 58,0 |
| DN 80 | 3" | ANSI 600 | ST111404ABA0AEMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 72,4 |
| DN 100 | 4" | ANSI 600 | ST112404ABA0AEMNV000AFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 151,7 |

# THOR SPLIT BODY - PN 63-100 ANSI 600
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINLESS STEEL -PN-*

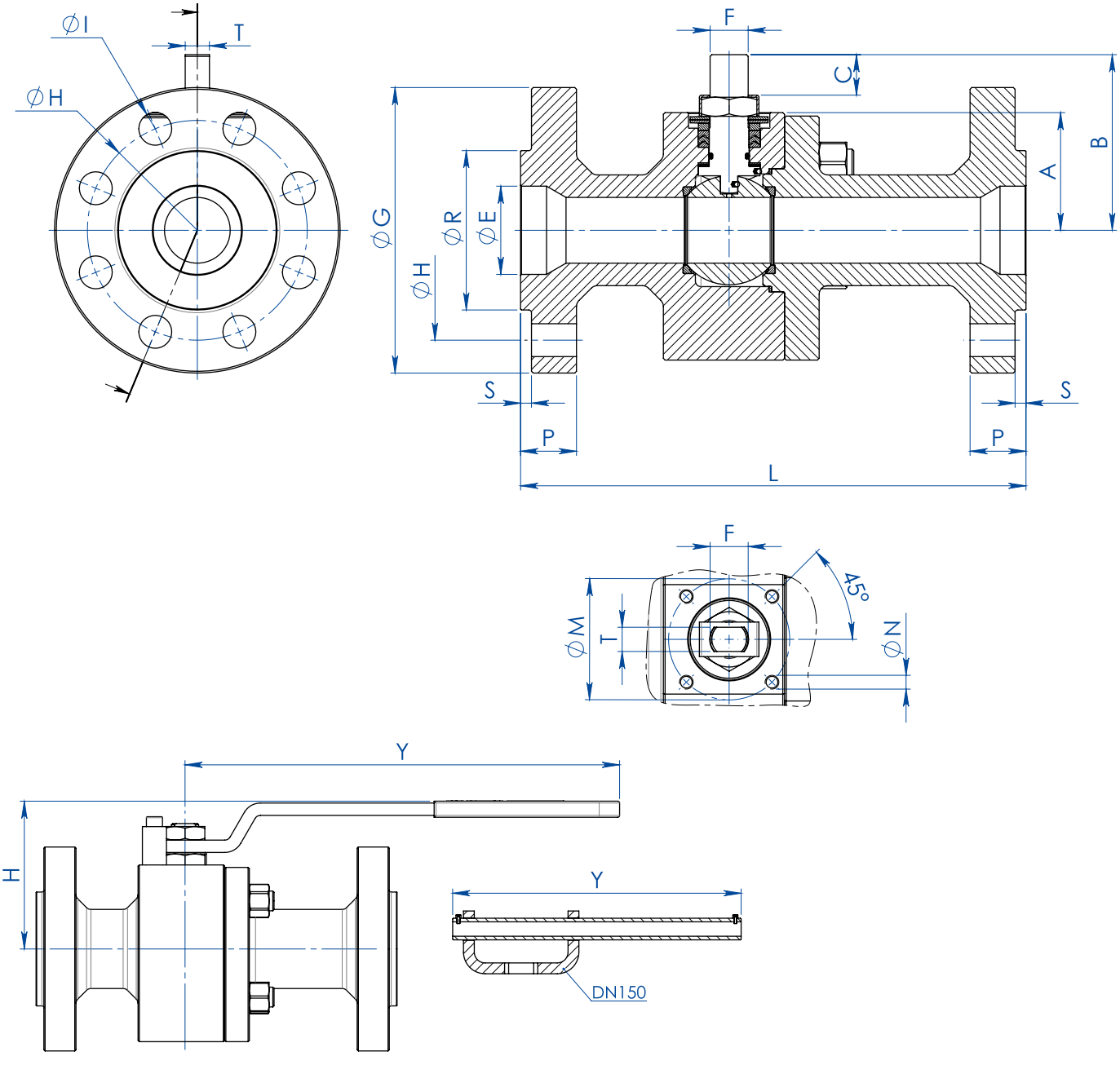
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN 63-100 | ET104N03ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 10,6 |
| DN 20 | 3/4" | PN 63-100 | ET105N03ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,3 |
| DN 25 | 1" | PN 63-100 | ET106N03ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,6 |
| DN 32 | 1" 1/4 | PN 63-100 | ET107N03ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,3 |
| DN 40 | 1" 1/2 | PN 63-100 | ET108N03ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 28,6 |
| DN 50 | 2" | PN 63 | ET109K03ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 33,3 |
| DN 50 | 2" | PN 100 | ET109L03ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 35,5 |
| DN 65 | 2" 1/2 | PN 63 | ET110K03ABA0AEMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,4 |
| DN 65 | 2" 1/2 | PN 100 | ET110L03ABA0AEMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 56,4 |
| DN 80 | 3" | PN 63 | ET111K03ABA0AEMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 63,0 |
| DN 80 | 3" | PN 100 | ET111L03ABA0AEMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 66,4 |
| DN 100 | 4" | PN 63 | ET112K03ABA0AEMNV000AMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 129,3 |
| DN 100 | 4" | PN 100 | ET112L03ABA0AEMNV000AMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 133,3 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 600 | ET104404ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 9,8 |
| DN 20 | 3/4" | ANSI 600 | ET105404ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 10,9 |
| DN 25 | 1" | ANSI 600 | ET106404ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 13,9 |
| DN 32 | 1" 1/4 | ANSI 600 | ET107404ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 16,7 |
| DN 40 | 1" 1/2 | ANSI 600 | ET108404ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 27,1 |
| DN 50 | 2" | ANSI 600 | ET109404ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 32,1 |
| DN 65 | 2" 1/2 | ANSI 600 | ET110404ABA0AEMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 53,7 |
| DN 80 | 3" | ANSI 600 | ET111404ABA0AEMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 65,1 |
| DN 100 | 4" | ANSI 600 | ET112404ABA0AEMNV000AMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 450,0 | 140,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

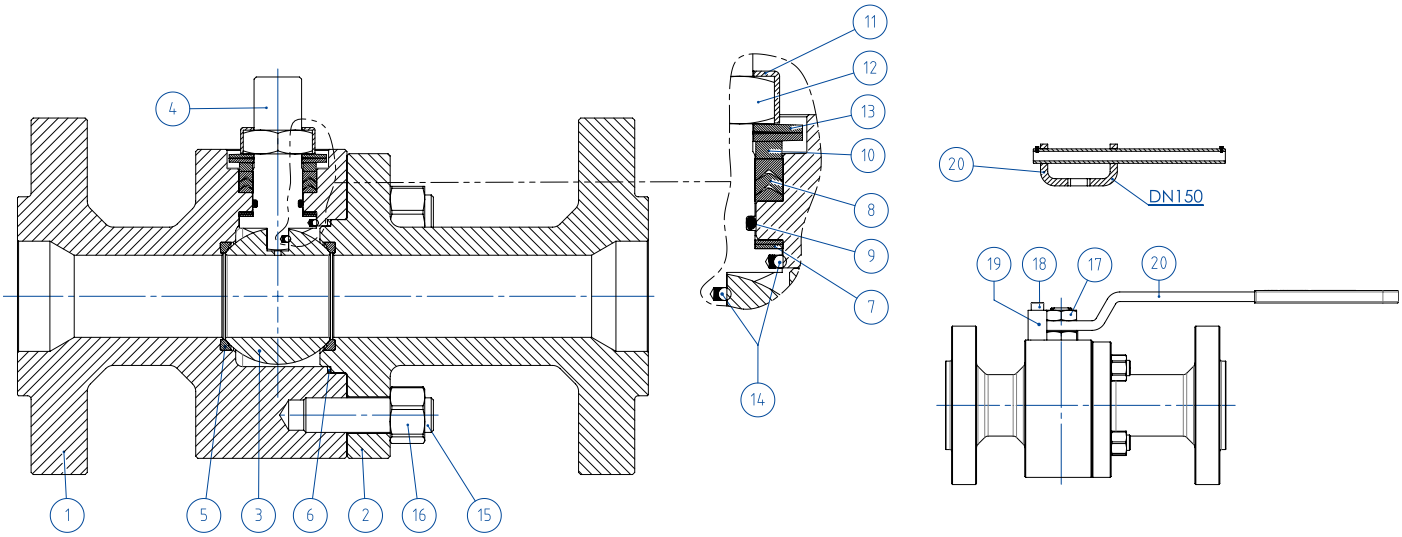
# THOR SPLIT BODY ANSI 600
# PASSAGGIO RIDOTTO *REDUCED BORE*




## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | ANSI | A | B | C | ∅E | Att. ISO | ∅M | ∅N | F/T | ∅G | ∅R | S | ∅H | N° FORI *HOLES N°* | ∅I | P | Kg | L | H | Y | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | | |
| 20x15 | 3/4"x1/2" | 600 | 40 | 54,5 | 9,6 | 19 | F04 | 42 | M5 | 12/8 | 115 | 42,9 | 6,3 | 82,6 | 4 | 19 | 22,5 | 6,8 | 190 | 80 | 150 | KLV58006 | KGBV472040 |
| 25x20 | 1"x3/4" | 600 | 45 | 57,5 | 9,6 | 25 | F04 | 42 | M5 | 12/8 | 125 | 50,8 | 6,3 | 88,9 | 4 | 19 | 24,3 | 8 | 216 | 88 | 150 | KLV58006 | KGBV472050 |
| 32x25 | 1"1/4x1" | 600 | 50 | 71,5 | 14,6 | 32 | F05 | 50 | M6 | 16/10 | 135 | 63,5 | 6,3 | 98,4 | 4 | 19 | 27,3 | 10,8 | 229 | 95 | 275 | KLV58008 | KGBV472060 |
| 40x32 | 1"1/2x1"1/4 | 600 | 55 | 76,5 | 14,6 | 38 | F05 | 50 | M6 | 16/10 | 155 | 73 | 6,3 | 114,3 | 4 | 22 | 29 | 14,1 | 241 | 100 | 275 | KLV58008 | KGBV472070 |
| 50x40 | 2"x1"1/2 | 600 | 68 | 98,5 | 20,4 | 51 | F07 | 70 | M8 | 22/14 | 165 | 92,1 | 6,3 | 127 | 8 | 19 | 32,3 | 21,5 | 292 | 120 | 350 | KLV58010 | KGBV472080 |
| 65x50 | 2"1/2x2" | 600 | 74 | 107,5 | 20,4 | 64 | F07 | 70 | M8 | 22/14 | 190 | 104,8 | 6,3 | 149,2 | 8 | 22 | 36 | 28,8 | 330 | 129 | 350 | KLV58010 | KGBV472090 |
| 80x65 | 3"x2"1/2 | 600 | 94 | 144 | 25,1 | 76 | F10 | 102 | M10 | 30/18 | 210 | 127 | 6,3 | 168,3 | 8 | 22 | 39 | 49 | 356 | 180 | 450 | KLV58012 | KGBV472100 |
| 100x80 | 4"x3" | 600 | 101,5 | 151,5 | 25,1 | 102 | F10 | 102 | M10 | 30/18 | 275 | 157,2 | 6,3 | 215,9 | 8 | 25,5 | 45,3 | 75,3 | 432 | 188 | 450 | KLV58012 | KGBV472110 |
| 150x100 | 6"x4" | 600 | 126 | 196,5 | 40,5 | 152 | F14 | 140 | M16 | 45/30 | 355 | 215,9 | 6,3 | 292,1 | 12 | 28,6 | 54,3 | 160 | 559 | 243 | 800 | KLV58014 | KGBV472120 |

# THOR SPLIT BODY ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY ANSI 600 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8 (*)(**) (1.4308/Gx5CrNi19-10) | ASTM A351 CF8 (*)(**) (1.4308/Gx5CrNi19-10) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON (.) | DEVLON (.) |
| 6* | Guarnizione corpo-terminale *Body-connector gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) • | TFM1600 (.) • |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) (1) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (x) | UNI 3740-1 6S ZINCATO - *Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B7 | ASTM A320-L7M |
| 16 | Dadi *Nut* | ASTM A194-Gr.2H | ASTM A194-Gr.7M |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 20 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) | Fe37 zincato - *Galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(*): A351 CF8M
(**): Per DN≤40x32 disponibile solo in CF8M *For DN≤40x32 available only in CF8M*
(x): 304 s.s.
(xx): 301 s.s.
• : per DN≤40x32 disponibile solo in DEVLON *for DN≤40x32 available only in DEVLON*
(1): Per DN150x100 disponibile solo in 304 *for DN150x100 available only in 304*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

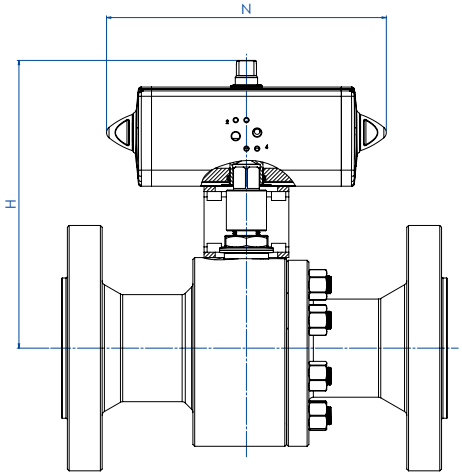
# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE* | | | | |
|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **A105** ***Carbon steel*** | **LF2** ***Carbon steel*** |
| **DN [mm]** | **[inch]** | | | |
| DN 20x15 | 3/4" x 1/2" | ANSI 600 | V/LT135404CAA0AFMRV00B | V/LT135404CBA0AHMRV00B |
| DN 25x20 | 1" x 3/4" | ANSI 600 | V/LT136404CAA0AFMRV00B | V/LT136404CBA0AHMRV00B |
| DN 32x25 | 1" 1/4 x 1" | ANSI 600 | V/LT137404CAA0AGMRV00B | V/LT137404CBA0AIMRV00B |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 600 | V/LT138404CAA0AGMRV00B | V/LT138404CBA0AIMRV00B |
| DN 50x40 | 2" x 1" 1/2 | ANSI 600 | V/LT139404CAB0AGMNV00B | V/LT139404CBB0AIMNV00B |
| DN 65x50 | 2" 1/2 x 2" | ANSI 600 | V/LT140404CAB0AGMNV00B | V/LT140404CBB0AIMNV00B |
| DN 80x65 | 3" x 2" 1/2 | ANSI 600 | V/LT141404CAB0AGMNV00B | V/LT141404CBB0AIMNV00B |
| DN 100x80 | 4" x 3" | ANSI 600 | V/LT142404CAB0AGMNV00B | V/LT142404CBB0AIMNV00B |
| DN 150x100 | 6" x 4" | ANSI 600 | V/LT174404CAB0AGMNV00B | V/LT174404CBB0AIMNV00B |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

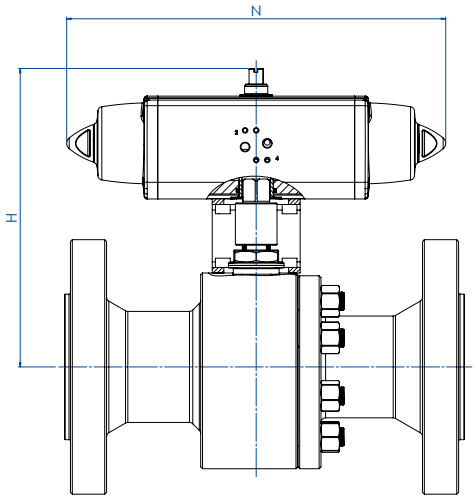
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | DT135404CAA0AFMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | DT136404CAA0AFMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,9 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | DT137404CAA0AGMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | DT138404CAA0AGMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,4 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | DT139404CAB0AGMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 25,1 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | DT140404CAB0AGMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 34,6 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | DT141404CAB0AGMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,5 | 56,3 |
| DN100X80 | 4" x 3" | ANSI 600 | DT142404CAB0AGMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 327,5 | 83,7 |
| DN150X100 | 6" x 4" | ANSI 600 | DT174404CAB0AGMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 176,9 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | DT135404CBA0AHMRV00BAFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | DT136404CBA0AHMRV00BAFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,9 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | DT137404CBA0AIMRV00BAFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | DT138404CBA0AIMRV00BAFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,4 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | DT139404CBB0AIMNV00BAFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 25,1 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | DT140404CBB0AIMNV00BAFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 34,6 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | DT141404CBB0AIMNV00BAFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,5 | 56,3 |
| DN100X80 | 4" x 3" | ANSI 600 | DT142404CBB0AIMNV00BAFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 327,5 | 83,7 |
| DN150X100 | 6" x 4" | ANSI 600 | DT174404CBB0AIMNV00BAFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 176,9 |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

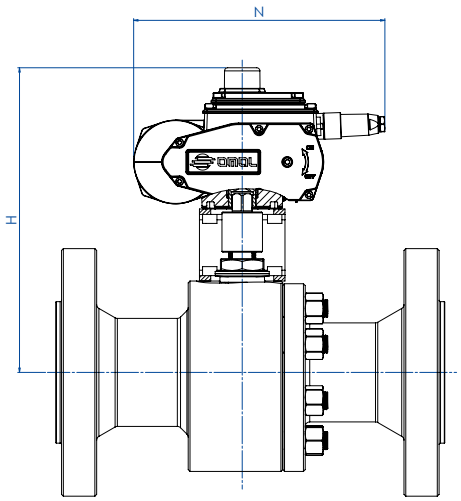
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ST135404CAA0AFMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ST136404CAA0AFMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,8 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ST137404CAA0AGMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,0 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ST138404CAA0AGMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 21,2 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ST139404CAB0AGMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,5 | 29,5 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ST140404CAB0AGMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 38,9 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ST141404CAB0AGMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 62,7 |
| DN100X80 | 4" x 3" | ANSI 600 | ST142404CAB0AGMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 93,7 |
| DN150X100 | 6" x 4" | ANSI 600 | ST174404CAB0AGMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 198,1 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ST135404CBA0AHMRV00BAFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ST136404CBA0AHMRV00BAFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,8 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ST137404CBA0AIMRV00BAFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,0 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ST138404CBA0AIMRV00BAFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 21,2 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ST139404CBB0AIMNV00BAFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,5 | 29,5 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ST140404CBB0AIMNV00BAFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 38,9 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ST141404CBB0AIMNV00BAFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 62,7 |
| DN100X80 | 4" x 3" | ANSI 600 | ST142404CBB0AIMNV00BAFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 93,7 |
| DN150X100 | 6" x 4" | ANSI 600 | ST174404CBB0AIMNV00BAFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 198,1 |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

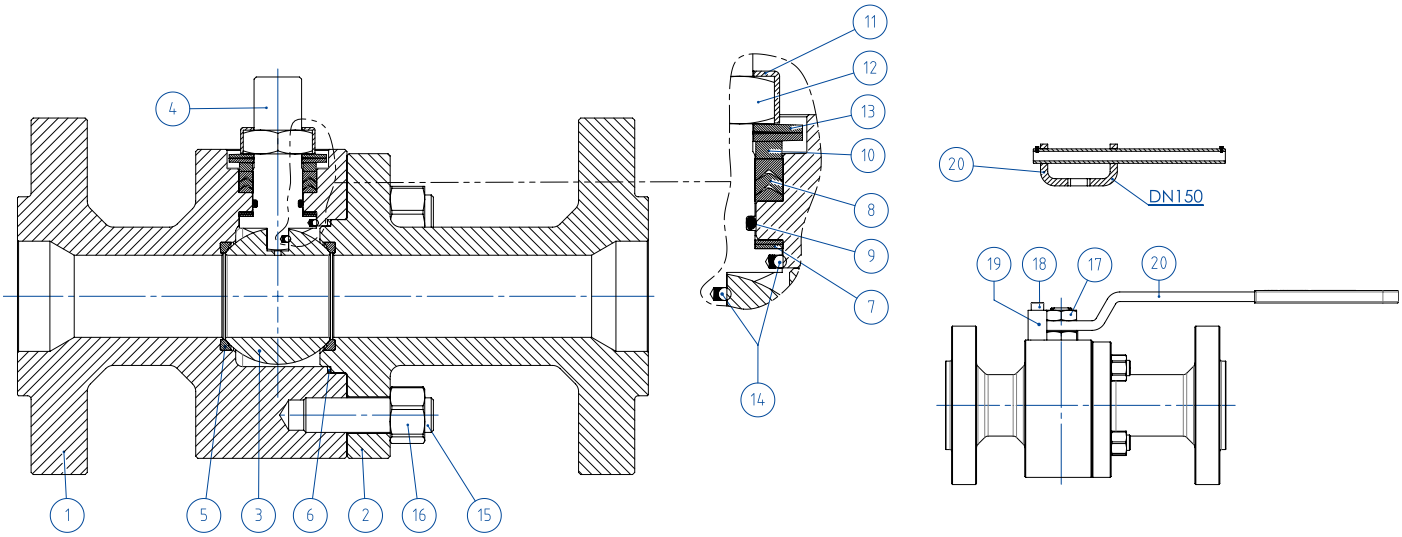
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ET135404CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 11,1 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ET136404CAA0AFMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,4 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ET137404CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ET138404CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,7 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ET139404CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 29,7 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ET140404CAB0AGMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 37,0 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ET141404CAB0AGMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 58,4 |
| DN100X80 | 4" x 3" | ANSI 600 | ET142404CAB0AGMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 86,4 |
| DN150X100 | 6" x 4" | ANSI 600 | ET174404CAB0AGMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 187,3 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ET135404CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 11,1 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ET136404CBA0AHMRV00BAMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,4 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ET137404CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ET138404CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,7 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ET139404CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 29,7 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ET140404CBB0AIMNV00BAMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 37,0 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ET141404CBB0AIMNV00BAMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 58,4 |
| DN100X80 | 4" x 3" | ANSI 600 | ET142404CBB0AIMNV00BAMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 86,4 |
| DN150X100 | 6" x 4" | ANSI 600 | ET174404CBB0AIMNV00BAMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 187,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# TABELLA DEI MATERIALI *MATERIALS TABLE*



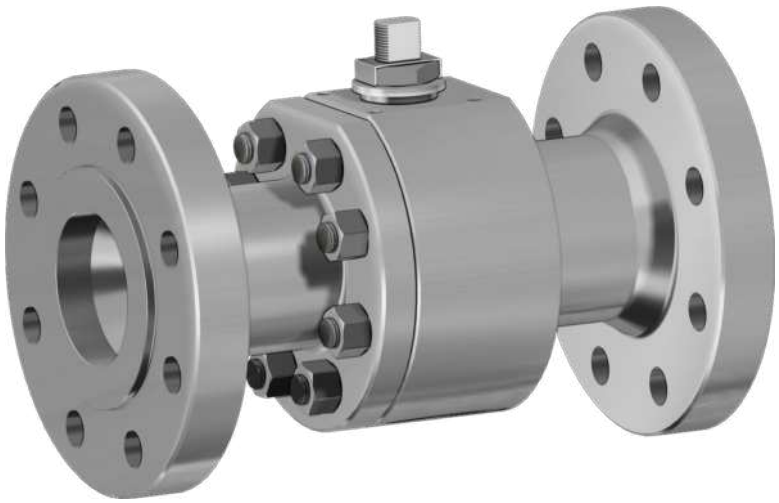

| MATERIALI *MATERIALS* ANSI 600 DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 (.) • |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 16 | Dadi *Nut* | ASTM A194-Gr.8 |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato (x) *Carbon steel galvanized (x)* |
| 20 | Leva *Lever* | Fe37 zincato-*galvanized (x)* |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.
• : per DN≤40x32 disponibile solo in DEVLON *for DN≤40x32 available only in DEVLON*

(.): Altri materiali disponibili a richiesta *Other materials available on request*

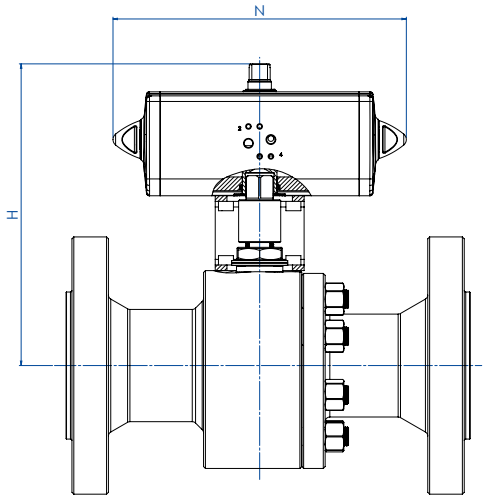
# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE* | | | |
|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **316** ***Stainless steel*** |
| **DN [mm]** | **[inch]** | | |
| DN 20x15 | 3/4" x 1/2" | ANSI 600 | V/LT135404ABA0ADMRV000 |
| DN 25x20 | 1" x 3/4" | ANSI 600 | V/LT136404ABA0ADMRV000 |
| DN 32x25 | 1" 1/4 x 1" | ANSI 600 | V/LT137404ABA0AEMRV000 |
| DN 40x32 | 1" 1/2 x 1" 1/4 | ANSI 600 | V/LT138404ABA0AEMRV000 |
| DN 50x40 | 2" x 1" 1/2 | ANSI 600 | V/LT139404ABA0AEMNV000 |
| DN 65x50 | 2" 1/2 x 2" | ANSI 600 | V/LT140404ABA0AEMNV000 |
| DN 80x65 | 3" x 2" 1/2 | ANSI 600 | V/LT141404ABA0AEMNV000 |
| DN 100x80 | 4" x 3" | ANSI 600 | V/LT142404ABA0AEMNV000 |
| DN 150x100 | 6" x 4" | ANSI 600 | V/LT174404ABA0AEMNV000 |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*



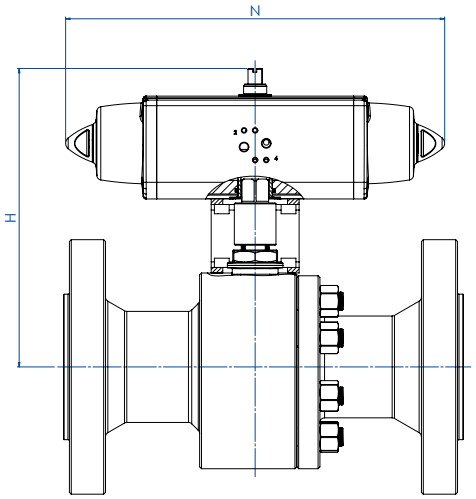



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | DT135404ABA0ADMRV000AFCA0 | DAN0030411S | KCNBCHD5340 | 174,2 | 179,2 | 8,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | DT136404ABA0ADMRV000AFDA0 | DAN0045412S | KCNBCHD5341 | 188,5 | 189,5 | 9,9 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | DT137404ABA0AEMRV000AFEA0 | DAN0060412S | KCNCCHD5342 | 198,0 | 200,4 | 13,2 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | DT138404ABA0AEMRV000AFGA0 | DAN0106411S | KCNCCHD5343 | 237,0 | 218,3 | 17,4 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | DT139404ABA0AEMNV000AFHA0 | DAN0120411S | KCNDDHD5344 | 244,1 | 235,0 | 25,1 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | DT140404ABA0AEMNV000AFIA0 | DAN0180411S | KCNDDHD5393 | 289,9 | 271,5 | 34,6 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | DT141404ABA0AEMNV000AFJA0 | DAN0240411S | KCNEEHD5346 | 313,6 | 315,5 | 56,3 |
| DN100X80 | 4" x 3" | ANSI 600 | DT142404ABA0AEMNV000AFKA0 | DAN0360411S | KCNEEHD5346 | 339,3 | 327,5 | 83,7 |
| DN150X100 | 6" x 4" | ANSI 600 | DT174404ABA0AEMNV000AFMA0 | DAN0720411S | KCNFGHD5365 | 433,1 | 404,0 | 176,9 |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*



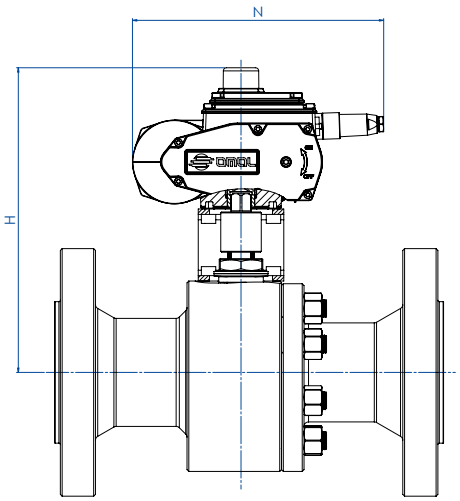



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ST135404ABA0ADMRV000AFEA0 | SRN0030402S | KCNBCHD5350 | 258,8 | 190,4 | 9,5 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ST136404ABA0ADMRV000AFGA0 | SRN0053401S | KCNBCHD5351 | 304,2 | 208,3 | 11,8 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ST137404ABA0AEMRV000AFHA0 | SRN0060401S | KCNCCHD5343 | 338,5 | 217,0 | 15,0 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ST138404ABA0AEMRV000AFIA0 | SRN0090401S | KCNCDHD5352 | 393,7 | 252,5 | 21,2 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ST139404ABA0AEMNV000AFJA0 | SRN0120401S | KCNDDHD5353 | 409,6 | 269,5 | 29,5 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ST140404ABA0AEMNV000AFKA0 | SRN0180401S | KCNDDHD5393 | 474,0 | 282,0 | 38,9 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ST141404ABA0AEMNV000AFLA0 | SRN0240401S | KCNEEHD5354 | 520,5 | 339,0 | 62,7 |
| DN100X80 | 4" x 3" | ANSI 600 | ST142404ABA0AEMNV000AFMA0 | SRN0360401S | KCNEEHD5354 | 613,0 | 359,5 | 93,7 |
| DN150X100 | 6" x 4" | ANSI 600 | ST174404ABA0AEMNV000AFQA0 | SRN0720401S | KCNGGHD5369 | 798,0 | 442,0 | 198,1 |

# THOR SPLIT BODY - ANSI 600 - PASSAGGIO RIDOTTO *REDUCED BORE*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*



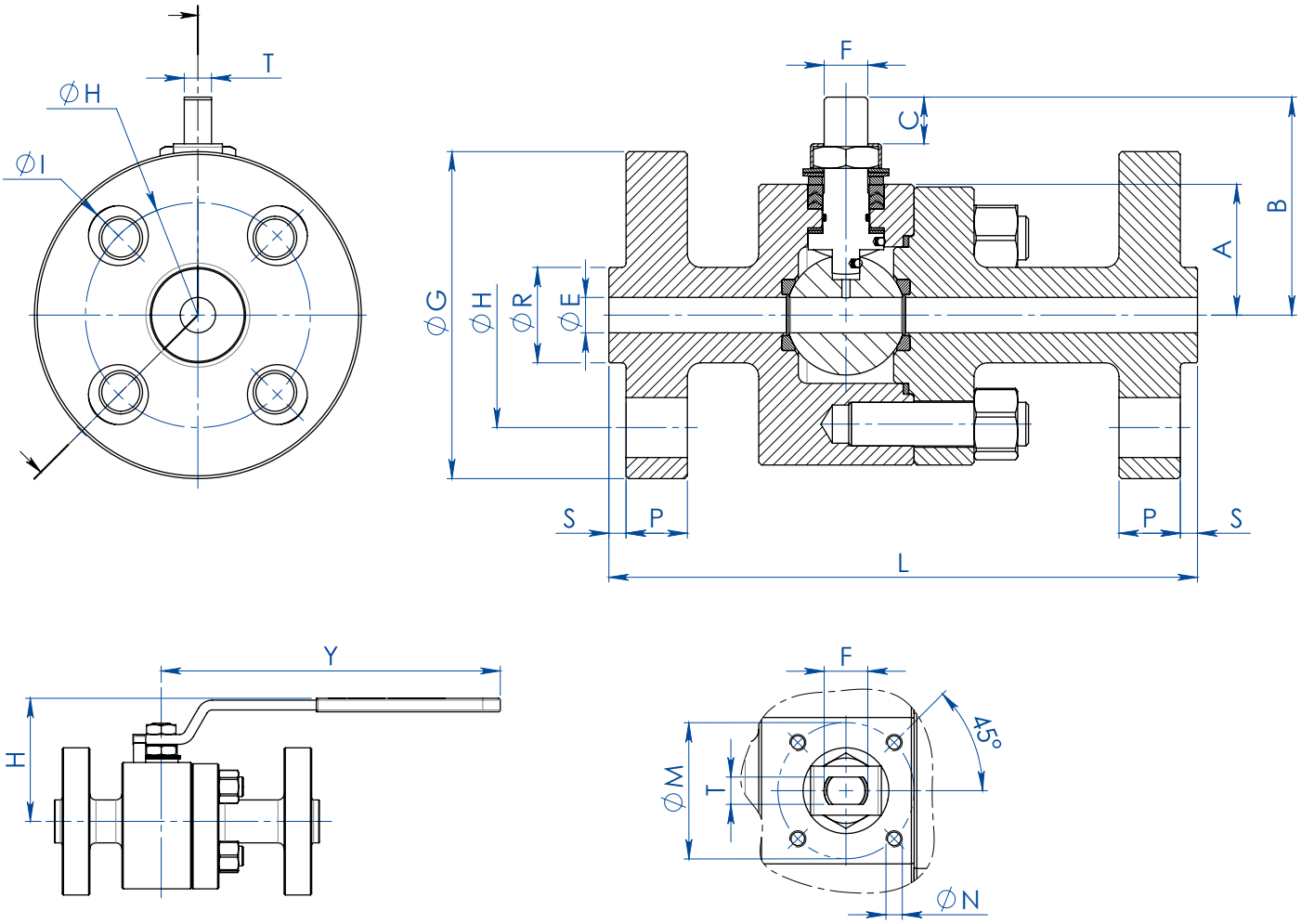



## CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN20X15 | 3/4" x 1/2" | ANSI 600 | ET135404ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5350 | 250,0 | 237,0 | 11,1 |
| DN25X20 | 1" x 3/4" | ANSI 600 | ET136404ABA0ADMRV000AMEG0 | EA0035A5C000 | KCNBCHD5357 | 250,0 | 242,0 | 12,4 |
| DN32X25 | 1" 1/4 x 1" | ANSI 600 | ET137404ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 247,0 | 15,4 |
| DN40X32 | 1" 1/2 x 1" 1/4 | ANSI 600 | ET138404ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5342 | 250,0 | 252,0 | 18,7 |
| DN50X40 | 2" x 1" 1/2 | ANSI 600 | ET139404ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5344 | 280,0 | 285,5 | 29,7 |
| DN65X50 | 2" 1/2 x 2" | ANSI 600 | ET140404ABA0AEMNV000AMIG0 | EA0130A5C000 | KCNDDHD5358 | 280,0 | 291,5 | 37,0 |
| DN80X65 | 3" x 2" 1/2 | ANSI 600 | ET141404ABA0AEMNV000AMKG0 | EA0240A5C000 | KCNEEHD5346 | 280,0 | 331,5 | 58,4 |
| DN100X80 | 4" x 3" | ANSI 600 | ET142404ABA0AEMNV000AMNA0 | AE160040 | KCNEEHV5359 | 256,5 | 366,5 | 86,4 |
| DN150X100 | 6" x 4" | ANSI 600 | ET174404ABA0AEMNV000AMTA0 | AE160100 | KCNFGHV5373 | 381,0 | 460,0 | 187,3 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

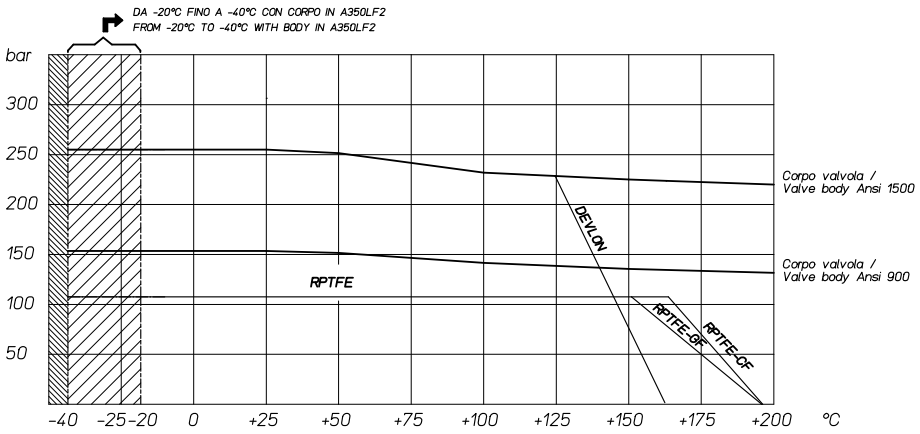
# **THOR SPLIT BODY** ANSI 900-1500



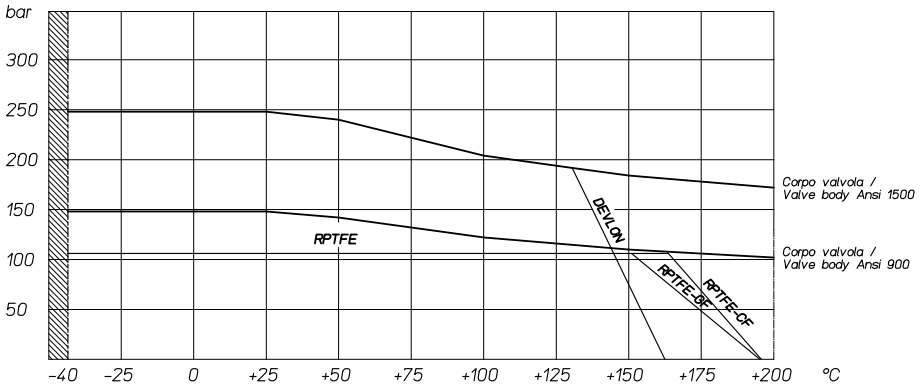

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **A** | **B** | **C** | **∅E** | **∅G** | **H** | **∅H** | **∅I** | **L** | **∅M** | **∅N** | **P** | **∅R** | **S** | **Y** | **F/T** | **ATT. ISO** | **N° FORI** *HOLES N°* | **Kg** | **KIT LEVA** *LEVER KIT* | **KIT GUARNIZIONI** *SEALS KIT* |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | | | | | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | 48 | 77,5 | 14,6 | 13 | 120 | 100 | 82,5 | 22 | 216 | 50 | M6 | 22,5 | 35 | 6,3 | 275 | 16/10 | F05 | 4 | 9,7 | KLV58008 | KGBV469040 |
| DN 20 | 3/4" | ANSI 900-1500 | 48 | 77,5 | 14,6 | 19 | 130 | 100 | 89 | 22 | 229 | 50 | M6 | 25,2 | 43 | 6,3 | 275 | 16/10 | F05 | 4 | 11,7 | KLV58008 | KGBV469050 |
| DN 25 | 1" | ANSI 900-1500 | 48 | 77,5 | 14,6 | 25 | 149,2 | 100 | 101,6 | 25,4 | 254 | 50 | M6 | 28,7 | 51 | 6,3 | 275 | 16/10 | F05 | 4 | 13,9 | KLV58008 | KGBV469060 |

# THOR SPLIT BODY ANSI 900-1500

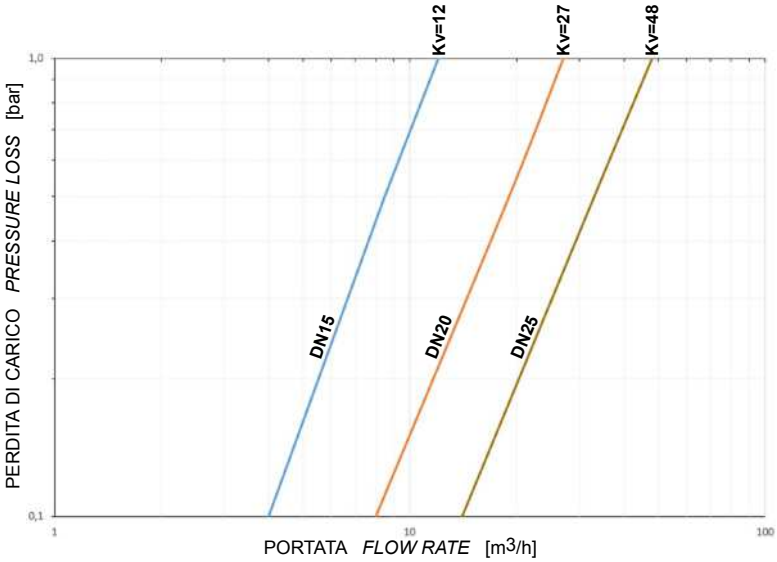
## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO AL CARBONIO
## *TEMPERATURE/PRESSURE DIAGRAM FOR CARBON STEEL VALVE*




## DIAGRAMMA PRESSIONE/TEMPERATURA PER VALVOLE CON CORPO IN ACCIAIO INOX
## *TEMPERATURE/PRESSURE DIAGRAM FOR STAINLESS STEEL VALVE*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# THOR SPLIT BODY ANSI 900-1500

| COPPIE DI SPUNTO IN Nm CON SEGGIO IN DEVLON E CON FLUIDO INTERCETTATO ACQUA (*)<br>*BREAKAWAY TORQUES IN Nm WITH DEVLON SEATS AND WITH WATER (*)* | | | |
|---|---|---|---|
| | DN 15 | DN 20 | DN 25 |
| 0 bar | 15 | 18 | 20 |
| 100 bar | 20 | 23 | 26 |
| 150 bar | 25 | 30 | 40 |
| 250 bar | 30 | 40 | 60 |

* Qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto riportato in tabella.

** If not lubricated fluids and/or fluids containing solid particles are intercepted, torques could be higher than those in the table.*

I valori della coppia in Nm possono variare in funzione della temperatura del fluido. Considerare un fattore di sicurezza pari a 1,4. Con frequenti cicli di apertura e chiusura, la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale.

*Torque can vary depending on temperature and type of fluid, a safety factor 1,4 must be applied.*
*Torque can drop on high frequency of operation.*

**Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.**
***The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.***

# THOR SPLIT BODY ANSI 900-1500
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante,passaggio totale.
- Tenuta soft-seat: DEVLON.
- Norme per flange d'attacco ASME B16.5.
- Scartamento: ANSI B16.10.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: ANSI 900-1500.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.
- Trattamento superficiale brunitura.

## *STANDARD FEATURES*
- *Floating ball, full bore.*
- *Soft-seat seal: DEVLON.*
- *Standard for connecting flanges: ASME B16.5.*
- *Face to face:* ANSI B16.10.
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: ANSI 900-1500.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*
- *Superficial treatment: blueing.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40 C° in LF2, per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva, dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica, (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40 C°). For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF) *. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-compensating hole in the ball.*
- *Stainless steel lever.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *Stainless steel Stem nuts and springs.*
- *Superficial treatment: white zinc coating ,epoxy coating. For other coating please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

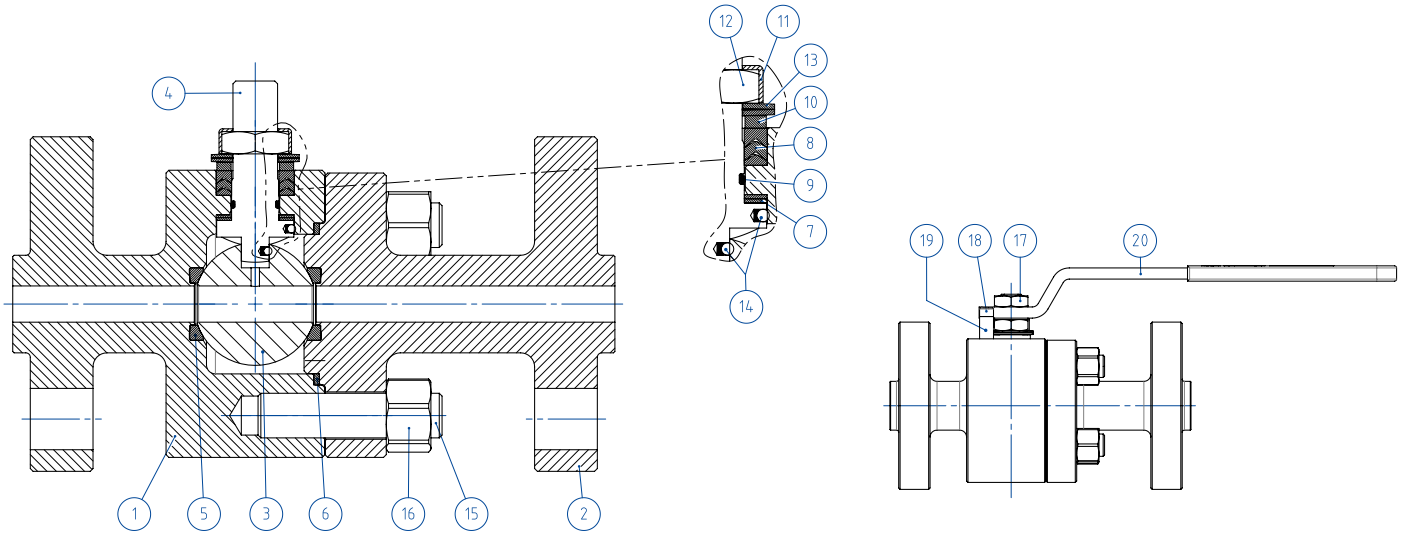
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- **API 6D: certificato n° 6D-1007.**
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- ***API 6D: certificate n° 6D-1007.***
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- API 6D.
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34.

## *ENGINEERING STANDARD*
- *API 6D.*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34.*

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY ANSI 900-1500 acciaio al carbonio *carbon steel* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) (*) | ASTM A351 CF8M (1.4408/Gx5CrNiMo19-12-2) (*) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON | DEVLON |
| 6* | Guarnizione corpo-terminale *Body-connector gasket* | GRAFOIL | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | DEVLON | DEVLON |
| 8* | Pacco a V *Chevron rings* | TFM1600 (.) | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) | FKM (.) |
| 10 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *Galvanized* (xx) | UNI 3740-1 6S ZINCATO - *Galvanized* (xx) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 ZINCATO - *Galvanized* (xx) | 50CrV4 ZINCATO - *Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 15 | Tiranti *Stud bolt* | ASTM A193-B7 | ASTM A320-L7M |
| 16 | Dadi *Nut* | ASTM A194-Gr.2H | ASTM A194-Gr.7M |
| 17 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO-*Galvanized* (x) | UNI 3740-1 6S ZINCATO-*Galvanized* (x) |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 19 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) | Acciaio al carbonio zincato - *Carbon steel galvanized* (x) |
| 20 | Leva *Lever* | Fe37 zincato - *Galvanized* (x) | Fe37 zincato - *Galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

Per DN15 disponibile solo in 316 S.S.
*For DN15 available only in 316 S.S.*
(x): 304 s.s.
(xx): 301 s.s.

(.): Altri materiali disponibili a richiesta *Other materials available on request*

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

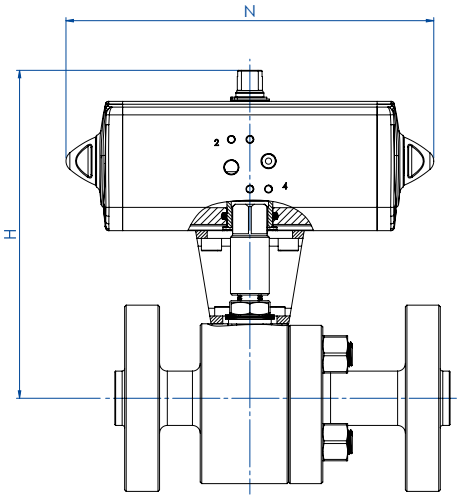


| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO AL CARBONIO *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE* | | | | |
|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **A105** ***Carbon steel*** | **LF2** ***Carbon steel*** |
| **DN [mm]** | **[inch]** | | | |
| DN 15 | 1/2" | ANSI 900-1500 | V/LT104904CAE0AGMRV00B | V/LT104904CBE0AIMRV00B |
| DN 20 | 3/4" | ANSI 900-1500 | V/LT105904CAA0AGMRV00B | V/LT105904CBA0AIMRV00B |
| DN 25 | 1" | ANSI 900-1500 | V/LT106904CAA0AGMRV00B | V/LT106904CBA0AIMRV00B |

DN40 e DN50 ANSI900-1500 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN40 and DN50 ANSI900-1500 on stock, check with our sales department for operating conditions.*

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

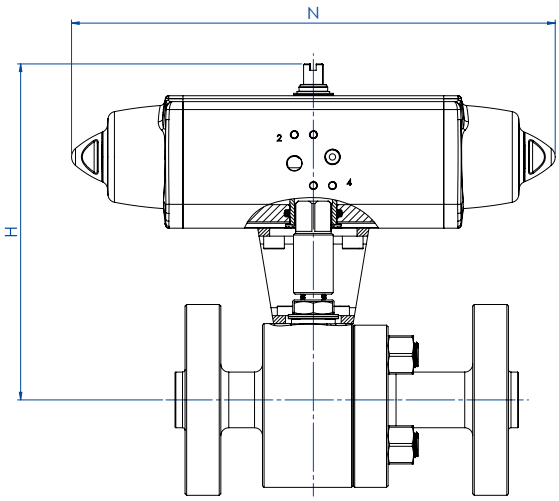
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | DT104904CAE0AGMRV00BAFDA0 | DAN0045412S | KCNCCHD5394 | 174,2 | 187,2 | 11,6 |
| DN 20 | 3/4" | ANSI 900-1500 | DT105904CAA0AGMRV00BAFEA0 | DAN0060412S | KCNCCHD5395 | 188,5 | 198,4 | 14,1 |
| DN 25 | 1" | ANSI 900-1500 | DT106904CAA0AGMRV00BAFGA0 | DAN0106411S | KCNCCHD5396 | 198,0 | 211,3 | 17,2 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | DT104904CBE0AIMRV00BAFDA0 | DAN0045412S | KCNCCHD5394 | 174,2 | 187,2 | 11,6 |
| DN 20 | 3/4" | ANSI 900-1500 | DT105904CBA0AIMRV00BAFEA0 | DAN0060412S | KCNCCHD5395 | 188,5 | 198,4 | 14,1 |
| DN 25 | 1" | ANSI 900-1500 | DT106904CBA0AIMRV00BAFGA0 | DAN0106411S | KCNCCHD5396 | 198,0 | 211,3 | 17,2 |

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

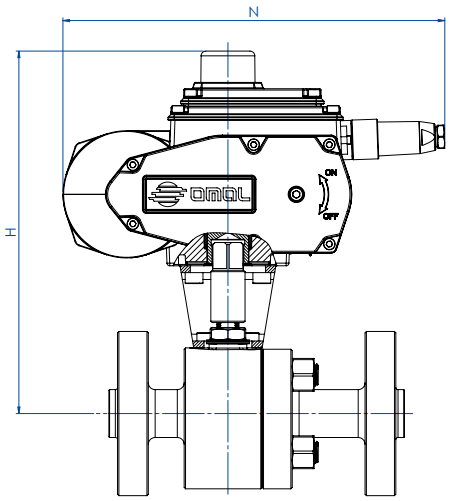
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ST104904CAE0AGMRV00BAFGA0 | SRN0053401S | KCNCCHD5396 | 304,2 | 211,3 | 13,5 |
| DN 20 | 3/4" | ANSI 900-1500 | ST105904CAA0AGMRV00BAFHA0 | SRN0060401S | KCNCCHD5396 | 338,5 | 215,0 | 15,8 |
| DN 25 | 1" | ANSI 900-1500 | ST106904CAA0AGMRV00BAFIA0 | SRN0090401S | KCNCDHD5397 | 393,7 | 245,5 | 20,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ST104904CBE0AIMRV00BAFGA0 | SRN0053401S | KCNCCHD5396 | 304,2 | 211,3 | 13,5 |
| DN 20 | 3/4" | ANSI 900-1500 | ST105904CBA0AIMRV00BAFHA0 | SRN0060401S | KCNCCHD5396 | 338,5 | 215,0 | 15,8 |
| DN 25 | 1" | ANSI 900-1500 | ST106904CBA0AIMRV00BAFIA0 | SRN0090401S | KCNCDHD5397 | 393,7 | 245,5 | 20,9 |

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ET104904CAE0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 14,3 |
| DN 20 | 3/4" | ANSI 900-1500 | ET105904CAA0AGMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 16,3 |
| DN 25 | 1" | ANSI 900-1500 | ET106904CAA0AGMRV00BAMIG0 | EA0130A5C000 | KCNCCHD5396 | 280,0 | 265,5 | 21,9 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ET104904CBE0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 14,3 |
| DN 20 | 3/4" | ANSI 900-1500 | ET105904CBA0AIMRV00BAMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 16,3 |
| DN 25 | 1" | ANSI 900-1500 | ET106904CBA0AIMRV00BAMIG0 | EA0130A5C000 | KCNCCHD5396 | 280,0 | 265,5 | 21,9 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY ANSI 900-1500
# ACCIAIO INOX *STAINLESS STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft-seat: DEVLON.
- Norme per flange d'attacco ASME B16.5.
- Temperature di utilizzo vedi diagramma pressione temperatura.
- Classe di pressione: ANSI 900-1500.
- Classe di tenuta: EN12266-1 rate A.
- Fluido intercettato: prodotti petroliferi, fluidi autolubrificanti (liquidi e gassosi), purchè compatibili con i materiali costruttivi. Per altre applicazioni rivolgersi all'ufficio commerciale.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM 1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Angolo di chiusura >7°.

## *STANDARD FEATURES*
- *Floating ball, full bore.*
- *Soft-seat seal: DEVLON.*
- *Standard for connecting flanges: ASME B16.5.*
- *Operating temperature see temperature pressure diagram.*
- *Pressure class: ANSI 900-1500.*
- *Tightness Class: EN12266-1 rate A.*
- *Intercepted fluid: petrochemical products, self-lubricating fluids (liquid and gaseous), compatible with the constructive materials. For others application please contact our sales department.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM 1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Closing angle >7°.*

## ESECUZIONI A RICHIESTA
- Per altri tipi di flangiature contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificazione ATEX **A RICHIESTA.**

## *FEATURES ON REQUEST*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite* (RPTFE-CF). *For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-compensating hole in the ball.*
- *Stainless steel lever.*
- *Stainless steel Stem nuts and springs.*
- *For special versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

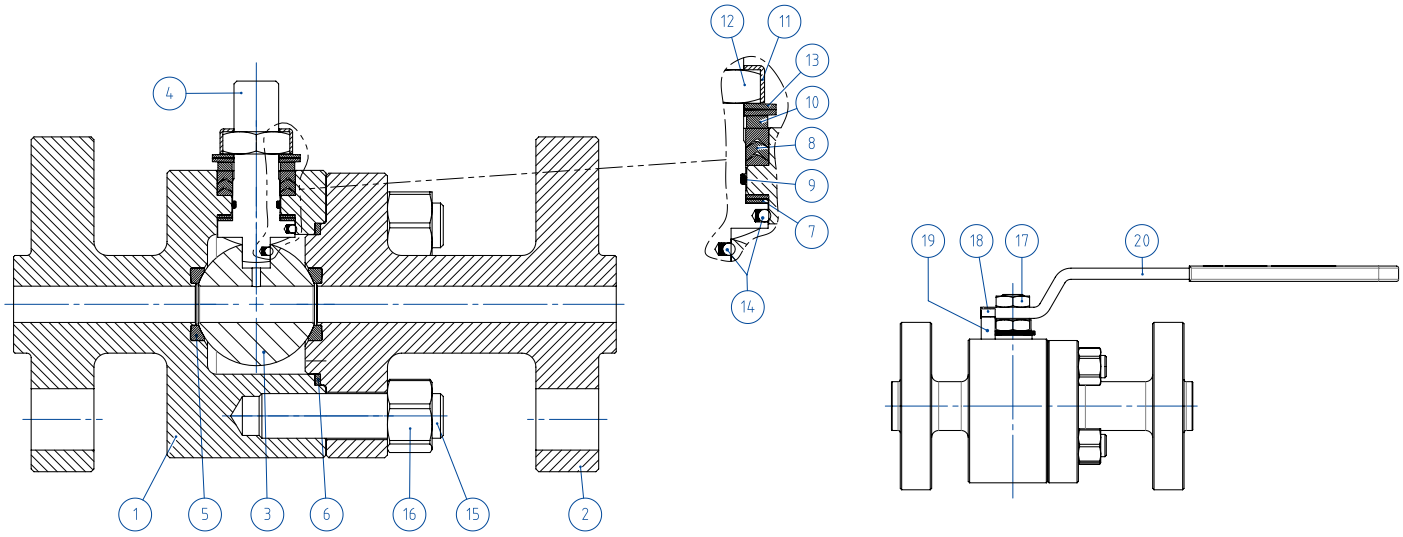
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.
- **API 6D: certificato n° 6D-1007.**
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; TA-LUFT VDI 2440; FIRE SAFE: ISO 10497 / API 607.*
- ***API 6D: certificate n° 6D-1007.***
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

## NORME DI PROGETTAZIONE
- API 6D.
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN 12516 per valvole PN.

## *ENGINEERING STANDARD*
- *API 6D.*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*
- *Materials and rating in compliance with ASME B16.34.*

# THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* ANSI 900-1500 DA BARRA *FROM BAR* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A 182 F316 / A479TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Terminale *Connector* | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (*) (1.4408/Gx5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 5* | Seggio *Seat* | DEVLON |
| 6* | Guarnizione corpo terminale *Body-Connector gasket* | GRAFOIL |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | DEVLON |
| 8* | Guarnizioni tipo Chevron *Chevron seals* | TFM1600 (.) |
| 9* | O-ring stelo *Stem o-ring* | FKM (.) |
| 10 | Anello premi guarnizione *Packing gland ring* | 304 S.S. |
| 11 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato-*Galvanized* (x) |
| 13 | Molle a tazza *Springs washer* | 50CrV4 Zincato-*Galvanized* (xx) |
| 14 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 15 | *Tiranti Stud bolt* | ASTM A193-B8 |
| 16 | *Dadi Nut* | ASTM A194-Gr.8 |
| 17 | *Controdado Lock nut* | UNI 3740-1 6S Zincato-*Galvanized* |
| 18 | *Vite di fermo Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 19 | *Fermo di posizione Holder screw* | Acciaio al carbonio zincato-*galvanized* (x) |
| 20 | *Leva Lever* | Fe37 zincato-*galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*

(*) Per DN15 disponibile solo in 316 S.S. *(*) For DN15 available only in 316 S.S.*
(x): 304 s.s.
(xx): 301 s.s.

# THOR SPLIT BODY - ANSI 900-1500
# ACCIAIO INOX *STAINLESS STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

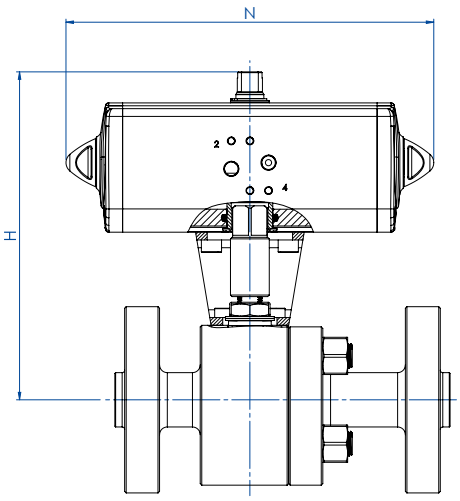


| CODICI VALVOLE ASSE LIBERO (V__) E CON LEVA (L__) IN ACCIAIO INOX *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE* | | | |
|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **316** ***Stainless steel*** |
| **DN [mm]** | **[inch]** | | |
| DN 15 | 1/2" | ANSI 900-1500 | V/LT104904ABE0AEMRV000 |
| DN 20 | 3/4" | ANSI 900-1500 | V/LT105904ABA0AEMRV000 |
| DN 25 | 1" | ANSI 900-1500 | V/LT106904ABA0AEMRV000 |

DN40 e DN50 ANSI900-1500 disponibile a magazzino, contattare ufficio commerciale per verifica condizioni operative.
*DN40 and DN50 ANSI900-1500 on stock, check with our sales department for operating conditions.*

# THOR SPLIT BODY - ANSI 900-1500
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*

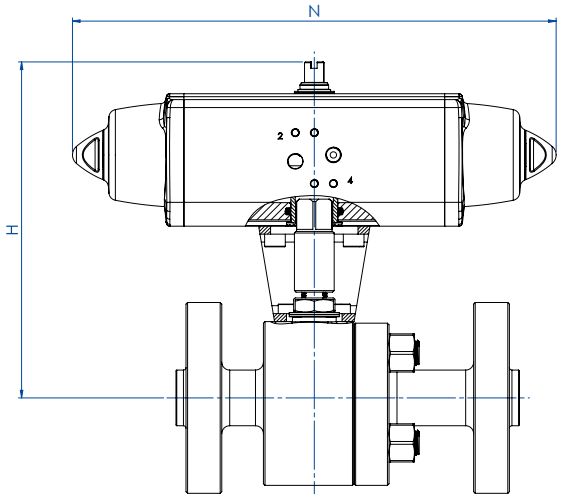





| CODICI ARTICOLI IN 316 ACCIAIO INOX *ITEM CODES IN 316 STAINLESS STEEL* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **ANSI** | **CODICE ARTICOLO -316-** *ITEM CODE -316-* | **ATTUATORE** *ACTUATOR* | **KIT di montaggio** *Mounting KIT* | **N [mm]** | **H [mm]** | **Peso Kg** *Weight Kg* |
| **DN [mm]** | **[inch]** | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | DT104904ABE0AEMRV000AFDA0 | DAN0045412S | KCNCCHD5394 | 174,2 | 187,2 | 11,6 |
| DN 20 | 3/4" | ANSI 900-1500 | DT105904ABA0AEMRV000AFEA0 | DAN0060412S | KCNCCHD5395 | 188,5 | 198,4 | 14,1 |
| DN 25 | 1" | ANSI 900-1500 | DT106904ABA0AEMRV000AFGA0 | DAN0106411S | KCNCCHD5396 | 198,0 | 211,3 | 17,2 |

## THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*



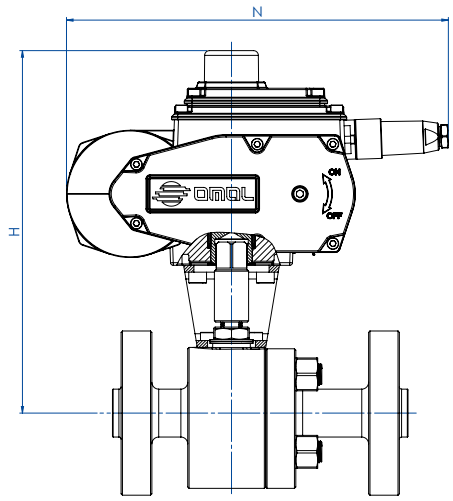



**CODICI ARTICOLI IN 316 ACCIAIO INOX** *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ST104904ABE0AEMRV000AFGA0 | SRN0053401S | KCNCCHD5396 | 304,2 | 211,3 | 13,5 |
| DN 20 | 3/4" | ANSI 900-1500 | ST105904ABA0AEMRV000AFHA0 | SRN0060401S | KCNCCHD5396 | 338,5 | 215,0 | 15,8 |
| DN 25 | 1" | ANSI 900-1500 | ST106904ABA0AEMRV000AFIA0 | SRN0090401S | KCNCDHD5397 | 393,7 | 245,5 | 20,9 |

## THOR SPLIT BODY - ANSI 900-1500
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*



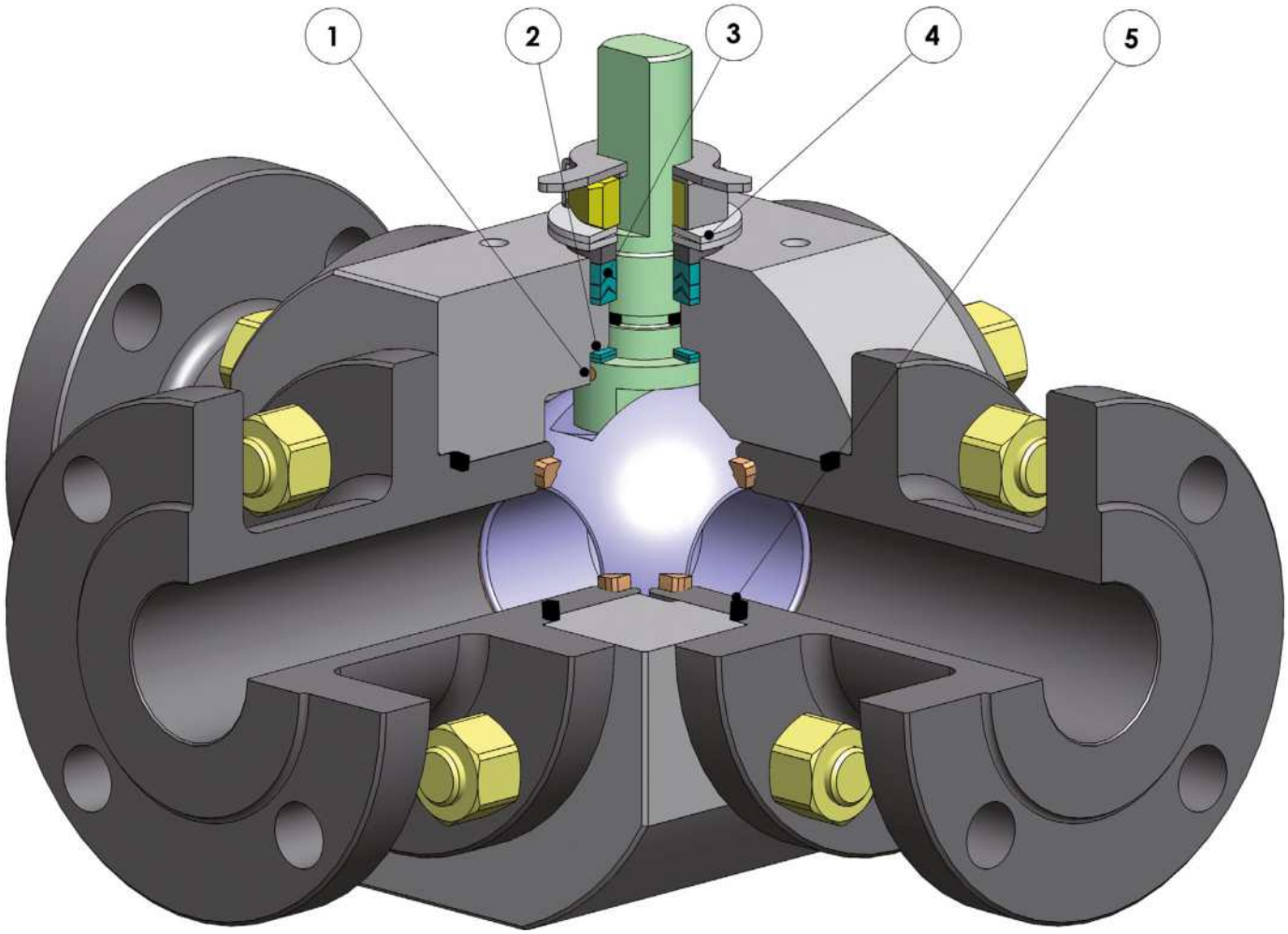



**CODICI ARTICOLI IN 316 ACCIAIO INOX** *ITEM CODES IN 316 STAINLESS STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -316- *ITEM CODE -316-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Peso Kg *Weight Kg* |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | ANSI 900-1500 | ET104904ABE0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 14,3 |
| DN 20 | 3/4" | ANSI 900-1500 | ET105904ABA0AEMRV000AMGG0 | EA0070A5C000 | KCNCCHD5395 | 250,0 | 245,0 | 16,3 |
| DN 25 | 1" | ANSI 900-1500 | ET106904ABA0AEMRV000AMIG0 | EA0130A5C000 | KCNCCHD5396 | 280,0 | 265,5 | 21,9 |

Articoli disponibili anche con attuatore modulante *Items available also with modulating actuator*

# THOR SPLIT BODY
# 3 VIE 4 GUARNIZIONI
# *3 WAY 4 SEALS*

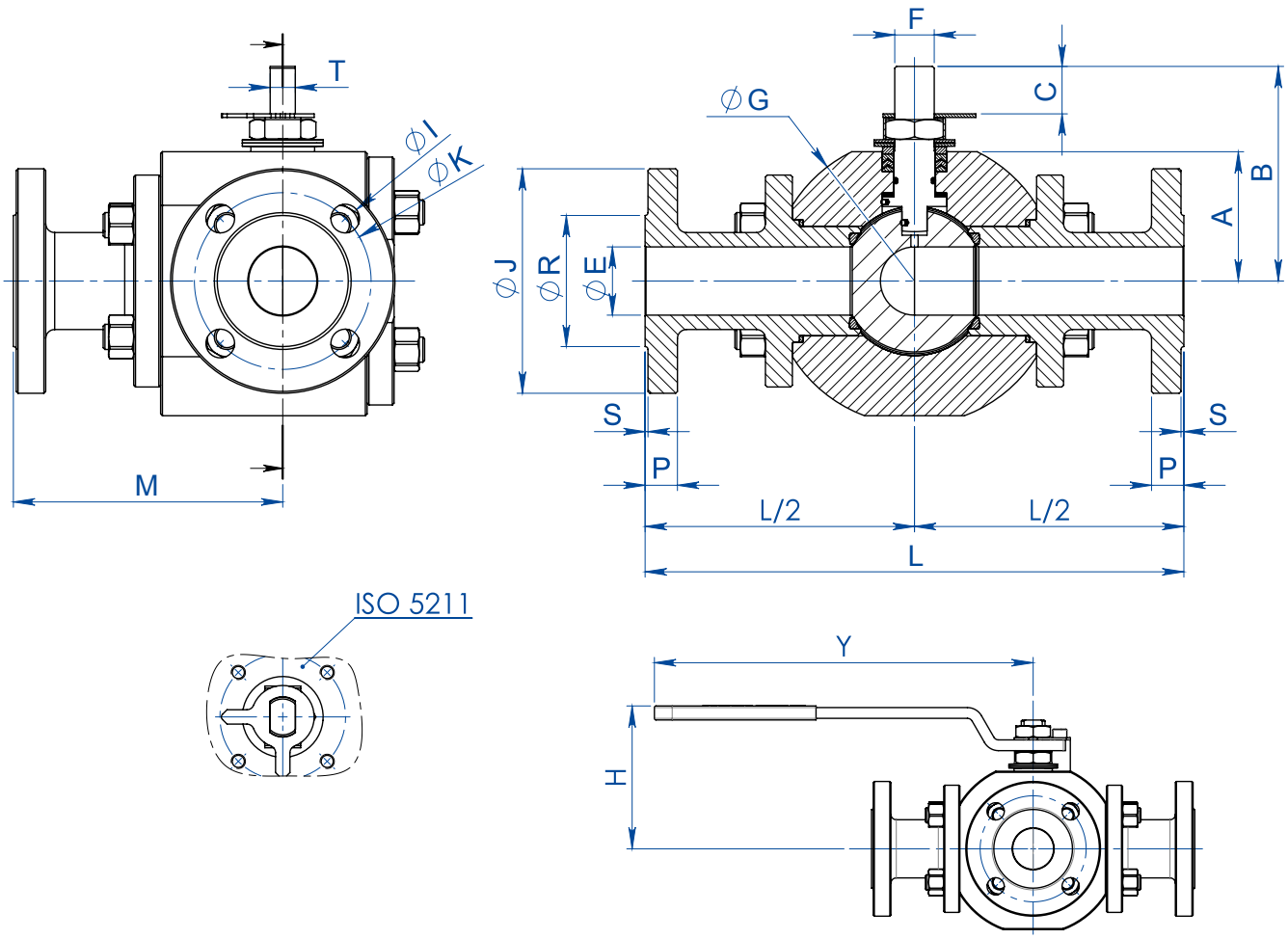


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/ explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Breakaway Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "v" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite vero l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizoini tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less breakaway torque* |
| | Facile manutenibilità direttamente sull'impianto<br>*Easy maintainance directly on site* | Contenimento dei costi durante la fase di manutenzione<br>*Reduced maintainance costs* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

# THOR SPLIT BODY 3 WAY 4 SEALS

## PN 16-40 ANSI 150




| DIMENSIONI *DIMENSIONS* -PN- | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | PN | ØE | L | M | A | B | C | ATT. ISO | F/T | ØG | ØJ | ØR | S | P | ØK | N° FORI | ØI | H | Y | Kg | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | | |
| DN 15 | 1/2" | 16-40 | 13 | 170 | 85 | 35 | 55 | 9,2 | F03 | 10/6 | 84 | 95 | 45 | 2 | 16 | 65 | 4 | 14 | 74 | 140 | 5,8 | KLV58004 | KGBV462040 |
| DN 20 | 3/4" | 16-40 | 19 | 200 | 100 | 45 | 71 | 13 | F04 | 12/8 | 105 | 105 | 58 | 2 | 18 | 75 | 4 | 14 | 90,5 | 150 | 10,2 | KLV58006 | KGBV462050 |
| DN 25 | 1" | 16-40 | 25 | 230 | 115 | 55,5 | 90,5 | 19,1 | F05 | 16/10 | 128 | 115 | 68 | 2 | 18 | 85 | 4 | 14 | 107 | 275 | 16,4 | KLV58008 | KGBV462060 |
| DN 32 | 1" 1/4 | 16-40 | 32 | 240 | 120 | 60 | 95 | 19,1 | F05 | 16/10 | 135 | 140 | 78 | 2 | 18 | 100 | 4 | 18 | 111,3 | 275 | 19,1 | KLV58008 | KGBV462070 |
| DN 40 | 1" 1/2 | 16-40 | 38 | 300 | 150 | 72 | 119,5 | 26,4 | F07 | 22/14 | 160 | 150 | 88 | 3 | 18 | 110 | 4 | 18 | 134,5 | 350 | 27,6 | KLV58010 | KGBV462080 |
| DN 50 | 2" | 16-40 | 51 | 320 | 160 | 81 | 128,5 | 26,4 | F07 | 22/14 | 178 | 165 | 102 | 3 | 20 | 125 | 4 | 18 | 143,5 | 350 | 39,2 | KLV58010 | KGBV462090 |
| DN 65 | 2" 1/2 | 16 | 64 | 350 | 175 | 93 | 154 | 33,1 | F10 | 30/18 | 205 | 185 | 122 | 3 | 18 | 145 | 4 | 18 | 182,3 | 450 | 57,3 | KLV58012 | KGBV462100 |
| DN 80 | 3" | 16 | 76 | 370 | 185 | 101 | 162 | 33,1 | F10 | 30/18 | 220 | 200 | 138 | 3 | 24 | 160 | 8 | 18 | 190,3 | 450 | 71,2 | KLV58012 | KGBV462110 |
| DN 100 | 4" | 16 | 102 | 400 | 200 | 124 | 182 | 33,1 | F10 | 30/18 | 270 | 220 | 158 | 3 | 20 | 180 | 8 | 18 | 210,5 | 450 | 100,2 | KLV58012 | KGBV462120 |

| DIMENSIONI *DIMENSIONS* -ANSI- | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | ANSI | ØE | L | M | A | B | C | ATT. ISO | F/T | ØG | ØJ | ØR | S | P | ØK | N° FORI | ØI | H | Y | Kg | KIT LEVA *LEVER KIT* | KIT GUARNIZIONI *SEALS KIT* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | | |
| DN 15 | 1/2" | 150 | 13 | 170 | 85 | 35 | 55 | 9,2 | F03 | 10/6 | 84 | 90 | 35 | 1,6 | 11,2 | 60,3 | 4 | 16 | 74 | 140 | 4,9 | KLV58004 | KGBV462040 |
| DN 20 | 3/4" | 150 | 19 | 200 | 100 | 45 | 71 | 13 | F04 | 12/8 | 105 | 100 | 43 | 1,6 | 13,0 | 69,9 | 4 | 16 | 90,5 | 150 | 9,1 | KLV58006 | KGBV462050 |
| DN 25 | 1" | 150 | 25 | 230 | 115 | 55,5 | 90,5 | 19,1 | F05 | 16/10 | 128 | 110 | 51 | 1,6 | 14,5 | 79,4 | 4 | 16 | 107 | 275 | 15,6 | KLV58008 | KGBV462060 |
| DN 32 | 1" 1/4 | 150 | 32 | 240 | 120 | 60 | 95 | 19,1 | F05 | 16/10 | 135 | 115 | 63,5 | 1,6 | 16,1 | 88,9 | 4 | 16 | 111,3 | 275 | 16,7 | KLV58008 | KGBV462070 |
| DN 40 | 1" 1/2 | 150 | 38 | 300 | 150 | 72 | 119,5 | 26,4 | F07 | 22/14 | 160 | 125 | 73 | 1,6 | 18,0 | 98,4 | 4 | 16 | 134,5 | 350 | 25,8 | KLV58010 | KGBV462080 |
| DN 50 | 2" | 150 | 51 | 320 | 160 | 81 | 128,5 | 26,4 | F07 | 22/14 | 178 | 150 | 92 | 1,6 | 19,6 | 120,7 | 4 | 19 | 143,5 | 350 | 37,7 | KLV58010 | KGBV462090 |
| DN 65 | 2" 1/2 | 150 | 64 | 350 | 175 | 93 | 154 | 33,1 | F10 | 30/18 | 205 | 180 | 104,8 | 1,6 | 22,6 | 139,7 | 4 | 19 | 182,3 | 450 | 59,1 | KLV58012 | KGBV462100 |
| DN 80 | 3" | 150 | 76 | 370 | 185 | 101 | 162 | 33,1 | F10 | 30/18 | 220 | 190 | 127 | 1,6 | 24,0 | 152,4 | 4 | 19 | 190,3 | 450 | 70,6 | KLV58012 | KGBV462110 |
| DN 100 | 4" | 150 | 102 | 400 | 200 | 124 | 182 | 33,1 | F10 | 30/18 | 270 | 230 | 157,2 | 1,6 | 24,6 | 190,5 | 8 | 19 | 210,5 | 450 | 105,1 | KLV58012 | KGBV462120 |

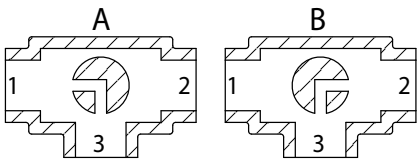
**Nota: per le valvole con la sfera a T, le dimensioni rimangono invariate.** ***Note: for valves with T port, tye dimensions do not change.***

# THOR SPLIT BODY 3 WAY 4 SEALS
## PN 16-40 ANSI 150

### SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*



Vista da sopra *View from above*

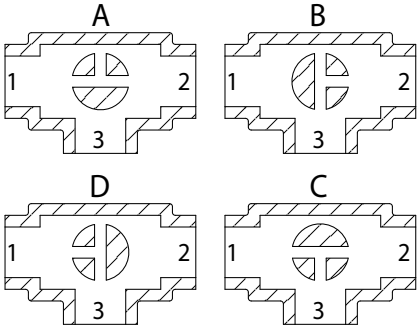
### SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

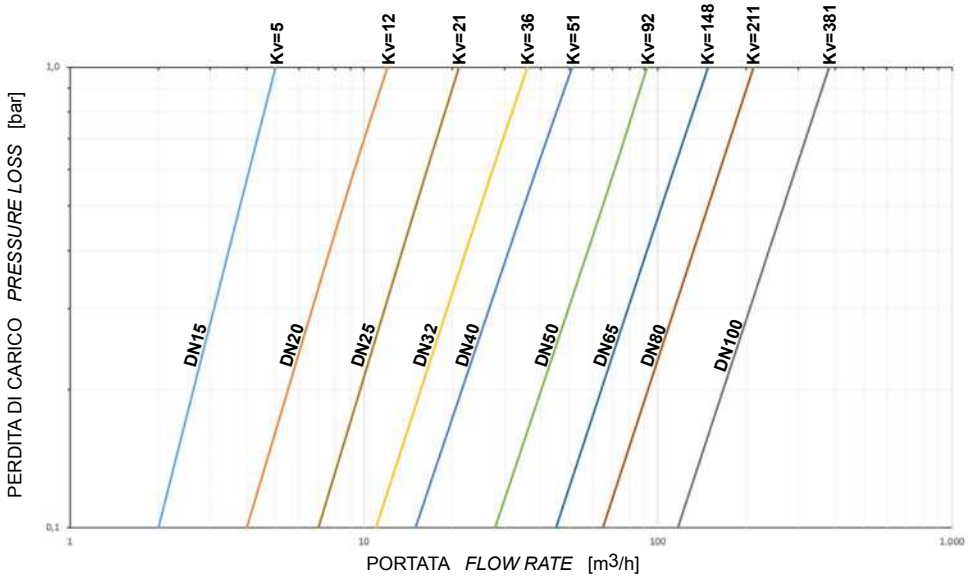
*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*



Vista da sopra *View from above*

### DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
### *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

Il dimensionamento degli attuatori pneumatici è stato fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
Qualora si intercettino fluidi sgrassanti e/o contenenti particolato solido le coppie di manovra possono risultare maggiorate rispetto a quanto previsto.

*The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.*
*In case of not lubricated fluids and/or fluids containing solid particles, torques could be higher than the ones indicated.*

# THOR SPLIT BODY 3 WAY 4 SEALS PN 16-40 ANSI 150
# ACCIAIO AL CARBONIO *CARBON STEEL*



## ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft seat TFM 1600.
- Norme per flange d'attacco: EN1092-1, ASME B16.5.
- Classi di pressione : ansi 150; PN16-40.
- Classe di tenuta: EN12266-1 rate A.
- Temperatura di utilizzo: -20°C +150°C.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.

## *STANDARD EXECUTIONS*
- *Floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN1092-1, ASME B16.5.*
- *Pressure Class : ansi 150; PN16-40.*
- *Tightness Class: EN12266-1 rate A.*
- *Working temperature: -20°C +150°C.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*

## ESECUZIONI A RICHIESTA
- Esecuzione per temperatura -40°C in A350 LF2.
- Per altri tipi di flangiatura contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Leva, Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Trattamento superficiale: zincatura bianca, verniciatura epossidica (per altri trattamenti contattare il nostro ufficio commerciale).
- Marcatura e certificato ATEX **A RICHIESTA.**

## *EXECUTIONS ON REQUEST*
- *LF2 carbon steel for low temperature execution (-40°C).*
- *For other flange types please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials please contact our sales department.*
- *Stainless steel lever.*
- *Stainless steel stem nuts and springs.*
- *For special versions with materials (body/ball/stem) different from the standard please contact our sales department.*
- *Surface treatment: white zinc coating, epoxy coating. For other coating please contact our sales department.*
- *ATEX marking and certificate* **ON REQUEST.**

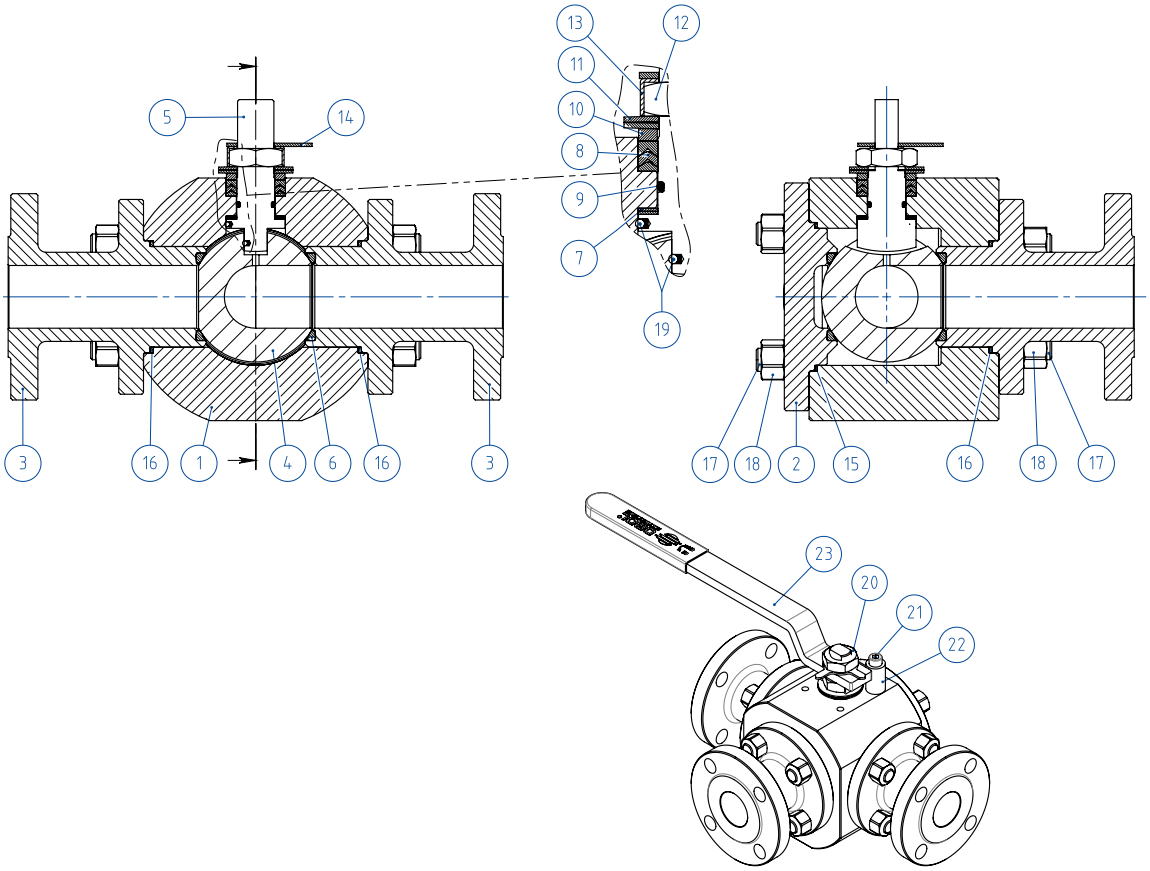
## CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

## *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate* ***ON REQUEST.***

## NORME DI PROGETTAZIONE
- Spessori corpo in accordo a ASME B16.34, ASME VIII div.1, EN12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN12516 per valvole PN.

## *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN12516 for PN valves.*

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY PN16-40 ANSI 150 | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **A105 *Carbon steel*** | **LF2 *Carbon steel*** |
| 1 | Corpo *Body* | ASTM A105 | ASTM A350 LF2 |
| 2 | Coperchio *Cover* | | |
| 3 | Terminale *Connector* | | |
| 4 | Sfera *Ball* | ASTM A351 CF8M | ASTM A351 CF8M |
| 5 | Stelo *Stem* | A564 TP.630 (17-4PH) | A564 TP.630 (17-4PH) |
| 6* | Seggio *Seat* | TFM1600 | TFM1600 |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 | TFM1600 |
| 8* | Pacco a V *Chevron rings* | TFM1600 | TFM1600 |
| 9* | O-ring stelo *Stem O-ring* | FKM | FKM |
| 10 | Anello premi guarnizione *Packing gland ring* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 11 | Molle stelo *Stem springs* | 50CrV4 ZINCATO -*galvanized* (xx) | 50CrV4 ZINCATO -*galvanized* (xx) |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *galvanized* (x) | UNI 3740-1 6S ZINCATO - *galvanized* (x) |
| 13 | Piastra blocca dado *Stop nut plate* | 304 S.S. | 304 S.S. |
| 14 | Indicatore *Indicator* | 304 S.S. | 304 S.S. |
| 15* | Guarnizione Corpo-Coperchio *Body-Cover nut gasket* | GRAFOIL | GRAFOIL |
| 16* | Guarnizione Corpo-Terminale *Body-Connector gasket* | GRAFOIL | GRAFOIL |
| 17 | Tiranti *Stud bolt* | ASTM A193-B7 | ASTM A320 L7M |
| 18 | Dadi *Nut* | ASTM A194-Gr.2H | ASTM A194-Gr.7M |
| 19 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 316 S.S. |
| 20 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *galvanized* (x) | UNI 3740-1 6S ZINCATO - *galvanized* (x) |
| 21 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) | A2-70 UNI 3740 (304 S.S.) |
| 22 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 23 | Leva *Lever* | Fe37 zincato - *galvanized* (x) | Fe37 zincato - *galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | | |

A richiesta disponibile in: *Available on request:*

(x): 304 s.s.
(xx): 301 s.s.

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE IN ACCIAIO AL CARBONIO ASSE LIBERO (V__) E CON LEVA (L__) - SFERA A "L"
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE - "L" BALL*

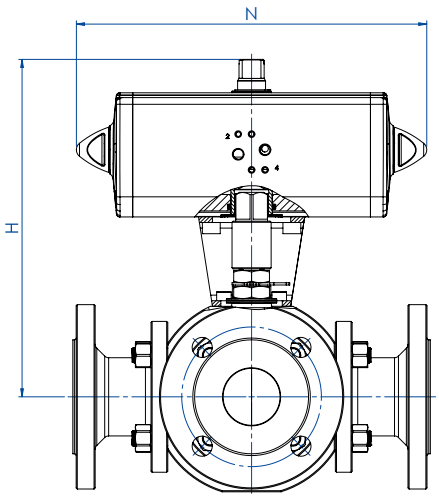
| | MISURA *SIZE* | | PN/ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|---|
| | DN [mm] | [inch] | | | |
| PN | DN 15 | 1/2" | PN 16-40 | V/LT204F03CAA0AFQNV00B | V/LT204F03CBA0AHQNV00B |
| | DN 20 | 3/4" | PN 16-40 | V/LT205F03CAA0AFQNV00B | V/LT205F03CBA0AHQNV00B |
| | DN 25 | 1" | PN 16-40 | V/LT206F03CAA0AFQNV00B | V/LT206F03CBA0AHQNV00B |
| | DN 32 | 1" 1/4 | PN 16-40 | V/LT207F03CAA0AFQNV00B | V/LT207F03CBA0AHQNV00B |
| | DN 40 | 1" 1/2 | PN 16-40 | V/LT208F03CAA0AGQNV00B | V/LT208F03CBA0AIQNV00B |
| | DN 50 | 2" | PN 16-40 | V/LT209F03CAA0AGQNV00B | V/LT209F03CBA0AIQNV00B |
| | DN 65 | 2" 1/2 | PN 16 | V/LT210E03CAA0AGQNV00B | V/LT210E03CBA0AIQNV00B |
| | DN 80 | 3" | PN 16 | V/LT211E03CAA0AGQNV00B | V/LT211E03CBA0AIQNV00B |
| | DN 100 | 4" | PN 16 | V/LT212E03CAA0AGQNV00B | V/LT212E03CBA0AIQNV00B |
| ANSI | DN 15 | 1/2" | ANSI 150 | V/LT204104CAA0AFQNV00B | V/LT204104CBA0AHQNV00B |
| | DN 20 | 3/4" | ANSI 150 | V/LT205104CAA0AFQNV00B | V/LT205104CBA0AHQNV00B |
| | DN 25 | 1" | ANSI 150 | V/LT206104CAA0AFQNV00B | V/LT206104CBA0AHQNV00B |
| | DN 32 | 1" 1/4 | ANSI 150 | V/LT207104CAA0AFQNV00B | V/LT207104CBA0AHQNV00B |
| | DN 40 | 1" 1/2 | ANSI 150 | V/LT208104CAA0AGQNV00B | V/LT208104CBA0AIQNV00B |
| | DN 50 | 2" | ANSI 150 | V/LT209104CAA0AGQNV00B | V/LT209104CBA0AIQNV00B |
| | DN 65 | 2" 1/2 | ANSI 150 | V/LT210104CAA0AGQNV00B | V/LT210104CBA0AIQNV00B |
| | DN 80 | 3" | ANSI 150 | V/LT211104CAA0AGQNV00B | V/LT211104CBA0AIQNV00B |
| | DN 100 | 4" | ANSI 150 | V/LT212104CAA0AGQNV00B | V/LT212104CBA0AIQNV00B |

### CODICI VALVOLE IN ACCIAIO AL CARBONIO ASSE LIBERO (V__) E CON LEVA (L__) - SFERA A "T"
### *CARBON STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE - "T" BALL*

| | MISURA *SIZE* | | PN/ANSI | A105 *Carbon steel* | LF2 *Carbon steel* |
|---|---|---|---|---|---|
| | DN [mm] | [inch] | | | |
| PN | DN 15 | 1/2" | PN 16-40 | V/LT304F03CAA0AFQNV00B | V/LT304F03CBA0AHQNV00B |
| | DN 20 | 3/4" | PN 16-40 | V/LT305F03CAA0AFQNV00B | V/LT305F03CBA0AHQNV00B |
| | DN 25 | 1" | PN 16-40 | V/LT306F03CAA0AFQNV00B | V/LT306F03CBA0AHQNV00B |
| | DN 32 | 1" 1/4 | PN 16-40 | V/LT307F03CAA0AFQNV00B | V/LT307F03CBA0AHQNV00B |
| | DN 40 | 1" 1/2 | PN 16-40 | V/LT308F03CAA0AGQNV00B | V/LT308F03CBA0AIQNV00B |
| | DN 50 | 2" | PN 16-40 | V/LT309F03CAA0AGQNV00B | V/LT309F03CBA0AIQNV00B |
| | DN 65 | 2" 1/2 | PN 16 | V/LT310E03CAA0AGQNV00B | V/LT310E03CBA0AIQNV00B |
| | DN 80 | 3" | PN 16 | V/LT311E03CAA0AGQNV00B | V/LT311E03CBA0AIQNV00B |
| | DN 100 | 4" | PN 16 | V/LT312E03CAA0AGQNV00B | V/LT312E03CBA0AIQNV00B |
| ANSI | DN 15 | 1/2" | ANSI 150 | V/LT304104CAA0AFQNV00B | V/LT304104CBA0AHQNV00B |
| | DN 20 | 3/4" | ANSI 150 | V/LT305104CAA0AFQNV00B | V/LT305104CBA0AHQNV00B |
| | DN 25 | 1" | ANSI 150 | V/LT306104CAA0AFQNV00B | V/LT306104CBA0AHQNV00B |
| | DN 32 | 1" 1/4 | ANSI 150 | V/LT307104CAA0AFQNV00B | V/LT307104CBA0AHQNV00B |
| | DN 40 | 1" 1/2 | ANSI 150 | V/LT308104CAA0AGQNV00B | V/LT308104CBA0AIQNV00B |
| | DN 50 | 2" | ANSI 150 | V/LT309104CAA0AGQNV00B | V/LT309104CBA0AIQNV00B |
| | DN 65 | 2" 1/2 | ANSI 150 | V/LT310104CAA0AGQNV00B | V/LT310104CBA0AIQNV00B |
| | DN 80 | 3" | ANSI 150 | V/LT311104CAA0AGQNV00B | V/LT311104CBA0AIQNV00B |
| | DN 100 | 4" | ANSI 150 | V/LT312104CAA0AGQNV00B | V/LT312104CBA0AIQNV00B |

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






## CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

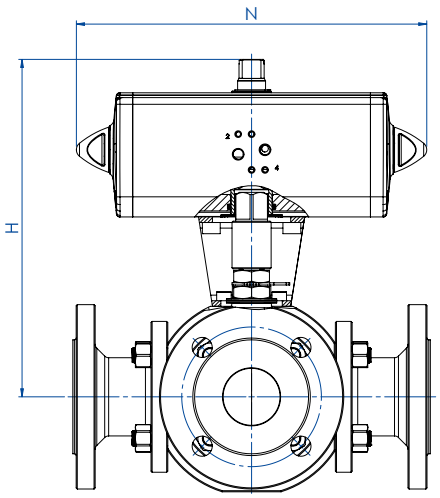
| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | DT204F03CAA0AFQNV00BAFEA0 | DT304F03CAA0AFQNV00BAFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 8,0 |
| DN 20 | 3/4" | 16-40 | DT205F03CAA0AFQNV00BAFGA0 | DT305F03CAA0AFQNV00BAFGA0 | DAN0106411S | KCNBCHD5398 | 237,0 | 208,3 | 13,4 |
| DN 25 | 1" | 16-40 | DT206F03CAA0AFQNV00BAFGA0 | DT306F03CAA0AFQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 218,8 | 19,7 |
| DN 32 | 1" 1/4 | 16-40 | DT207F03CAA0AFQNV00BAFHA0 | DT307F03CAA0AFQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 22,5 |
| DN 40 | 1" 1/2 | 16-40 | DT208F03CAA0AGQNV00BAFIA0 | DT308F03CAA0AGQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 33,3 |
| DN 50 | 2" | 16-40 | DT209F03CAA0AGQNV00BAFKA0 | DT309F03CAA0AGQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 289,0 | 46,8 |
| DN 65 | 2" 1/2 | 16 | DT210E03CAA0AGQNV00BAFKA0 | DT310E03CAA0AGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 65,6 |
| DN 80 | 3" | 16 | DT211E03CAA0AGQNV00BAFLA0 | DT311E03CAA0AGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 245,9 | 83,4 |
| DN 100 | 4" | 16 | DT212E03CAA0AGQNV00BAFNA0 | DT312E03CAA0AGQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 120,8 |

## CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 16-40 | DT204F03CBA0AHQNV00BAFEA0 | DT304F03CBA0AHQNV00BAFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 8,0 |
| DN 20 | 3/4" | 16-40 | DT205F03CBA0AHQNV00BAFGA0 | DT305F03CBA0AHQNV00BAFGA0 | DAN0106411S | KCNBCHD5398 | 237,0 | 208,3 | 13,4 |
| DN 25 | 1" | 16-40 | DT206F03CBA0AHQNV00BAFGA0 | DT306F03CBA0AHQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 218,8 | 19,7 |
| DN 32 | 1" 1/4 | 16-40 | DT207F03CBA0AHQNV00BAFHA0 | DT307F03CBA0AHQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 22,5 |
| DN 40 | 1" 1/2 | 16-40 | DT208F03CBA0AIQNV00BAFIA0 | DT308F03CBA0AIQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 33,3 |
| DN 50 | 2" | 16-40 | DT209F03CBA0AIQNV00BAFKA0 | DT309F03CBA0AIQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 289,0 | 46,8 |
| DN 65 | 2" 1/2 | 16 | DT210E03CBA0AIQNV00BAFKA0 | DT310E03CBA0AIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 65,6 |
| DN 80 | 3" | 16 | DT211E03CBA0AIQNV00BAFLA0 | DT311E03CBA0AIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 245,9 | 83,4 |
| DN 100 | 4" | 16 | DT212E03CBA0AIQNV00BAFNA0 | DT312E03CBA0AIQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 120,8 |

# THOR SPLIT BODY 3 WAY 4 SEALS - ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

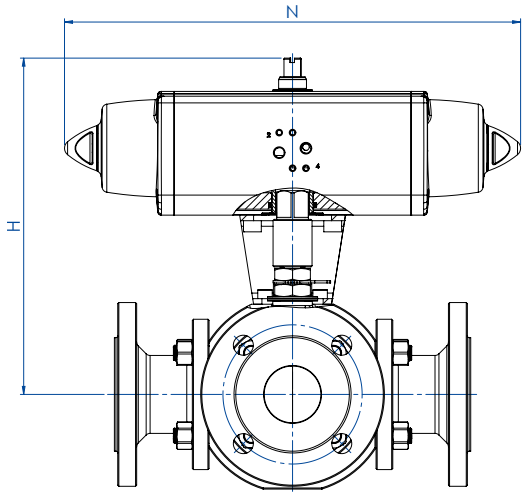
| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DT204104CAA0AFQNV00BAFEA0 | DT304104CAA0AFQNV00BAFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 7,1 |
| DN 20 | 3/4" | 150 | DT205104CAA0AFQNV00BAFGA0 | DT305104CAA0AFQNV00BAFGA0 | DAN0106411S | KCNBCHD5398 | 237,0 | 208,3 | 12,3 |
| DN 25 | 1" | 150 | DT206104CAA0AFQNV00BAFGA0 | DT306104CAA0AFQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 218,8 | 18,9 |
| DN 32 | 1" 1/4 | 150 | DT207104CAA0AFQNV00BAFHA0 | DT307104CAA0AFQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 20,1 |
| DN 40 | 1" 1/2 | 150 | DT208104CAA0AGQNV00BAFIA0 | DT308104CAA0AGQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 31,5 |
| DN 50 | 2" | 150 | DT209104CAA0AGQNV00BAFKA0 | DT309104CAA0AGQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 289,0 | 45,3 |
| DN 65 | 2" 1/2 | 150 | DT210104CAA0AGQNV00BAFKA0 | DT310104CAA0AGQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 67,4 |
| DN 80 | 3" | 150 | DT211104CAA0AGQNV00BAFLA0 | DT311104CAA0AGQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 245,9 | 82,8 |
| DN 100 | 4" | 150 | DT212104CAA0AGQNV00BAFNA0 | DT312104CAA0AGQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 125,7 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DT204104CBA0AHQNV00BAFEA0 | DT304104CBA0AHQNV00BAFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 7,1 |
| DN 20 | 3/4" | 150 | DT205104CBA0AHQNV00BAFGA0 | DT305104CBA0AHQNV00BAFGA0 | DAN0106411S | KCNBCHD5398 | 237,0 | 208,3 | 12,3 |
| DN 25 | 1" | 150 | DT206104CBA0AHQNV00BAFGA0 | DT306104CBA0AHQNV00BAFGA0 | DAN0106411S | KCNCCHD5317 | 237,0 | 218,8 | 18,9 |
| DN 32 | 1" 1/4 | 150 | DT207104CBA0AHQNV00BAFHA0 | DT307104CBA0AHQNV00BAFHA0 | DAN0120411S | KCNCCHD5317 | 244,1 | 227,0 | 20,1 |
| DN 40 | 1" 1/2 | 150 | DT208104CBA0AIQNV00BAFIA0 | DT308104CBA0AIQNV00BAFIA0 | DAN0180411S | KCNDDHD5319 | 289,9 | 269,5 | 31,5 |
| DN 50 | 2" | 150 | DT209104CBA0AIQNV00BAFKA0 | DT309104CBA0AIQNV00BAFKA0 | DAN0360411S | KCNDDHD5319 | 339,3 | 289,0 | 45,3 |
| DN 65 | 2" 1/2 | 150 | DT210104CBA0AIQNV00BAFKA0 | DT310104CBA0AIQNV00BAFKA0 | DAN0360411S | KCNEEHD5379 | 339,3 | 321,0 | 67,4 |
| DN 80 | 3" | 150 | DT211104CBA0AIQNV00BAFLA0 | DT311104CBA0AIQNV00BAFLA0 | DAN0480411S | KCNEFHD5322 | 387,6 | 245,9 | 82,8 |
| DN 100 | 4" | 150 | DT212104CBA0AIQNV00BAFNA0 | DT312104CBA0AIQNV00BAFNA0 | DAN0960411S | KCNEFHD5380 | 479,3 | 402,0 | 125,7 |

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

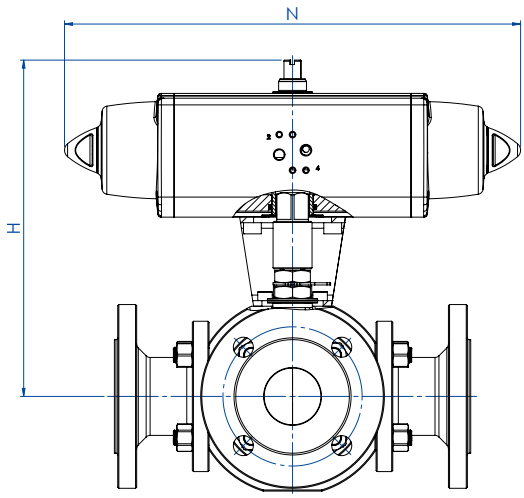
| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | ST204F03CAA0AFQNV00BAFHA0 | ST304F03CAA0AFQNV00BAFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 9,7 |
| DN 20 | 3/4" | 16-40 | ST205F03CAA0AFQNV00BAFIA0 | ST305F03CAA0AFQNV00BAFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 17,1 |
| DN 25 | 1" | 16-40 | ST206F03CAA0AFQNV00BAFIA0 | ST306F03CAA0AFQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 23,4 |
| DN 32 | 1" 1/4 | 16-40 | ST207F03CAA0AFQNV00BAFJA0 | ST307F03CAA0AFQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 27,0 |
| DN 40 | 1" 1/2 | 16-40 | ST208F03CAA0AGQNV00BAFKA0 | ST308F03CAA0AGQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 37,7 |
| DN 50 | 2" | 16-40 | ST209F03CAA0AGQNV00BAFMA0 | ST309F03CAA0AGQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 57,5 |
| DN 65 | 2" 1/2 | 16 | ST210E03CAA0AGQNV00BAFMA0 | ST310E03CAA0AGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 76,4 |
| DN 80 | 3" | 16 | ST211E03CAA0AGQNV00BAFNA0 | ST311E03CAA0AGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 97,0 |
| DN 100 | 4" | 16 | ST212E03CAA0AGQNV00BAFRA0 | ST312E03CAA0AGQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 146,4 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | ST204F03CBA0AHQNV00BAFHA0 | ST304F03CBA0AHQNV00BAFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 9,7 |
| DN 20 | 3/4" | 16-40 | ST205F03CBA0AHQNV00BAFIA0 | ST305F03CBA0AHQNV00BAFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 17,1 |
| DN 25 | 1" | 16-40 | ST206F03CBA0AHQNV00BAFIA0 | ST306F03CBA0AHQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 23,4 |
| DN 32 | 1" 1/4 | 16-40 | ST207F03CBA0AHQNV00BAFJA0 | ST307F03CBA0AHQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 27,0 |
| DN 40 | 1" 1/2 | 16-40 | ST208F03CBA0AIQNV00BAFKA0 | ST308F03CBA0AIQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 37,7 |
| DN 50 | 2" | 16-40 | ST209F03CBA0AIQNV00BAFMA0 | ST309F03CBA0AIQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 57,5 |
| DN 65 | 2" 1/2 | 16 | ST210E03CBA0AIQNV00BAFMA0 | ST310E03CBA0AIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 76,4 |
| DN 80 | 3" | 16 | ST211E03CBA0AIQNV00BAFNA0 | ST311E03CBA0AIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 97,0 |
| DN 100 | 4" | 16 | ST212E03CBA0AIQNV00BAFRA0 | ST312E03CBA0AIQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 146,4 |

# THOR SPLIT BODY 3 WAY 4 SEALS - ANSI 150
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN A105 ACCIAIO AL CARBONIO *ITEM CODES IN A105 CARBON STEEL*

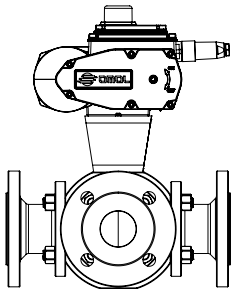
| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 150 | ST204104CAA0AFQNV00BAFHA0 | ST304104CAA0AFQNV00BAFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 8,8 |
| DN 20 | 3/4" | 150 | ST205104CAA0AFQNV00BAFIA0 | ST305104CAA0AFQNV00BAFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 16,0 |
| DN 25 | 1" | 150 | ST206104CAA0AFQNV00BAFIA0 | ST306104CAA0AFQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 22,6 |
| DN 32 | 1" 1/4 | 150 | ST207104CAA0AFQNV00BAFJA0 | ST307104CAA0AFQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 24,6 |
| DN 40 | 1" 1/2 | 150 | ST208104CAA0AGQNV00BAFKA0 | ST308104CAA0AGQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 35,9 |
| DN 50 | 2" | 150 | ST209104CAA0AGQNV00BAFMA0 | ST309104CAA0AGQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 56,0 |
| DN 65 | 2" 1/2 | 150 | ST210104CAA0AGQNV00BAFMA0 | ST310104CAA0AGQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 78,2 |
| DN 80 | 3" | 150 | ST211104CAA0AGQNV00BAFNA0 | ST311104CAA0AGQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 96,4 |
| DN 100 | 4" | 150 | ST212104CAA0AGQNV00BAFRA0 | ST312104CAA0AGQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 151,3 |

### CODICI ARTICOLI IN LF2 ACCIAIO AL CARBONIO *ITEM CODES IN LF2 CARBON STEEL*

| MISURA *SIZE* DN [mm] | [inch] | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | 150 | ST204104CBA0AHQNV00BAFHA0 | ST304104CBA0AHQNV00BAFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 8,8 |
| DN 20 | 3/4" | 150 | ST205104CBA0AHQNV00BAFIA0 | ST305104CBA0AHQNV00BAFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 16,0 |
| DN 25 | 1" | 150 | ST206104CBA0AHQNV00BAFIA0 | ST306104CBA0AHQNV00BAFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 22,6 |
| DN 32 | 1" 1/4 | 150 | ST207104CBA0AHQNV00BAFJA0 | ST307104CBA0AHQNV00BAFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 24,6 |
| DN 40 | 1" 1/2 | 150 | ST208104CBA0AIQNV00BAFKA0 | ST308104CBA0AIQNV00BAFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 35,9 |
| DN 50 | 2" | 150 | ST209104CBA0AIQNV00BAFMA0 | ST309104CBA0AIQNV00BAFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 56,0 |
| DN 65 | 2" 1/2 | 150 | ST210104CBA0AIQNV00BAFMA0 | ST310104CBA0AIQNV00BAFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 78,2 |
| DN 80 | 3" | 150 | ST211104CBA0AIQNV00BAFNA0 | ST311104CBA0AIQNV00BAFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 96,4 |
| DN 100 | 4" | 150 | ST212104CBA0AIQNV00BAFRA0 | ST312104CBA0AIQNV00BAFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 151,3 |

A richiesta, articoli disponibili anche con attuatore elettrico:
*On request, items available also with electric actuator:*





# THOR SPLIT BODY 3 WAY 4 SEALS PN 16-40 ANSI 150
# ACCIAIO INOX *STAINLESS STEEL*



### ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft seat TFM 1600.
- Norme per flange d'attacco: EN1092-1, ASME B16.5.
- Classi di pressione : ANSI 150; PN16-40.
- Classe di tenuta: EN12266-1 rate A.
- Temperatura di utilizzo: -40°C +150°C.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in TFM1600.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.

### *STANDARD EXECUTIONS*
- *Floating ball, full bore.*
- *Soft-seat seal TFM 1600.*
- *Standard for connecting flanges: EN1092-1, ASME B16.5.*
- *Pressure Class : ANSI 150; PN16-40.*
- *Tightness Class: EN12266-1 rate A.*
- *Working temperature: -40°C +150°C.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: TFM1600 V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*

### ESECUZIONI A RICHIESTA
- Per altri tipi di flangiatura contattare il nostro ufficio commerciale.
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF). Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Leva inox.
- Dadi e molle stelo inox.
- Per esecuzioni speciali con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX **A RICHIESTA.**

### *EXECUTIONS ON REQUEST*
- *For other flanges type please contact our sales department.*
- *Sealing in: PTFE reinforced with glass (RPTFE-GF), PTFE reinforced with carbon-graphite (RPTFE-CF). For other types of materials please contact our sales department.*
- *Stainless steel lever.*
- *Stainless steel stem nuts and springs.*
- *For special versions with materials (body/ball/stem) different from the standard please contact our sales department.*
- *ATEX marking and certificate **ON REQUEST.***

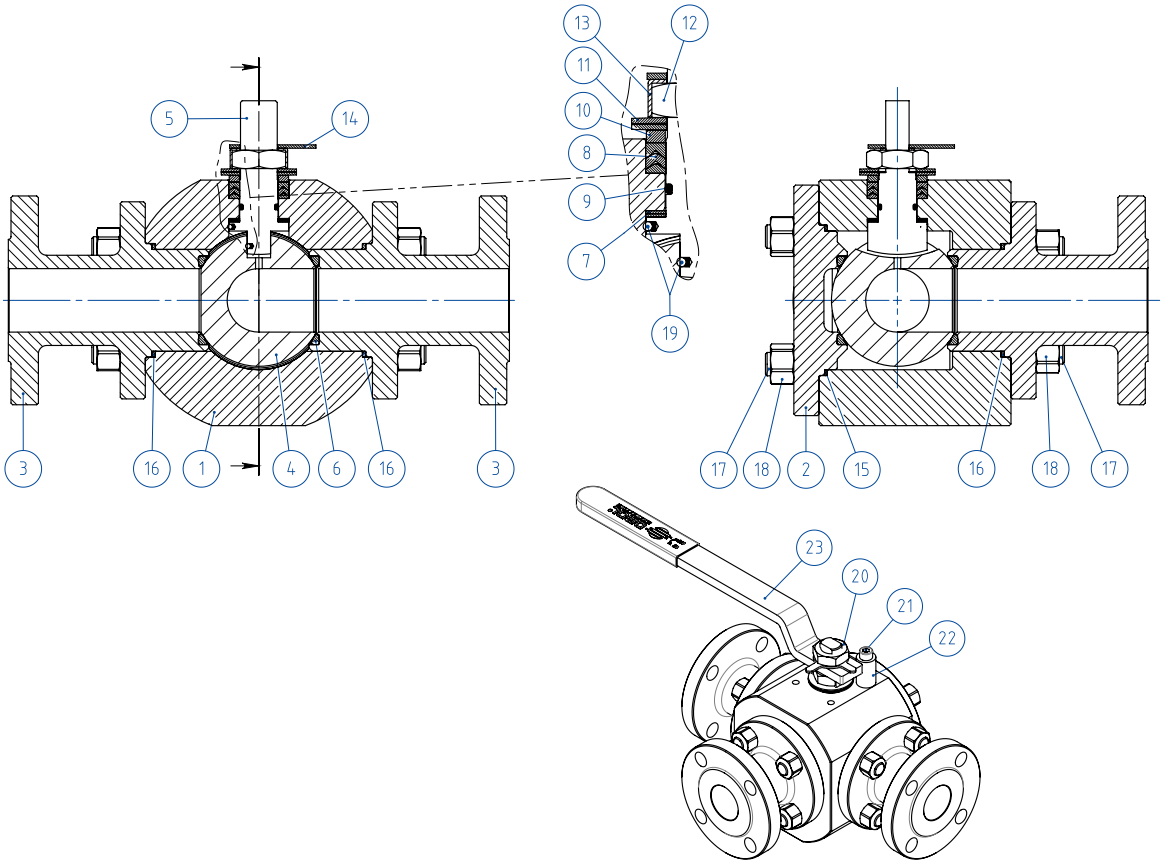
### CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.
- Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.
- Conforme alla direttiva ATEX 2014/34/UE, certificato ATEX **A RICHIESTA.**

### *CERTIFICATIONS*
- *In compliance with European Directive 2014/68/EU PED; Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440.*
- *Safety integrity level up to SIL 3 according to the IEC 61508.*
- *In compliance with ATEX 2014/34/EU Directive , ATEX certificate **ON REQUEST.***

### NORME DI PROGETTAZIONE
- Spessori corpo in accordo a ASME B16.34, ASME VIII div.1, EN12516.
- Materiali e rating in accordo ad ASME B16.34 per valvole ANSI ed EN12516 per valvole PN.

### *ENGINEERING STANDARDS*
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN12516.*
- *Materials and rating in compliance with ASME B16.34 for ANSI valves and EN12516 for PN valves.*

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* SPLIT BODY PN16-40 ANSI 150 | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **316 *Stainless steel*** |
| 1 | Corpo *Body* | ASTM A182 F316 / A479TP.316 |
| 2 | Coperchio *Cover* | |
| 3 | Terminale *Connector* | |
| 4 | Sfera *Ball* | ASTM A351 CF8M |
| 5 | Stelo *Stem* | A564 TP.630 (17-4PH) |
| 6* | Seggio *Seat* | TFM1600 |
| 7* | Tenuta inferiore stelo *Stem lower sealing* | TFM1600 |
| 8* | Pacco a V *Chevron rings* | TFM1600 |
| 9* | O-ring stelo *Stem O-ring* | FKM |
| 10 | Anello premi guarnizione *Packing gland ring* | AISI 304 |
| 11 | Molle stelo *Stem springs* | 50CrV4 ZINCATO -*galvanized* (xx) |
| 12 | Dado stelo *Stem nut* | UNI 3740-1 6S ZINCATO - *galvanized* (x) |
| 13 | Piastra blocca dado *Stop nut plate* | 304 S.S. |
| 14 | Indicatore *Indicator* | 304 S.S. |
| 15* | Guarnizione Corpo-Coperchio *Body-Cover nut gasket* | GRAFOIL |
| 16* | Guarnizione Corpo-Terminale *Body-Connector gasket* | GRAFOIL |
| 17 | Tiranti *Stud bolt* | ASTM A193-B8 |
| 18 | Dadi *Nut* | ASTM A194-Gr.8 |
| 19 | Dispositivo antistatico *Antistatic device* | 316 S.S. |
| 20 | Controdado *Lock nut* | UNI 3740-1 6S ZINCATO - *galvanized* (x) |
| 21 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |
| 22 | Fermo di posizione *Holder screw* | Acciaio al carbonio zincato - *zinc coated carbon steel* (x) |
| 23 | Leva *Lever* | Fe37 zincato - *galvanized* (x) |
| * Componenti del kit di guarnizioni *Components of seals kit* | | |

A richiesta disponibile in: *Available on request:*
(x): 304 s.s.
(xx): 301 s.s.

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*



### CODICI VALVOLE IN ACCIAIO INOX ASSE LIBERO (V__) E CON LEVA (L__) -PN-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -PN-*

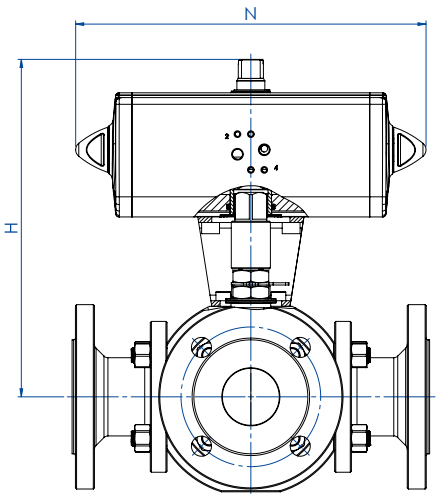
| MISURA *SIZE* | | PN | 316 *Stainless steel - "L" BALL* | 316 *Stainless steel - "T" BALL* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | PN 16-40 | V/LT204F03ABA0ADQNV000 | V/LT304F03ABA0ADQNV000 |
| DN 20 | 3/4" | PN 16-40 | V/LT205F03ABA0ADQNV000 | V/LT305F03ABA0ADQNV000 |
| DN 25 | 1" | PN 16-40 | V/LT206F03ABA0ADQNV000 | V/LT306F03ABA0ADQNV000 |
| DN 32 | 1" 1/4 | PN 16-40 | V/LT207F03ABA0ADQNV000 | V/LT307F03ABA0ADQNV000 |
| DN 40 | 1" 1/2 | PN 16-40 | V/LT208F03ABA0AEQNV000 | V/LT308F03ABA0AEQNV000 |
| DN 50 | 2" | PN 16-40 | V/LT209F03ABA0AEQNV000 | V/LT309F03ABA0AEQNV000 |
| DN 65 | 2" 1/2 | PN 16 | V/LT210E03ABA0AEQNV000 | V/LT310E03ABA0AEQNV000 |
| DN 80 | 3" | PN 16 | V/LT211E03ABA0AEQNV000 | V/LT311E03ABA0AEQNV000 |
| DN 100 | 4" | PN 16 | V/LT212E03ABA0AEQNV000 | V/LT312E03ABA0AEQNV000 |

### CODICI VALVOLE IN ACCIAIO INOX ASSE LIBERO (V__) E CON LEVA (L__) -ANSI-
### *STAINLESS STEEL BARE SHAFT (V__) AND LEVER (L__) OPERATED VALVE CODE -ANSI-*

| MISURA *SIZE* | | ANSI | 316 *Stainless steel - "L" BALL* | 316 *Stainless steel - "T" BALL* |
|---|---|---|---|---|
| DN [mm] | [inch] | | | |
| DN 15 | 1/2" | ANSI 150 | V/LT204104ABA0ADQNV000 | V/LT304104ABA0ADQNV000 |
| DN 20 | 3/4" | ANSI 150 | V/LT205104ABA0ADQNV000 | V/LT305104ABA0ADQNV000 |
| DN 25 | 1" | ANSI 150 | V/LT206104ABA0ADQNV000 | V/LT306104ABA0ADQNV000 |
| DN 32 | 1" 1/4 | ANSI 150 | V/LT207104ABA0ADQNV000 | V/LT307104ABA0ADQNV000 |
| DN 40 | 1" 1/2 | ANSI 150 | V/LT208104ABA0AEQNV000 | V/LT308104ABA0AEQNV000 |
| DN 50 | 2" | ANSI 150 | V/LT209104ABA0AEQNV000 | V/LT309104ABA0AEQNV000 |
| DN 65 | 2" 1/2 | ANSI 150 | V/LT210104ABA0AEQNV000 | V/LT310104ABA0AEQNV000 |
| DN 80 | 3" | ANSI 150 | V/LT211104ABA0AEQNV000 | V/LT311104ABA0AEQNV000 |
| DN 100 | 4" | ANSI 150 | V/LT212104ABA0AEQNV000 | V/LT312104ABA0AEQNV000 |

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINELSS STEEL -PN-*

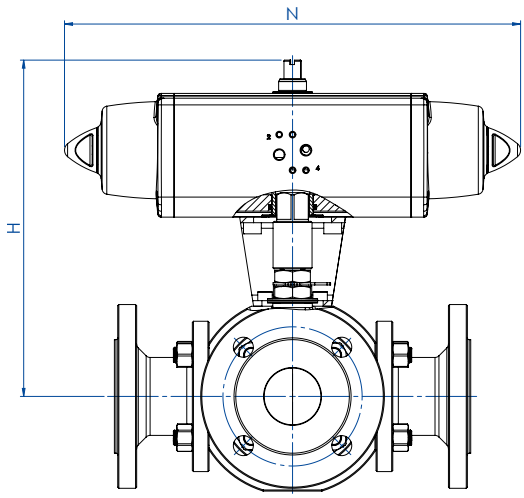
| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | DT204F03ABA0ADQNV000AFEA0 | DT304F03ABA0ADQNV000AFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 8,0 |
| DN 20 | 3/4" | 16-40 | DT205F03ABA0ADQNV000AFGA0 | DT305F03ABA0ADQNV000AFGA0 | DAN01060411S | KCNBCHD5398 | 237,0 | 208,3 | 13,4 |
| DN 25 | 1" | 16-40 | DT206F03ABA0ADQNV000AFGA0 | DT306F03ABA0ADQNV000AFGA0 | DAN01060411S | KCNCCHD5317 | 237,0 | 218,8 | 19,7 |
| DN 32 | 1" 1/4 | 16-40 | DT207F03ABA0ADQNV000AFHA0 | DT307F03ABA0ADQNV000AFHA0 | DAN01200411S | KCNCCHD5317 | 244,1 | 227,0 | 22,5 |
| DN 40 | 1" 1/2 | 16-40 | DT208F03ABA0AEQNV000AFIA0 | DT308F03ABA0AEQNV000AFIA0 | DAN01800411S | KCNDDHD5319 | 289,9 | 269,5 | 33,3 |
| DN 50 | 2" | 16-40 | DT209F03ABA0AEQNV000AFKA0 | DT309F03ABA0AEQNV000AFKA0 | DAN03600411S | KCNDDHD5319 | 339,3 | 289,0 | 46,8 |
| DN 65 | 2" 1/2 | 16 | DT210E03ABA0AEQNV000AFKA0 | DT310E03ABA0AEQNV000AFKA0 | DAN03600411S | KCNEEHD5379 | 339,3 | 321,0 | 65,6 |
| DN 80 | 3" | 16 | DT211E03ABA0AEQNV000AFLA0 | DT311E03ABA0AEQNV000AFLA0 | DAN04800411S | KCNEFHD5322 | 387,6 | 245,9 | 83,4 |
| DN 100 | 4" | 16 | DT212E03ABA0AEQNV000AFNA0 | DT312E03ABA0AEQNV000AFNA0 | DAN09600411S | KCNEFHD5380 | 479,3 | 402,0 | 120,8 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | DT204104ABA0ADQNV000AFEA0 | DT304104ABA0ADQNV000AFEA0 | DAN00060412S | KCNACHD5263 | 198,0 | 185,4 | 7,1 |
| DN 20 | 3/4" | 150 | DT205104ABA0ADQNV000AFGA0 | DT305104ABA0ADQNV000AFGA0 | DAN01060411S | KCNBCHD5398 | 237,0 | 208,3 | 12,3 |
| DN 25 | 1" | 150 | DT206104ABA0ADQNV000AFGA0 | DT306104ABA0ADQNV000AFGA0 | DAN01060411S | KCNCCHD5317 | 237,0 | 218,8 | 18,9 |
| DN 32 | 1" 1/4 | 150 | DT207104ABA0ADQNV000AFHA0 | DT307104ABA0ADQNV000AFHA0 | DAN01200411S | KCNCCHD5317 | 244,1 | 227,0 | 20,1 |
| DN 40 | 1" 1/2 | 150 | DT208104ABA0AEQNV000AFIA0 | DT308104ABA0AEQNV000AFIA0 | DAN01800411S | KCNDDHD5319 | 289,9 | 269,5 | 31,5 |
| DN 50 | 2" | 150 | DT209104ABA0AEQNV000AFKA0 | DT309104ABA0AEQNV000AFKA0 | DAN03600411S | KCNDDHD5319 | 339,3 | 289,0 | 45,3 |
| DN 65 | 2" 1/2 | 150 | DT210104ABA0AEQNV000AFKA0 | DT310104ABA0AEQNV000AFKA0 | DAN03600411S | KCNEEHD5379 | 339,3 | 321,0 | 67,4 |
| DN 80 | 3" | 150 | DT211104ABA0AEQNV000AFLA0 | DT311104ABA0AEQNV000AFLA0 | DAN04800411S | KCNEFHD5322 | 387,6 | 245,9 | 82,8 |
| DN 100 | 4" | 150 | DT212104ABA0AEQNV000AFNA0 | DT312104ABA0AEQNV000AFNA0 | DAN09600411S | KCNEFHD5380 | 479,3 | 402,0 | 125,7 |

# THOR SPLIT BODY 3 WAY 4 SEALS - PN 16-40 ANSI 150
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR*






### CODICI ARTICOLI IN 316 ACCIAIO INOX -PN- *ITEM CODES IN 316 STAINELSS STEEL -PN-*

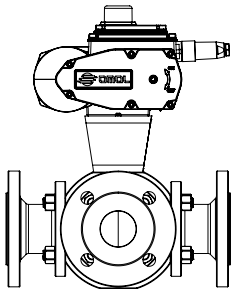
| MISURA *SIZE* | | PN | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 16-40 | ST204F03ABA0ADQNV000AFHA0 | ST304F03ABA0ADQNV000AFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 9,7 |
| DN 20 | 3/4" | 16-40 | ST205F03ABA0ADQNV000AFIA0 | ST305F03ABA0ADQNV000AFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 17,1 |
| DN 25 | 1" | 16-40 | ST206F03ABA0ADQNV000AFIA0 | ST306F03ABA0ADQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 23,4 |
| DN 32 | 1" 1/4 | 16-40 | ST207F03ABA0ADQNV000AFJA0 | ST307F03ABA0ADQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 27,0 |
| DN 40 | 1" 1/2 | 16-40 | ST208F03ABA0AEQNV000AFKA0 | ST308F03ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 37,7 |
| DN 50 | 2" | 16-40 | ST209F03ABA0AEQNV000AFMA0 | ST309F03ABA0AEQNV000AFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 57,5 |
| DN 65 | 2" 1/2 | 16 | ST210E03ABA0AEQNV000AFMA0 | ST310E03ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 76,4 |
| DN 80 | 3" | 16 | ST211E03ABA0AEQNV000AFNA0 | ST311E03ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 97,0 |
| DN 100 | 4" | 16 | ST212E03ABA0AEQNV000AFRA0 | ST312E03ABA0AEQNV000AFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 146,4 |

### CODICI ARTICOLI IN 316 ACCIAIO INOX -ANSI- *ITEM CODES IN 316 STAINLESS STEEL -ANSI-*

| MISURA *SIZE* | | ANSI | CODICE ARTICOLO -SFERA A "L"- *ITEM CODE -"L" BALL-* | CODICE ARTICOLO -SFERA A "T"- *ITEM CODE -"T" BALL-* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 150 | ST204104ABA0ADQNV000AFHA0 | ST304104ABA0ADQNV000AFHA0 | SRN0060401S | KCNACHD5399 | 338,5 | 202,0 | 8,8 |
| DN 20 | 3/4" | 150 | ST205104ABA0ADQNV000AFIA0 | ST305104ABA0ADQNV000AFIA0 | SRN0090401S | KCNBDHD5400 | 393,7 | 242,5 | 16,0 |
| DN 25 | 1" | 150 | ST206104ABA0ADQNV000AFIA0 | ST306104ABA0ADQNV000AFIA0 | SRN0090401S | KCNCDHD5329 | 393,7 | 253,0 | 22,6 |
| DN 32 | 1" 1/4 | 150 | ST207104ABA0ADQNV000AFJA0 | ST307104ABA0ADQNV000AFJA0 | SRN0120401S | KCNCDHD5329 | 409,6 | 261,1 | 24,6 |
| DN 40 | 1" 1/2 | 150 | ST208104ABA0AEQNV000AFKA0 | ST308104ABA0AEQNV000AFKA0 | SRN0180401S | KCNDDHD5383 | 474,0 | 280,0 | 35,9 |
| DN 50 | 2" | 150 | ST209104ABA0AEQNV000AFMA0 | ST309104ABA0AEQNV000AFMA0 | SRN0360401S | KCNDEHD5330 | 613,0 | 339,0 | 56,0 |
| DN 65 | 2" 1/2 | 150 | ST210104ABA0AEQNV000AFMA0 | ST310104ABA0AEQNV000AFMA0 | SRN0360401S | KCNEFHD5322 | 613,0 | 351,0 | 78,2 |
| DN 80 | 3" | 150 | ST211104ABA0AEQNV000AFNA0 | ST311104ABA0AEQNV000AFNA0 | SRN0480401S | KCNEFHD5392 | 648,2 | 279,0 | 96,4 |
| DN 100 | 4" | 150 | ST212104ABA0AEQNV000AFRA0 | ST312104ABA0AEQNV000AFRA0 | SRN0960401S | KCNEGHD5384 | 828,0 | 441,7 | 151,3 |

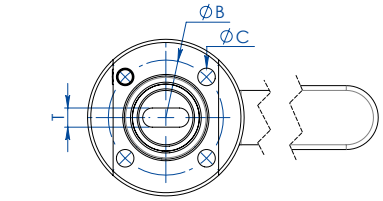
A richiesta, articoli disponibili anche con attuatore elettrico:
*On request, items available also with electric actuator:*

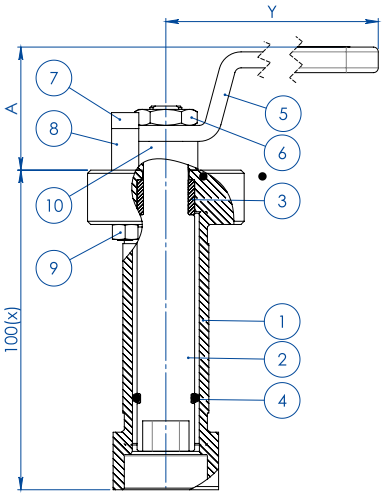


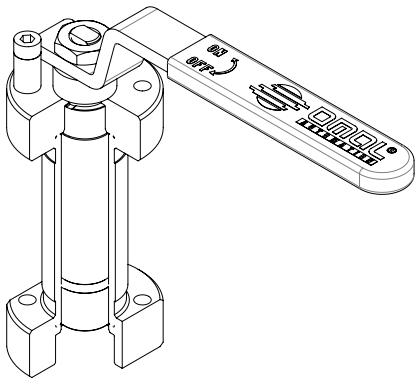


# MAGNUM & THOR ACCESSORI *ACCESSORIES*

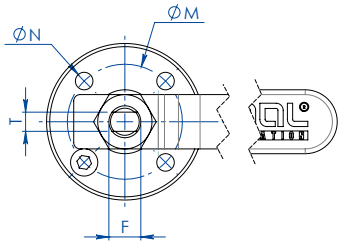
## PROLUNGA GUIDATA SALDATA A LEVA *WELDED STEM EXTENSION WITH LEVER*



(x): A richiesta disponibili diverse misure
*On request available different sizes*




| MATERIALI *MATERIALS* | | |
|---|---|---|
| **PART. N°** | **DESCRIZIONE - *DESCRIPTION*** | **MATERIALE - *MATERIAL*** |
| 1 | Prolunga *Extension* | AISI304 S.S. |
| 2 | Perno *Pin* | AISI 430 F |
| 3 | Bussola *Bush* | DELRIN |
| 4 | O-RING *O-RING* | NBR |
| 5 | Leva *Lever* | Fe 37 *galvanized* (*) |
| 6 | Dado *Nut* | *galvanized carbon steel* (*) |
| 7 | Fermo leva *Holder Lever* | *galvanized carbon steel* (*) |
| 8 | Vite fermo leva *Holder screw* | A2-70 |
| 9 | Dado fermo leva *Lever nut* | A2 (**) |

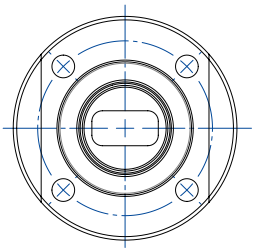
(*): a richiesta disponibili in 304 S.S. *On request available in Aisi 304 s.s.*
(**): non presente su valvole con attacco iso F04 *No available on valves with Iso connection F04*

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ISO** | **A** | **B** | **C** | **M** | **N** | **F/T** | **Y** |
| **F03** | 36 | 36 | 5,5 | 36 | 5,5 | 10/6 | 140 |
| **F04** | 43 | 42 | 5,5 | 42 | M5 | 12/8 | 150 |
| **F05** | 45 | 50 | 6,5 | 50 | 6,5 | 16/10 | 275 |
| **F07** | 54 | 70 | 9 | 70 | 9 | 22/14 | 350 |
| **F10** | 76 | 102 | 11 | 102 | 11 | 30/18 | 450 |

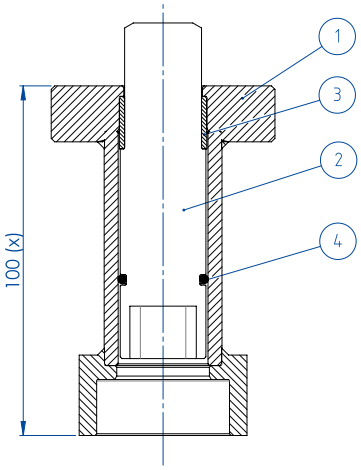
**NOTA**: Il codice della prolunga dipende dal tipo di azionamento e dall'attacco valvola; richiedere in fase d'ordine.
***NOTE**: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order"*

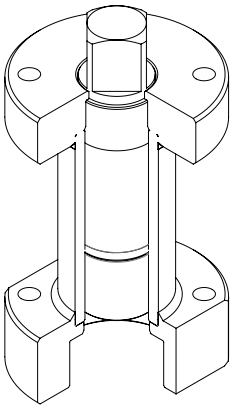
# MAGNUM & THOR ACCESSORI *ACCESSORIES*

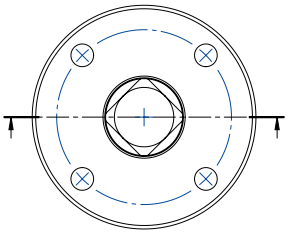
## PROLUNGA GUIDATA PER ATTUATORE *STEM EXTENSION FOR ACTUATORS*



**NOTA: Le dimensioni dipendono dalle dimensioni dell'attacco valvola**
***NOTE: Dimensions depending from valve's connection***





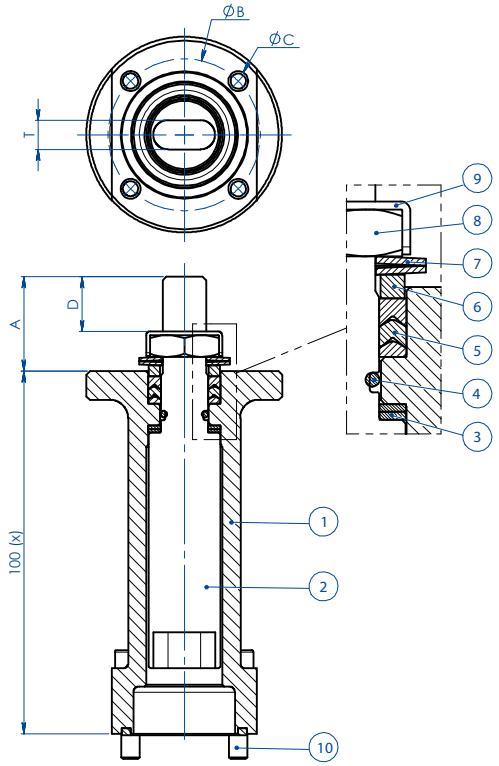
**NOTA: Le dimensioni dipendono dalla taglia dell'attuatore**
***NOTE: Dimensions depending from actuator's size***

| MATERIALI *MATERIALS* | | |
|---|---|---|
| **PART. N°** | **DESCRIZIONE *DESCRIPTION*** | **MATERIALE *MATERIAL*** |
| 1 | Prolunga *Extension* | 304 S.S. |
| 2 | Perno *Pin* | AISI 430 F |
| 3 | Bussola *Bush* | DELRIN |
| 4 | O-RING *O-RING* | NBR |

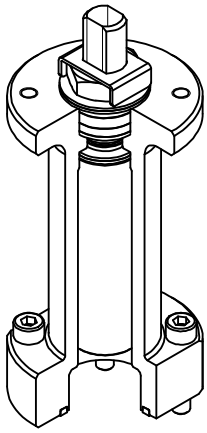
**NOTA**: Il codice della prolunga dipende dal tipo di azionamento e dall'attacco valvola; richiedere in fase d'ordine.
***NOTE**: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order"*

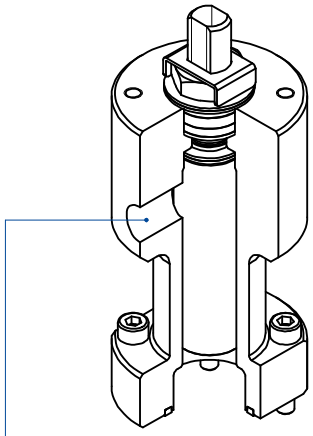
# MAGNUM & THOR ACCESSORI *ACCESSORIES*

## PROLUNGA CON TENUTA AGGIUNTIVA *STEM EXTENSION WITH ADDITIONAL SEAL*

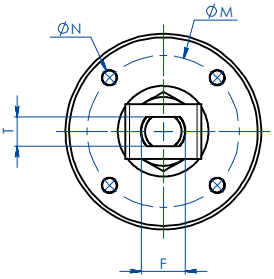



(x): A richiesta disponibili diverse misure
*On request available different sizes*





A richiesta disponibile anche la versione con presa per Sniffer
*Stem extension with sniffer also available on request*




| MATERIALI *MATERIALS* | | |
|---|---|---|
| **PART. N°** | **DESCRIZIONE - *DESCRIPTION*** | **MATERIALE - *MATERIAL*** |
| 1 | Prolunga *Extension* | 304 s.s. |
| 2 | Perno *Pin* | AA564 TP.630 (17-4ph) |
| 3 | Anello Antifrizione *Bottom Sealing* | TFM1600 |
| 4 | O-Ring *O-Ring* | FKM |
| 5 | Pacco A V *Chevron Ring* | TFM1600 |
| 6 | Anello Premiguarnizione *Packing Gland Ring* | 304 s.s. |
| 7 | Molle A Tazza *Spring Washer* | 50CrV4 Zincato - *Galvanized* |
| 8 | Dado Stelo *Stem Nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 9 | Piastra Blocca Dado *Stop Nut Plate* | 304 s.s. |
| 10 | Vite *Socket Head Cap Screw* | A2-70 UNI 3740 (304 s.s.) |

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ISO** | **A** | **B** | **C** | **D** | **F/T** | **M** | **N** |
| **F03** | 20 | 36 | 5,5 | 10,22 | 10/6 | 36 | M5 |
| **F04** | 26 | 42 | 5,5 | 15,08 | 12/8 | 42 | M5 |
| **F05** | 35 | 50 | 6,5 | 21,14 | 16/10 | 50 | M6 |
| **F07** | 47,5 | 65 | 8,5 | 28,41 | 22/14 | 70 | M8 |
| **F10** | 61 | 102 | 10,5 | 35,13 | 30/18 | 102 | M10 |

**NOTA**: Il codice della prolunga dipende dal tipo di azionamento e dall'attacco valvola; richiedere in fase d'ordine.
***NOTE**: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order.*

# ESECUZIONI SPECIALI A RICHIESTA PER MAGNUM & THOR
## *SPECIAL EXECUTIONS ON REQUEST FOR MAGNUM & THOR*



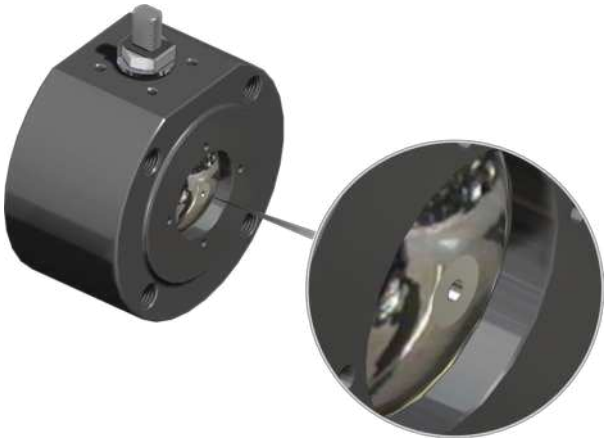
**LEVA E BOX FINECORSA**
***LEVER AND LIMIT SWITCH BOX***



**DISPOSITIVO LUCCHETTABILE**
***LOCKING DEVICE***



**FORI LISCI PASSANTI**
***THROUGH HOLES***



**FORO DI COMPENSAZIONE**
***PRESSURE RELIEF HOLE***

# ESECUZIONI SPECIALI A RICHIESTA PER MAGNUM & THOR
# *SPECIAL EXECUTIONS ON REQUEST FOR MAGNUM & THOR*



**DEAD MAN**
***DEAD MAN***



**ESECUZIONE FONDO SERBATOIO**
***TANK EXECUTION***



**RIDUTTORE MANUALE**
***MANUAL GEAR-BOX***



**RIDUTTORE MANUALE E BOX FINECORSA**
***MANUAL GEAR-BOX AND LIMIT SWITCH BOX***



Certificate of Authority to use the Official API Monogram

License Number: 6D-1007 ORIGINAL

The American Petroleum Institute hereby grants to

OMAL SPA
Via Ponte Nuovo, 11
Rodengo Saiano, Brescia
Italy

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-1007

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: AUGUST 13, 2019
Expiration Date: AUGUST 13, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

CORPORATE SEAL

**▲ API 6D (Valvole Split Body THOR *Split Body THOR valves*)**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole a sfera per impianti del settore del petrolio e dal gas naturale in accordo allo standard API6D ed autorizzazione all'applicazione del Monogramma API da parte dell'American Petroleum Institute.

*Certification of the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of ball valves for installations in the sector of oil and natural gas according to the API6D Spec. and license by American Petroleum Institute to the API monogram application.*



TÜV NORD

CERTIFICATE

This certifies, that the company

Omal S.p.A.
Via Ponte Nuovo, 11
25050 Rodengo Saiano (BS)
Italy

Is authorized to provide the product mentioned below

Description of product: 2-ways wafer, split wafer and split body floating ball valve series Magnum, Thor

In accordance with: EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7

Registration No 20 20534 02
Test Report No PS-20534-20-L-02
File reference 20534-02

Validity
from 2020-07-29
until 2023-07-29

TÜV NORD Italia S.r.l. (TÜV NORD Group)
Via Turati, 70 20023 Cerro Maggiore (MI)

www.tuev-nord.it

Cerro Maggiore, 2020-07-29
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

**▲ SIL**

Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification of compliance to the IEC 61508 requirements, of the functional safety level provided by the product intended to be integrated in systems with required safety integrity level up to SIL 3.*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura :
BALL VALVES

Type(s)/ Type(s) / Tipo(i) : Wafer type, Split body type, Split Wafer type steel ball valves / Two-piece, Three-piece steel ball valve High-pressure - threaded ends / Two-piece brass ball valves threaded ends

Marquage/ Marking / Marcatura : Ex II 2 GD

Dépositaire / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1).b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 February 2014, acknowledges receipt of file according to the procedure described chapter 3, article 13 1). b). ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : V5-19 datée 10/10/2019
est consignée sous le numéro d'enregistrement :
n° INERIS-EQEN 035241/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

The technical documentation referenced : V5-19 dated 10/10/2019
is consigned under the reference :
no INERIS-EQEN 035241/19.
Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

La documentazione tecnica di riferimento : V5-19 datata 10/10/2019
è depositata con il numero di registrazione :
n° INERIS-EQEN 035241/19.
Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07

Validity completion date : 2029.11.07

Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,

The Chief Executive Officer of INERIS, By delegation,

Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél: +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 internet www.ineris.fr

Etablissement public à caractère industriel et commercial - RCS Compiègne B 381 964 934 - Siret 381 964 921 00019 - APE 7120B - TVA intracom FR 71 381 964 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ЕАЭС RU C-IT.АА87.В.00308/20

Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Органы по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНРО ЦСВ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: cve@cve.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» НЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНРО ЦСВ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации Преловский Николай Николаевич

М.П.

Эксперт (эксперт-аудитор) (эксперты-аудиторы)) Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



FUGITIVE EMISSION CERTIFICATE

CERTIFICATE NUMBER: FG-063579-647

CLIENT: OMAL
ADDRESS: Via Ponte Nuovo, 11 25050 Rodengo Saiano (BS) - Italy

REPORT NUMBER: 38

SCOPE OF REPORT: Fugitive Emission test carried out according to: **ISO 15848-1 Edition 2015**

max BAR: **100,0 Bar**

max °C: **+200°C**

QUALIFIED VALVE: Size: 1"1/2 (Stem Dia. 23mm)
Rating Class: ANSI 600
Drawing N°: Y_4700
Type: SPLIT BODY BALL VALVE

RANGE AND TYPE OF VALVES COVERED: **ISO FE BH-C03-SSA0-I(-29°C, 200°C)-ANSI600-ISO 15848-1**
**In accordance with ISO 15848, we also extend the certification to valve with same stem and body seals material, design (shape) and construction, with stem size 50% lower and 200% higher than stem tested.**
**Paragraph 8 e): Stem tested Ø23 mm => Ø11.5 mm ≤ Stem certified ≤ Ø46 mm**
**Paragraph 8 f): Pressure ≤ANSI600**
**The valve certified in accordance with paragraph 8 e) & 8 f) are:**
**From DN15 FB to DN 100 FB , ANSI ≤ cl.600 and PN ≤ 100 of series M4, T1.**
**From DN20 RB to DN150 RB , ANSI ≤ cl.600 and PN ≤ 100 of series T1.**

TÜV INSPECTOR Mastrogiacomo Simona Review Witness

CERTIFICATION DATE 07/09/2015

MANAGEMENT INSPECTION SERVICE Frecchiami Mauro

TÜV Italia s.r.l. - TÜV SÜD Group

**▲ FUGITIVE EMISSION**

Certificazione di conformità ai requisiti di non emissione verso l'esterno di sostanze nocive, in accordo con la norma UNI EN ISO 15848-1, per applicazione con fluidi volatili inquinanti e pericolosi.

*Certification in compliance with UNI EN ISO 15848-1 requirements of non-emission of harmful substances to the outside, referring to volatile air pollutants and hazardous fluids applications.*



FIRE SAFE CERTIFICATE

CERTIFICATE NUMBER: **FS-063579-228**

CLIENT: **OMAL**
ADDRESS: **Via Ponte Nuovo, 11**
**25050 Rodengo Saiano (BS)- Italy**

REPORT NUMBER: **1253**

SCOPE OF REPORT: Fire Safe test carried out according to: **API 607 Sixth Edition September 2010, ISO 10497 Third Edition September 2010**

max BAR: **114,9 Bar**

max °C: **+922°C**

QUALIFIED VALVE: Size: 2"
Rating Class: PN63
Drawing N°: Y_2156
Model: V587/VM4 (MAGNUM)
Type: FLOATING BALL VALVE SPLIT WAFER

RANGE AND TYPE OF VALVES COVERED: NPS 2"and below, 2"1/2, 3", 4" (DN 50 and below, 65, 80,100) Class 300; 600 (PN 63, 100)

TÜV INSPECTOR Frecchiami Mauro

CERTIFICATION DATE 12/02/13

MANAGEMENT OF INSPECTION SERVICE

TÜV Italia s.r.l. - TÜV SÜD Group

**▲ FIRE SAFE**

Certificazione della capacità di tenuta di una valvola in pressione, durante e dopo la prova di resistenza al fuoco in accordo con le norme API607/ISO 10497

*Certification of compliance of the sealing capability of a valve in pressure during and after the fire type-testing according to API607/ISO 10497 standards*



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04001HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115

ATTESTA
ATTESTS

che il sistema qualità adottato da
that the quality system operated by

FABBRICANTE MANUFACTURER: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, modulo H, della Direttiva 2014/68/UE.
for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE

AUTORIZZA
AUTHORIZES

ad apporre, sui prodotti di seguito specificati, il marchio CE 1115
to provide the above mentioned products, the mark

ACCESSORI A PRESSIONE PRESSURE ACCESSORIES: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO
BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES

Modelli coperti Covered models: Vedere elenco riportato in Appendice A
See list in Appendix A

Rapporti di valutazione Evaluation Reports: 004_ROS_2018_07_22
004_RAO_2019_09_13

CONDIZIONI DI VALIDITA' VALIDITY TERMS AND CONDITIONS:

ACCREDIA

| Prima Emissione First Issue | Emissione corrente Current Issue | Data di Scadenza Expiring date |
|---|---|---|
| 18/09/2007 | 18/09/2019 | 17/09/2022 |

Consorzio PASCAL srl

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*

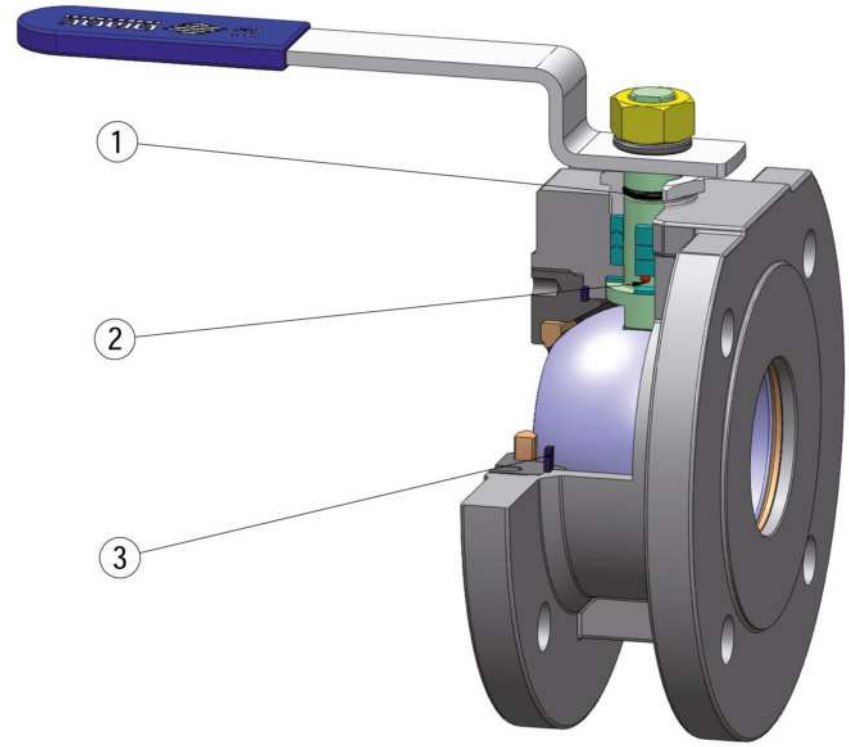


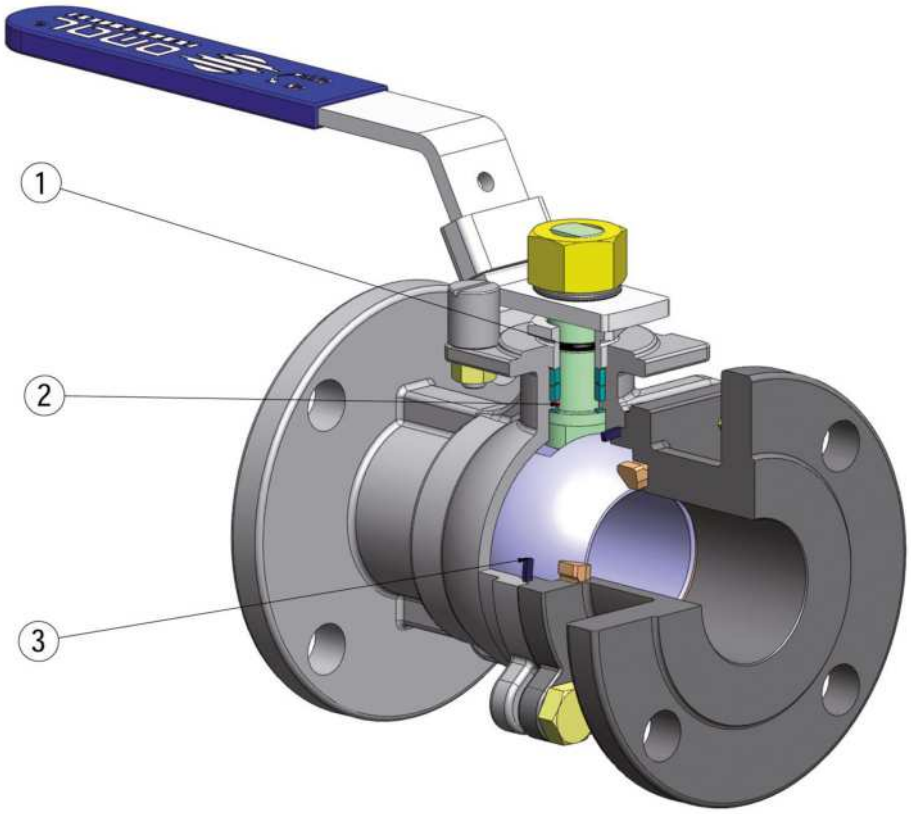
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# STARK & SPARTAN

# STARK & SPARTAN

## VALVOLE MANUALI *MANUAL VALVES*



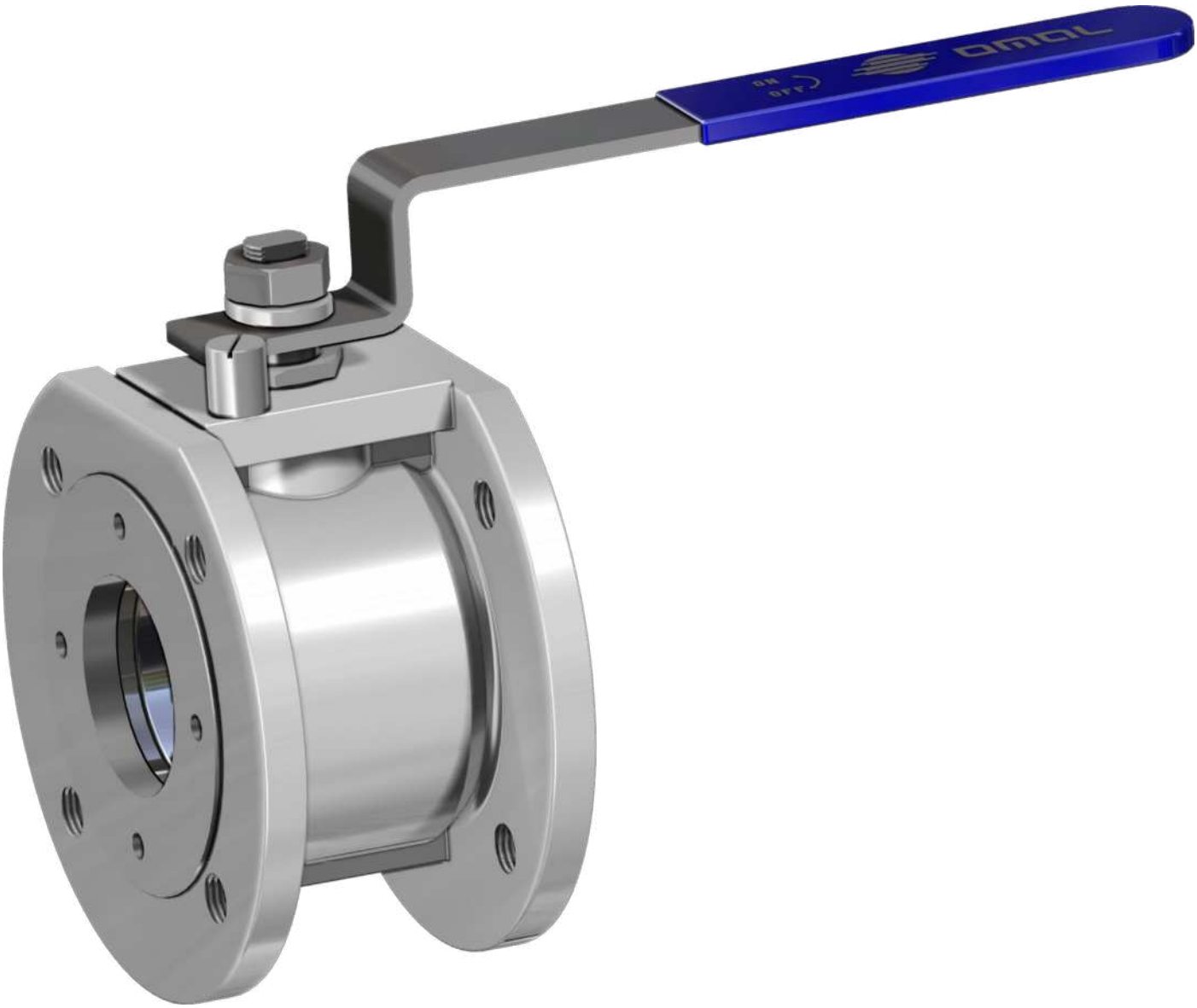
| FEATURES & BENEFITS | | |
|---|---|---|
| 1 | Tenuta addizionale mediante Oring<br>*Additional Oring on the stem* | Garantisce una tenuta addizionale verso l'esterno<br>*To grant additional tightness towards outside* |
| 2 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device (electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Safety of the contact is granted throughout the entire life of the valve* |
| 3 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Linea di valvole fusa<br>*CASTED line* | Minor peso della valvola<br>*Lighter Weight* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificato PED<br>PED Certificate | Conformità alla direttiva europea sulla sicurezza per i dispositivi in pressione<br>Compliance with European Safety Standards for Pressure Equipment |

# **STARK WAFER** PN 16-40 - MANUAL
# **ACCIAIO AL CARBONIO** ***CARBON STEEL***




| **ESECUZIONE STANDARD** | ***STANDARD FEATURES*** |
|---|---|
| • Sfera flottante, passaggio totale.<br>• Tenuta soft-seat PTFE+15%vetro.<br>• Norme per flange d'attacco EN 1092-1.<br>• Temperature di utilizzo: -20°C / +150°C.<br>• Classe di pressione: PN16-40.<br>• Fluido intercettato: aria, acqua, gas, prodotti petroliferi.<br>• Antistatic device EN12266-2.<br>• Tenuta stelo: pacco a V di serie in PTFE.<br>• Tenuta addizionale su stelo con O-ring FKM.<br>• Stelo anti Blow-out.<br>• Trattamento superficiale brunitura. | • *Floating ball, full bore.*<br>• *Soft-seat seal: PTFE+15% glass filled.*<br>• *Standard for connecting flanges: EN 1092-1.*<br>• *Operating temperature: -20°C / +150°C.*<br>• *Pressure class: PN16-40.*<br>• *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*<br>• *Antistatic device EN12266-2.*<br>• *Stem seal: PTFE V-pack.*<br>• *Additional seal on stem with FKM O-ring.*<br>• *Anti Blow-out stem.*<br>• *Superficial treatment: bluing.* |
| **CERTIFICAZIONI** | ***CERTIFICATIONS*** |
| • Conforme alla direttiva Europea 2014/68/UE PED.<br>• Conforme alla direttiva ATEX 2014/34/UE.<br>• FIRE SAFE: API 607 - EN ISO 10497. | • *In compilance with European Directive 2014/68/UE PED;*<br>• *In compliance with ATEX 2014/34/EU Directive.*<br>• *FIRE SAFE: API 607 - EN ISO 10497.* |

# **STARK WAFER** PN 16-40 - MANUAL
# **ACCIAIO INOX** ***STAINLESS STEEL***



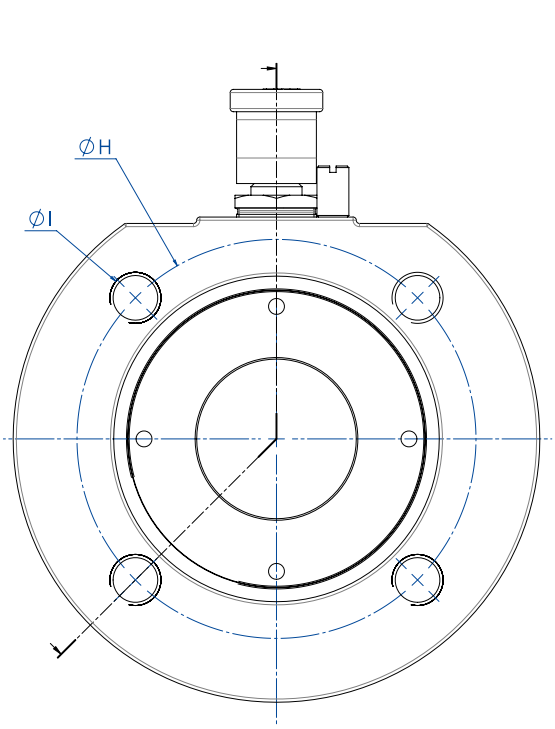

### ESECUZIONE STANDARD
- Sfera flottante, passaggio totale.
- Tenuta soft-seat PTFE+15%vetro.
- Norme per flange d'attacco EN 1092-1.
- Temperature di utilizzo: -20°C / +150°C.
- Classe di pressione: PN16-40.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi.
- Antistatic device EN12266-2.
- Tenuta stelo: pacco a V di serie in PTFE.
- Tenuta addizionale su stelo con O-ring FKM.
- Stelo anti Blow-out.

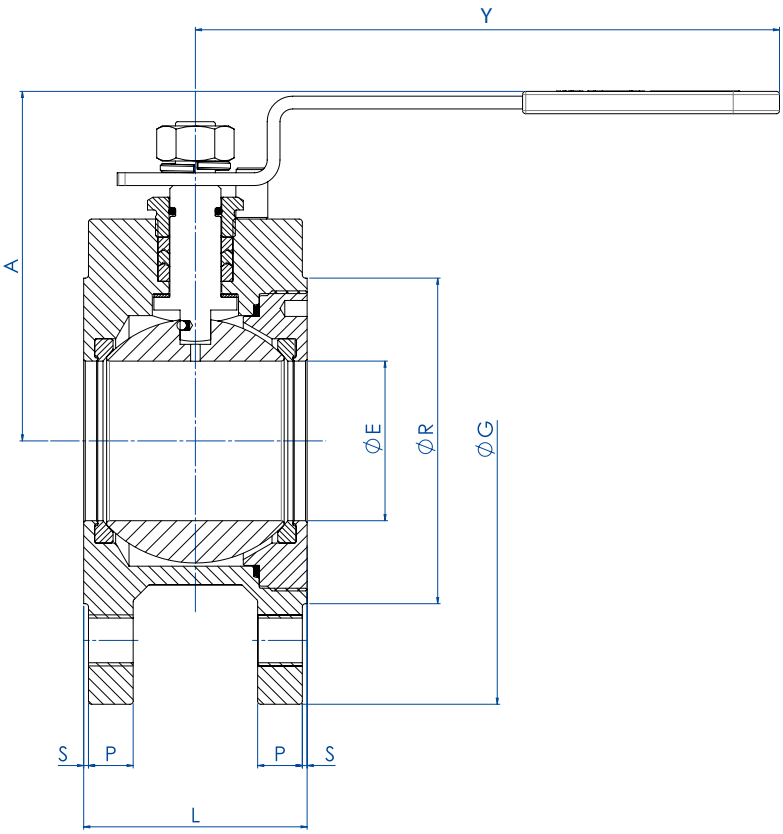
### *STANDARD FEATURES*
- *Floating ball, full bore.*
- *Soft-seat seal: PTFE+15% glass filled.*
- *Standard for connecting flanges: EN 1092-1.*
- *Operating temperature: -20°C / +150°C.*
- *Pressure class: PN16-40.*
- *Intercepted fluid: air, water, gas, petroleum and petrochemical products, aggressive fluids.*
- *Antistatic device EN12266-2.*
- *Stem seal: PTFE V-pack.*
- *Additional seal on stem with FKM O-ring.*
- *Anti Blow-out stem.*

### CERTIFICAZIONI
- Conforme alla direttiva Europea 2014/68/UE PED.
- Conforme alla direttiva ATEX 2014/34/UE.
- FIRE SAFE: API 607 - EN ISO 10497.

### *CERTIFICATIONS*
- *In compilance with European Directive 2014/68/UE PED.*
- *In compliance with ATEX 2014/34/EU Directive.*
- *FIRE SAFE: API 607 - EN ISO 10497.*

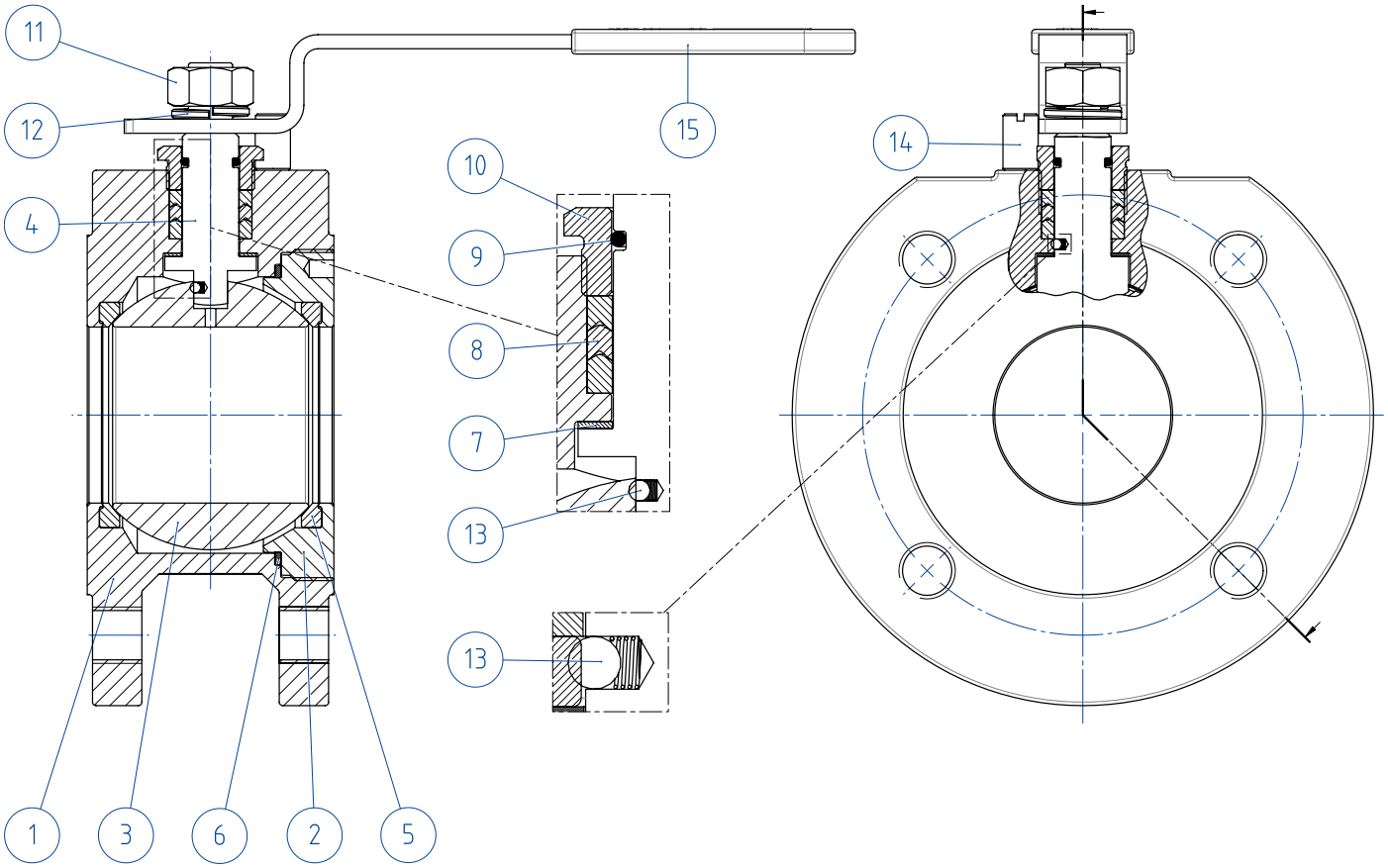
# **STARK WAFER** PN 16-40




| DIMENSIONI E CODICI *DIMENSIONS AND CODES* | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **PN** | **Codice** ***Code*** ***Carbon Steel*** **A216 WCB** | **Codice** ***Code*** ***Stainless steel*** **CF8M** | **ØE** | **A** | **Y** | **ØG** | **ØR** | **S** | **P** | **ØH** | **N° Fori** ***Holes*** | **ØI** | **Kg** | **L** |
| **DN [mm]** | **[inch]** | | | | | | | | | | | | | | | |
| DN 15 | 1/2" | PN16-40 | LST04F00CC | LST04F00AE | 15 | 70 | 153 | 88 | 45 | 1 | 6 | 65 | 4 | M12 | 1,2 | 36 |
| DN 20 | 3/4" | PN16-40 | LST05F00CC | LST05F00AE | 20 | 70 | 153 | 98 | 58 | 1 | 6 | 75 | 4 | M12 | 1,4 | 38 |
| DN 25 | 1" | PN16-40 | LST06F00CC | LST06F00AE | 25 | 80 | 152,5 | 108 | 68 | 1,75 | 7 | 85 | 4 | M12 | 2 | 43 |
| DN 32 | 1" 1/4 | PN16-40 | LST07F00CC | LST07F00AE | 32 | 87 | 152,5 | 128 | 78 | 1,5 | 7 | 100 | 4 | M16 | 2,9 | 51 |
| DN 40 | 1" 1/2 | PN16-40 | LST08F00CC | LST08F00AE | 38 | 102 | 181 | 150 | 88 | 1,5 | 13 | 110 | 4 | M16 | 4,4 | 63 |
| DN 50 | 2" | PN16-40 | LST09F00CC | LST09F00AE | 50 | 108 | 181 | 165 | 102 | 1,5 | 14 | 125 | 4 | M16 | 5,5 | 70 |
| DN 65 | 2" 1/2 | PN10-16 | LST10E00CC | LST10E00AE | 65 | 143 | 287,5 | 186 | 123 | 1,5 | 13,5 | 145 | 4 | M16 | 10,1 | 107 |
| DN 80 | 3" | PN16-40 | LST11F00CC | LST11F00AE | 76 | 152 | 287,5 | 200 | 138 | 3 | 21 | 160 | 8 | M16 | 13 | 120 |
| DN100 | 4" | PN10-16 | LST12E00CC | LST12E00AE | 96 | 168 | 322 | 220 | 158 | 2,5 | 17 | 180 | 8 | M16 | 19,7 | 152 |

# STARK WAFER PN 16-40
## ACCIAIO AL CARBONIO E ACCIAIO INOX *CARBON STEEL AND STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* - *B.O.M* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **Versione - Acciaio al Carbonio *Carbon Steel version*** | **Versione - Acciaio Inox *Stainless Steel version*** |
| 1 | Corpo *Body* | ASTM A216 WCB | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) |
| 2 | Ghiera *Ring nut* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | ASTM A276 316 | ASTM A276 316 |
| 5 | Seggio *Seats* | PTFE + 15% *GLASS FILLED* | PTFE + 15% *GLASS FILLED* |
| 6 | Guarnizione corpo-terminale *Body-connector gasket* | *GRAPHITE* | *GRAPHITE* |
| 7 | Tenuta inferiore *Stem lower sealing* | PTFE | PTFE |
| 8 | Pacco a V *Chevron pack* | | |
| 9 | O-ring stelo *Stem o-ring* | FKM | FKM |
| 10 | Premiguarnizione *Gland Nut* | 304 s.s. | 304 s.s. |
| 11 | Dado stelo *Stem Nut* | | |
| 12 | Rosetta elastica Grower *Spring lock washer* | | |
| 13 | Dispositivo Antistatico *Antistatic device* | *STAINLESS STEEL* | *STAINLESS STEEL* |
| 14 | Fermo leva *Stop pin* | 304 s.s. | 304 s.s. |
| 15 | Leva *Lever* | *STAINLESS STEEL* | *STAINLESS STEEL* |

# SPARTAN SPLIT BODY PN 16-40 ANSI 150-300 - MANUAL
# ACCIAIO AL CARBONIO *CARBON STEEL*



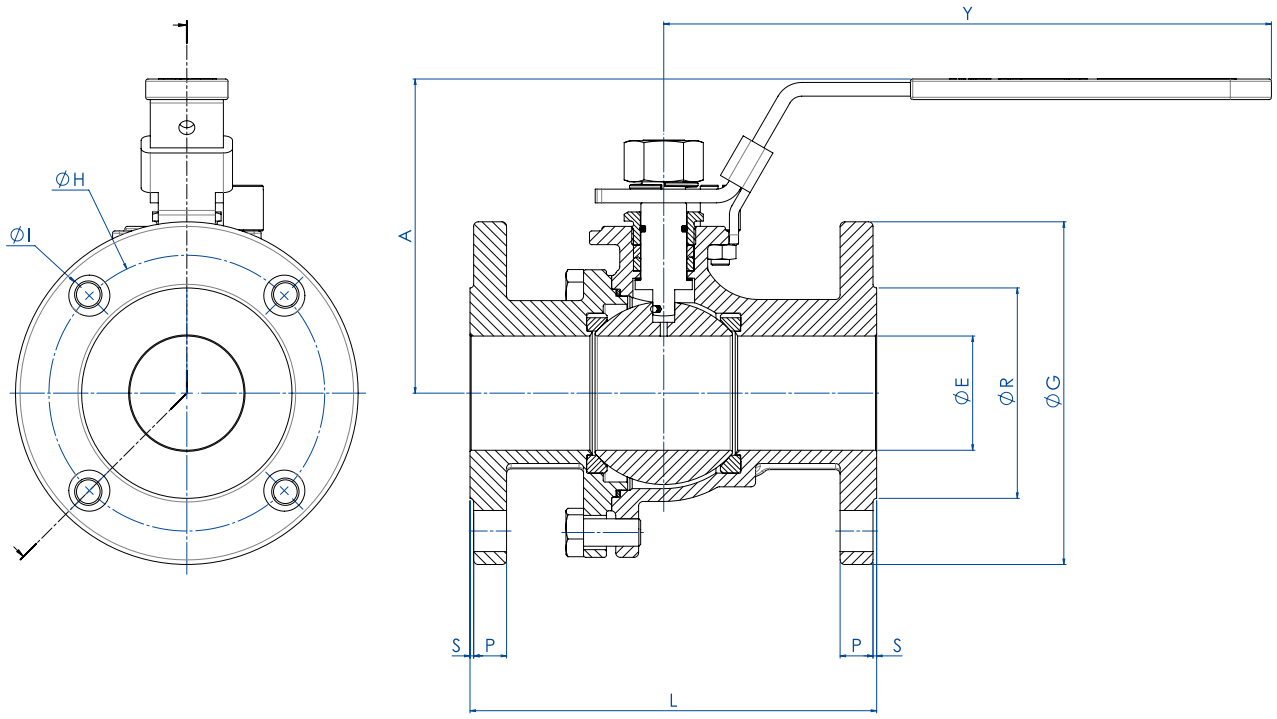

| ESECUZIONE STANDARD | *STANDARD FEATURES* |
|---|---|
| • Sfera flottante, passaggio totale.<br>• Tenuta soft-seat PTFE+15%vetro.<br>• Norme per flange d'attacco EN 1092-1; ASME B16.5.<br>• Temperature di utilizzo: -20°C / +150°C.<br>• Classe di pressione: PN16-40; ANSI 150-300.<br>• Fluido intercettato: aria, acqua, gas, prodotti petroliferi.<br>• Antistatic device EN12266-2.<br>• Tenuta stelo: pacco a V di serie in PTFE.<br>• Tenuta addizionale su stelo con O-ring FKM.<br>• Stelo anti Blow-out.<br>• Trattamento superficiale brunitura. | • *Floating ball, full bore.*<br>• *Soft-seat seal PTFE+15% glass filled.*<br>• *Standard for connecting flanges: EN 1092-1; ASME B16.5.*<br>• *Operating temperature: -20°C/+150°C.*<br>• *Pressure class: PN16-40; ANSI 150-300.*<br>• *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*<br>• *Antistatic device EN12266-2.*<br>• *Stem seal: PTFE-ring packing.*<br>• *Additional seal on stem with FKM O-ring.*<br>• *Anti Blow-out stem.*<br>• *Superficial treatment: bluing.* |
| **CERTIFICAZIONI** | ***CERTIFICATIONS*** |
| • Conforme alla direttiva Europea 2014/68/UE PED.<br>• Conforme alla direttiva ATEX 2014/34/UE.<br>• FIRE SAFE: API 607 - EN ISO 10497. | • *In compliance with European Directive 2014/68/UE PED.*<br>• *In compliance with ATEX 2014/34/EU Directive.*<br>• *FIRE SAFE: API 607 - EN ISO 10497.* |

# SPARTAN SPLIT BODY PN 16-40 ANSI 150-300 - MANUAL
# ACCIAIO INOX *STAINLESS STEEL*




| | |
|---|---|
| **ESECUZIONE STANDARD**<br>• Sfera flottante, passaggio totale.<br>• Tenuta soft-seat PTFE+15%vetro.<br>• Norme per flange d'attacco EN 1092-1; ASME B16.5.<br>• Temperature di utilizzo: -20°C / +150°C.<br>• Classe di pressione: PN16-40; ANSI 150-300.<br>• Fluido intercettato: aria, acqua, gas, prodotti petroliferi.<br>• Antistatic device EN12266-2.<br>• Tenuta stelo: pacco a V di serie in PTFE.<br>• Tenuta addizionale su stelo con O-ring FKM.<br>• Stelo anti Blow-out. | ***STANDARD FEATURES***<br>• *Floating ball, full bore.*<br>• *Soft-seat seal PTFE +15% glass filled.*<br>• *Standard for connecting flanges: EN 1092-1; ASME B16.5.*<br>• *Operating temperature: -20°C / +150°C.*<br>• *Pressure class: PN16-40 - ANSI 150-300.*<br>• *Intercepted fluid: air, water, gas, petroleum and petrochemical products.*<br>• *Antistatic device EN12266-2.*<br>• *Stem seal: PTFE V-ring packing.*<br>• *Additional seal on stem with FKM O-ring.*<br>• *Anti Blow-out stem.* |
| **CERTIFICAZIONI**<br>• Conforme alla direttiva Europea 2014/68/UE PED.<br>• Conforme alla direttiva ATEX 2014/34/UE.<br>• FIRE SAFE: API 607 - EN ISO 10497. | ***CERTIFICATIONS***<br>• *In compliance with European Directive 2014/68/UE PED.*<br>• *In compliance with ATEX 2014/34/EU Directive.*<br>• *FIRE SAFE: API 607 - EN ISO 10497.* |

# SPARTAN SPLIT BODY PN 16-40 ANSI 150-300




## DIMENSIONI E CODICI *DIMENSIONS AND CODES* -PN-

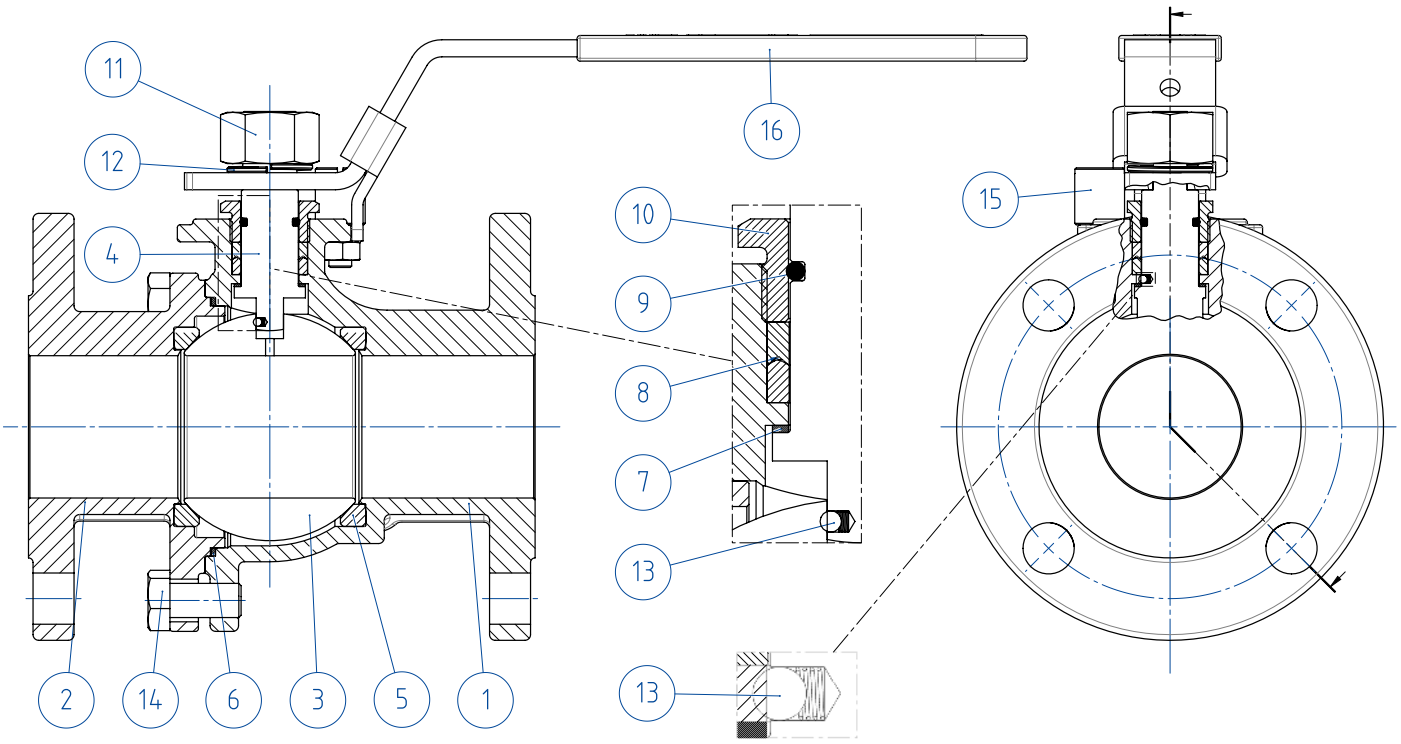
| MISURA *SIZE* DN [mm] | [inch] | PN | Codice *Code* Carbon Steel A216 WCB | Codice *Code* Stainless steel CF8M | ØE | A | Y | ØG | ØR | S | P | ØH | N° Fori *Holes* | ØI | Kg | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | PN16-40 | LSP04F03CC | LSP04F03AE | 15 | 85,7 | 169 | 95 | 45 | 2 | 14 | 65 | 4 | 14 | 2,3 | 115 (1) |
| DN 20 | 3/4" | PN16-40 | LSP05F03CC | LSP05F03AE | 20 | 87,5 | 169 | 105 | 58 | 2 | 16 | 75 | 4 | 14 | 2,9 | 120 (1) |
| DN 25 | 1" | PN16-40 | LSP06F03CC | LSP06F03AE | 25 | 103 | 205 | 115 | 68 | 2 | 16 | 85 | 4 | 14 | 3,8 | 125 (1) |
| DN 32 | 1" 1/4 | PN16-40 | LSP07F03CC | LSP07F03AE | 32 | 108 | 205 | 140 | 78 | 2 | 16 | 100 | 4 | 18 | 5,3 | 130 (1) |
| DN 40 | 1" 1/2 | PN16-40 | LSP08F03CC | LSP08F03AE | 38 | 126 | 266 | 150 | 88 | 3 | 15 | 110 | 4 | 18 | 6,9 | 140 (1) |
| DN 50 | 2" | PN16-40 | LSP09F03CC | LSP09F03AE | 50 | 133 | 266 | 165 | 102 | 3 | 17 | 125 | 4 | 18 | 9,4 | 150 (1) |
| DN 65 | 2" 1/2 | PN16 | LSP10E03CC | LSP10E03AE | 63 | 142 | 298 | 185 | 122 | 3 | 15 | 145 | 4 | 18 | 13,1 | 170 (1) |
| DN 80 | 3" | PN16-40 | LSP11F03CC | LSP11F03AE | 76 | 165 | 390 | 200 | 138 | 3 | 21 | 160 | 8 | 18 | 17,8 | 180 (1) |
| DN100 | 4" | PN16 | LSP12E03CC | LSP12E03AE | 96 | 183 | 390 | 220 | 158 | 3 | 17 | 180 | 8 | 18 | 25 | 190 (1) |

## DIMENSIONI E CODICI *DIMENSIONS AND CODES* -ANSI-

| MISURA *SIZE* DN [mm] | [inch] | ANSI | Codice *Code* Carbon Steel A216 WCB | Codice *Code* Stainless steel CF8M | ØE | A | Y | ØG | ØR | S | P | ØH | N° Fori *Holes* | ØI | Kg | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 15 | 1/2" | ANSI 150 | LSP04104CC | LSP04104AE | 15 | 85,7 | 169 | 89 | 35 | 1,6 | 9,6 | 60,5 | 4 | 16 | 1,8 | 108 (2) |
| DN 15 | 1/2" | ANSI 300 | LSP04204CC | LSP04204AE | 15 | 85,7 | 169 | 95 | 35 | 1,6 | 12,7 | 66,5 | 4 | 16 | 2,3 | 140 (2) |
| DN 20 | 3/4" | ANSI 150 | LSP05104CC | LSP05104AE | 20 | 88,5 | 169 | 99 | 43 | 1,6 | 9,6 | 70 | 4 | 16 | 2 | 117 (2) |
| DN 20 | 3/4" | ANSI 300 | LSP05204CC | LSP05204AE | 20 | 88,5 | 169 | 117 | 43 | 1,6 | 14,2 | 82,5 | 4 | 19 | 3,2 | 152 (2) |
| DN 25 | 1" | ANSI 150 | LSP06104CC | LSP06104AE | 25 | 103 | 205 | 108 | 51 | 1,6 | 9,7 | 79 | 4 | 16 | 3 | 127 (2) |
| DN 25 | 1" | ANSI 300 | LSP06204CC | LSP06204AE | 25 | 103,3 | 205 | 124 | 51 | 1,6 | 15,9 | 89 | 4 | 19 | 4,4 | 165 (2) |
| DN 32 | 1" 1/4 | ANSI 150 | LSP07104CC | LSP07104AE | 32 | 108 | 205 | 117 | 63,5 | 1,6 | 11,1 | 88,9 | 4 | 16 | 4 | 140 (2) |
| DN 32 | 1" 1/4 | ANSI 300 | LSP07204CC | LSP07204AE | 32 | 108 | 205 | 133 | 64 | 1,6 | 17,5 | 98,5 | 4 | 19 | 5,7 | 178 (2) |
| DN 40 | 1" 1/2 | ANSI 150 | LSP08104CC | LSP08104AE | 38 | 128 | 266 | 127 | 73,2 | 1,6 | 12,7 | 98,6 | 4 | 16 | 5,8 | 165 (2) |
| DN 40 | 1" 1/2 | ANSI 300 | LSP08204CC | LSP08204AE | 38 | 128,4 | 266 | 156 | 73 | 1,6 | 19 | 115 | 4 | 22 | 8,6 | 190 (2) |
| DN 50 | 2" | ANSI 150 | LSP09104CC | LSP09104AE | 50 | 136 | 266 | 152 | 92 | 1,6 | 14,4 | 120,7 | 4 | 19,1 | 8,4 | 178 (2) |
| DN 50 | 2" | ANSI 300 | LSP09204CC | LSP09204AE | 50 | 135,9 | 266 | 165 | 92 | 1,6 | 20,8 | 127 | 8 | 19 | 10,9 | 216 (2) |
| DN 65 | 2" 1/2 | ANSI 150 | LSP10104CC | LSP10104AE | 65 | 148 | 298 | 178 | 104,6 | 1,6 | 16 | 139 | 4 | 19,1 | 13,2 | 190 (2) |
| DN 65 | 2" 1/2 | ANSI 300 | LSP10204CC | LSP10204AE | 63 | 147,6 | 298 | 190 | 105 | 1,6 | 23,8 | 149 | 8 | 22 | 16,7 | 241 (2) |
| DN 80 | 3" | ANSI 150 | LSP11104CC | LSP11104AE | 80 | 168 | 390 | 190 | 127 | 1,6 | 17,5 | 152 | 4 | 19,1 | 17,3 | 203 (2) |
| DN 80 | 3" | ANSI 300 | LSP11204CC | LSP11204AE | 76 | 167,5 | 390 | 210 | 127 | 1,6 | 26,9 | 168 | 8 | 22 | 23,9 | 282 (2) |
| DN100 | 4" | ANSI 150 | LSP12104CC | LSP12104AE | 100 | 183 | 390 | 228 | 157,2 | 1,6 | 22,4 | 190,5 | 8 | 19,1 | 27,8 | 229 (2) |
| DN100 | 4" | ANSI 300 | LSP12204CC | LSP12204AE | 100 | 182,5 | 390 | 254 | 157 | 1,6 | 30,2 | 200 | 8 | 22 | 38,4 | 305 (2) |

(1) EN 558 TAB.2 COL.14/DIN 3202-1 F4 (2) ANSI B16.10

# SPARTAN SPLIT BODY PN 16-40 ANSI 150-300
## ACCIAIO AL CARBONIO E ACCIAIO INOX *CARBON STEEL AND STAINLESS STEEL*
## TABELLA DEI MATERIALI *MATERIALS TABLE*




| MATERIALI *MATERIALS* - *B.O.M.* | | | |
|---|---|---|---|
| **N°** | **Descrizione *Description*** | **Versione - Acciaio al Carbonio *Carbon Steel version*** | **Versione - Acciaio Inox *Stainless steel version*** |
| 1 | Corpo *Body* | ASTM A216 WCB | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) |
| 2 | Terminale *Connector* | | |
| 3 | Sfera *Ball* | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) | ASTM A351 CF8M (1.4408/GX5CrNiMo19-12-2) |
| 4 | Stelo *Stem* | ASTM A276 316 | ASTM A276 316 |
| 5 | Seggio *Seats* | PTFE + 15% *GLASS FILLED* | PTFE + 15% *GLASS FILLED* |
| 6 | Guarnizione corpo-terminale *Body-connector gasket* | *GRAPHITE* | *GRAPHITE* |
| 7 | Tenuta inferiore *Stem lower sealing* | PTFE | PTFE |
| 8 | Pacco a V *Chevron pack* | | |
| 9 | O-ring stelo *Stem o-ring* | FKM | FKM |
| 10 | Premiguarnizione *Gland Nut* | 304 s.s. | 304 s.s. |
| 11 | Dado stelo *Stem Nut* | | |
| 12 | Rosetta elastica Grower *Spring lock washer* | | |
| 13 | Dispositivo Antistatico *Antistatic device* | *STAINLESS STEEL* | *STAINLESS STEEL* |
| 14 | Vite *Bolt* | 304 s.s. | 304 s.s. |
| 15 | Fermo leva *Stop pin* | | |
| 16 | Leva *Lever* | *STAINLESS STEEL* | *STAINLESS STEEL* |



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04D01HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
Consortio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115

ATTESTA
ATTESTS
che il sistema qualità adottato da
that the quality system operated by

FABBRICANTE / MANUFACTURER: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa / Operational Office Address: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, modulo H, della Direttiva 2014/68/UE.
for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.

AUTORIZZA
AUTHORIZES
ad apporre, sui prodotti di seguito specificati, il marchio / to provide the above mentioned products, the mark CE 1115

ACCESSORI A PRESSIONE / PRESSURE ACCESSORIES: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO / BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES

Modelli coperti / Covered models: Vedere elenco riportato in Appendice A / See list in Appendix A
Rapporti di valutazione / Evaluation Reports: 004_RQQ_2018_07_23 004_RAO_2018_08_13
CONDIZIONI DI VALIDITA' / VALIDITY TERMS AND CONDITIONS

ACCREDIA

| Prima Emissione / First Issue | Emissione corrente / Current Issue | Data di Scadenza / Expiring date |
|---|---|---|
| 16/08/2007 | 16/08/2019 | 17/08/2022 |

Pagina / Page 1 di / of 2

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives.*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
Non electrical equipment intended for use in potentially explosive atmospheres
Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva

Directive 2014/34/UE
Directive 2014/34/EU / Direttiva 2014/34/UE

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION
AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO

Appareil / Equipment / Apparecchiatura : BALL VALVES

Type(s)/ Type(s) / Tipo(i) : Wafer type, Split body type, Split Wafer type steel ball valves / Two-piece, Three-piece steel ball valve High-pressure - threaded ends / Two-piece brass ball valves threaded ends

Marquage/ Marking / Marcatura : Ex II 2 GD

Déposant / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception de la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 febraury 2014, acknowledges receipt of file according to the procedure described chapter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VS-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035241/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

The technical documentation referenced : VS-19 dated 10/10/2019 is consigned under the reference : no INERIS-EQEN 035241/19.
Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

La documentazione tecnica di riferimento : VS-19 dated 10/10/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 035241/19.
Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07
Validity completion date : 2029.11.07
Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

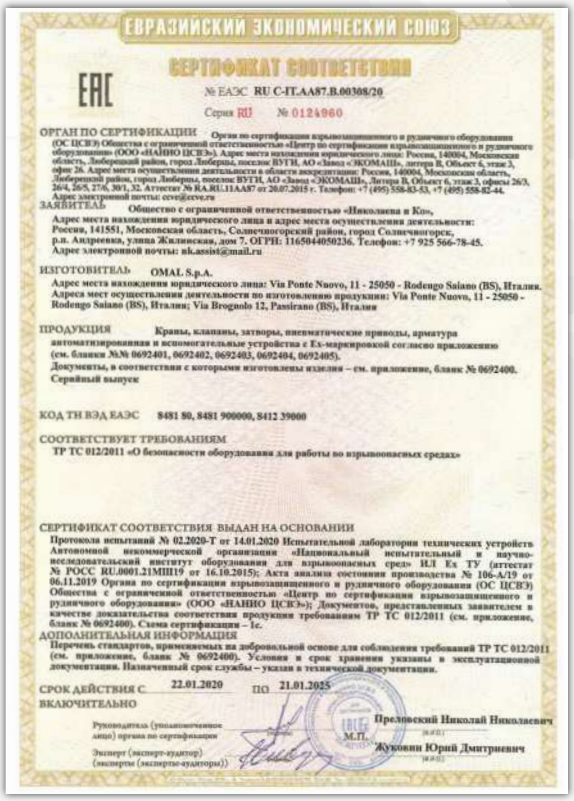
Le Directeur Général de l'INERIS, Par délégation,
The Chief Executive Officer of INERIS, By delegation,
Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél +33(0)3 44 55 66 77 Fax +33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Etablissement public à caractère industriel et commercial - RCS Compiègne B 381 984 926 - Siret 381 984 921 00019 - APE 7120B - TVA Intracom FR 75 381 984 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

EAC

№ ЕАЭС RU C-IT.AA87.B.00308/20
Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: ocve@ecvt.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ex ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации — Предиевский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2324-17
Зареєстровано в реєстрі органів оцінки відповідності «ПРОМТЕСТ» за №
Registered in the Record of conformity assessment body "PROMTEST" under №

Термін дії з 25.07.2017 р. до 03.09.2020 р.
Строк дійсності / Term of validity is from

Сертифікат видано 'OMAL S.p.A.' Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія
Сертифікат виданий/Certificate is issued on

Продукція Крани кульові без електричного обладнання (згідно з додатком) 8481
Продукція/Production

Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT) Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі
Соответствует требованиям/Comply with the requirements

Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія
Производитель/Producer

Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Italia
Место производства/Place of production

Додаткова інформація
Дополнительная информация/Additional information

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ"
Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.
Сертификат выдан органом оценки соответствия/Certificate is issued by the conformity assessment body

На підставі Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ 'ПРОМТЕСТ'
На основании/On the grounds of

Керівник органу з оцінки відповідності Самотой В.І.
Руководитель органа оценки соответствия/Director of the conformity assessment body

Термін дії сертифіката відповідності закінчується 03.09.2020 р. Дійсність сертифіката відповідності можна перевірити на сайті www.promtest.org.ua
Действие сертификата соответствия можно проверить на сайте www.promtest.org.ua
Validity of the Certificate of conformity can be checked on the site www.promtest.org.ua

**▲ UKR**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.

*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*



FIRE SAFE CERTIFICATE

CERTIFICATE NUMBER: FS-063579-400

CLIENT: OMAL
ADDRESS: Via Ponte Nuovo, 11 25050 Rodengo Saiano (BS)- Italy

REPORT NUMBER: 15

SCOPE OF REPORT: Fire Safe test carried out according to: ISO 10497 Third Edition FEBRUARY 2010 and API 607 Sixth Edition SEPTEMBER 2010

max BAR: 12 Bar
max °C: +866°C

QUALIFIED VALVE: Size: 2"
Rating Class: PN 16
Drawing N°: Y_2931
Type: FLOATING BALL VALVE WAFER TYPE

RANGE AND TYPE OF VALVES COVERED: NPS 2" and below 2.1/2"; 3"; 4" (DN 50 and below 65, 80, 100) Class 150 (PN 16, 25).

TÜV INSPECTOR Frecchiami Mauro
CERTIFICATION DATE 09/04/2014
MANAGEMENT INSPECTION SERVICE Mastrogiacomo Simone

TÜV Italia s.r.l. - TÜV SÜD Group



FIRE SAFE CERTIFICATE

CERTIFICATE NUMBER: FS-063579-397

CLIENT: OMAL
ADDRESS: Via Ponte Nuovo, 11 25050 Rodengo Saiano (BS)- Italy

REPORT NUMBER: 12

SCOPE OF REPORT: Fire Safe test carried out according to: ISO 10497 Third Edition FEBRUARY 2010 and API 607 Sixth Edition SEPTEMBER 2010

max BAR: 14,3 Bar
max °C: +890°C

QUALIFIED VALVE: Size: 2"
Rating Class: ANSI 150
Drawing N°: Y_2758
Type: FLOATING BALL VALVE SPLIT BODY

RANGE AND TYPE OF VALVES COVERED: NPS 2" and below 2.1/2"; 3"; 4" (DN 50 and below 65, 80, 100) Class 150; 300 (PN 10, 16, 25, 40).

TÜV INSPECTOR Frecchiami Mauro
CERTIFICATION DATE 03/04/2014
MANAGEMENT INSPECTION SERVICE Mastrogiacomo Simone

TÜV Italia s.r.l. - TÜV SÜD Group

**▲ FIRE SAFE**

Certificazione della capacità di tenuta di una valvola in pressione, durante e dopo la prova di resistenza al fuoco in accordo con le norme API607/ISO 10497

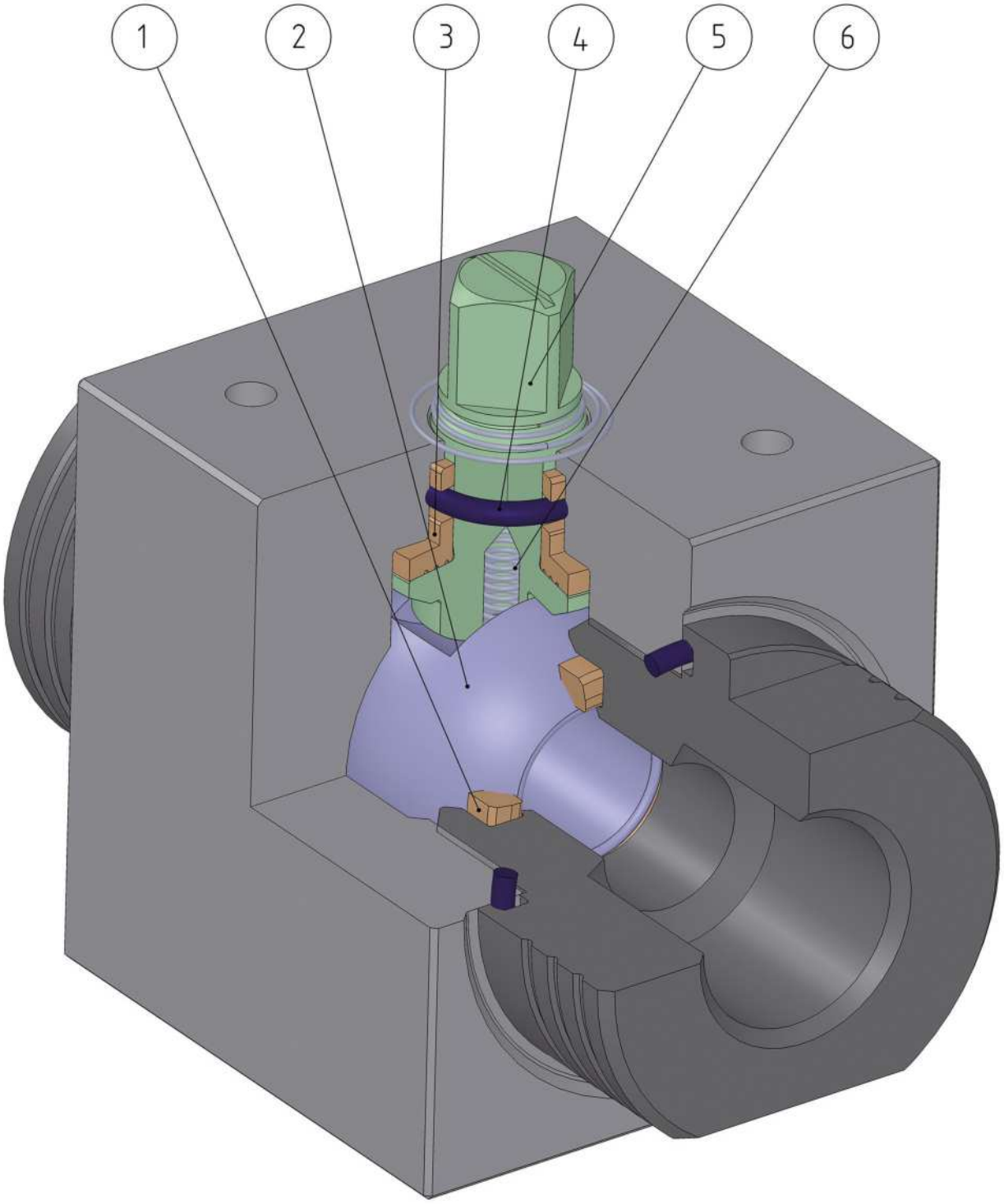
*Certification of compliance of the sealing capability of a valve in pressure during and after the fire type-testing according to API607/ISO 10497 standards*


OMAL
HERCULES
DN 15
PN 500
1.3737
T: -20°C +200°C

1.3

# HERCULES

# HERCULES ALTA CICLICITÀ *HIGH CICLICITY*



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Tenuta in "EXTREME"**<br>*Seat in "EXTREME"***| Minor usura rispetto a tenute non modificate<br>*Less wear comparing with not modify seat* |
| | | Elevata resistenza alla sollecitazione<br>*High resistance to stress* |
| 2 | Sfera in acciaio inossidable con rivestimento in Cromo Duro da 40µm<br>*Stainless steel ball, coated with 40µm Hard Chrome* | Maggior tenuta nel tempo grazie alla bassa usura della sfera<br>*Longer seal life due to the low wear of the ball* |
| 3 | Supporto stelo in "POWERAMMIDE"*<br>*"POWERAMMIDE"* stem bush* | Si ha un perfetto allineamento dell'albero sul corpo e si evitano oscillazioni con alte pressioni<br>*It grants a perfect alignment of the shaft on the body and prevents oscillations with high pressure* |
| | | Nessuna possibilità di grippaggio<br>*No seizing* |
| | | Elevato numero di azionamenti<br>*High number of cycles* |
| 4 | O-ring in elastomero da 90 Shore A<br>*Elastomer O-Ring with a hardness of 90 Shore A* | Nessun deperimento dovuto ad azionamenti estremamente veloci<br>*No deterioration with quick operations* |
| 4 | *O-ring a bassa permeabilità "Rapid Gas Decompression"*<br>*Low-permeability O-ring "Rapid Gas Decompression"* | *Buona resistenza alla decompressione esplosiva*<br>*Good resistance to explosive decompression* |
| 5 | Stelo in 17-4 PH H900<br>*Stem in 17-4 PH H900* | Maggior resistenza meccanica di circa 5 volte rispetto ad un classico 316 S.S.<br>*Increased mechanical strenght about 5 times more compared to a standard 316 S.S.* |
| 5 | Rullatura stelo<br>Shaft rolling | Minor usura delle guarnizioni grazie alla bassa rugosità (0,4 micron Ra ) dello stelo che facilita lo scorrimento<br>*Less wear of the seals due to the low roughness (0,4 micron Ra) which facilitate the sliding of the shaft* |
| 6 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device (electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione (per DN ≥ 32)<br>*Full compliance with European safety standards for pressure equipment (for DN ≥ 32)* |
| | Fire safe design<br>*Fire safe design* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*Atex Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

*Blend di tecnopolimeri e di cariche aramidiche **Blend of polymers and aramid filler*
** Poliammide aromatica a catena lunga ***Aromatic polyamide long chemical structure*

# HERCULES

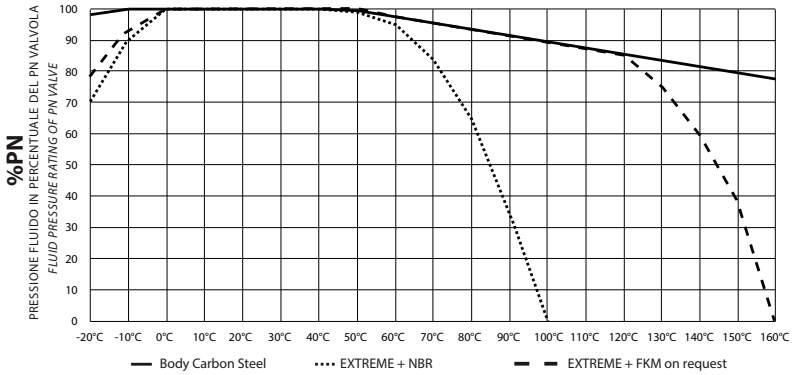
## ALTA PRESSIONE - ALTA CICLICITÀ **ACCIAIO AL CARBONIO**

## *HIGH PRESSURE - HIGH CICLICITY* ***CARBON STEEL***

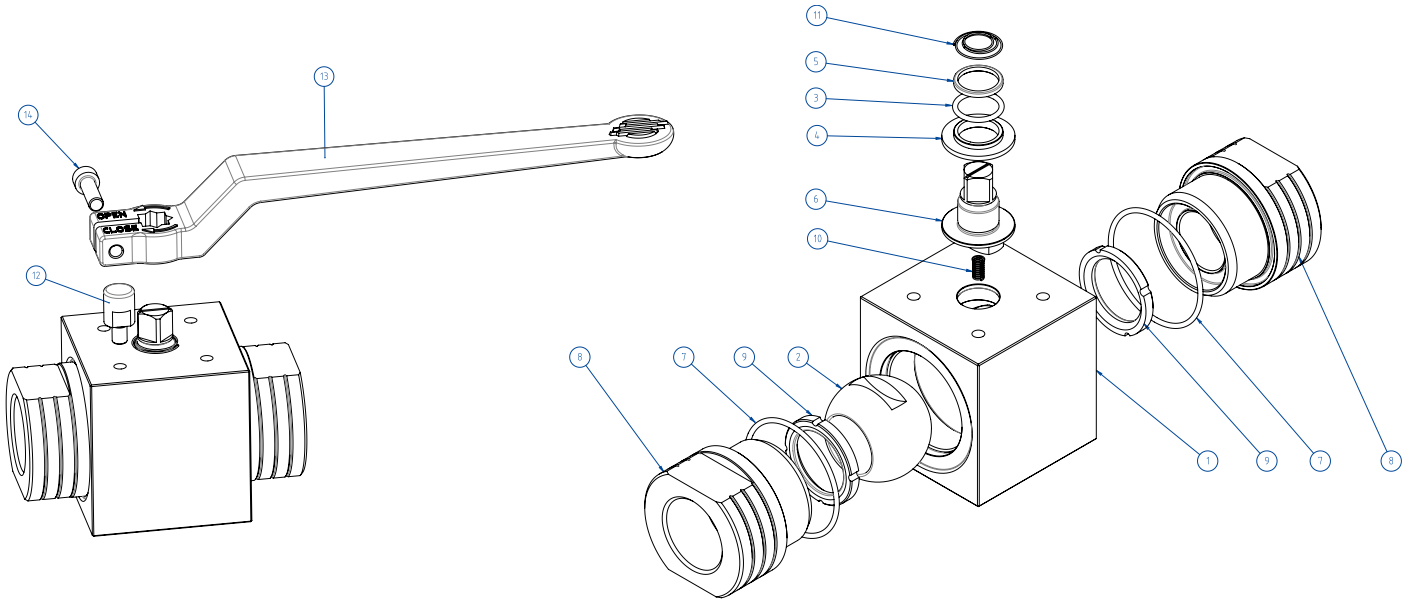



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate EN ISO 228 o NPT.<br>• Temperatura di utilizzo: da -20°C a +100°C con Oring in NBR;<br>da -20°C a +160°C con Oring in FKM (a richiesta).<br>• Pressione di utilizzo: PN500/7000 psi DN6, DN8, DN10, DN15;<br>PN400/6000 psi DN20 e DN25;<br>PN320/4500 psi DN32, DN40, DN50.<br>• Fluido intercettato: fluidi liquidi e gassosi autolubrificanti purchè compatibili con i materiali costruttivi.<br>• Antistatic device.<br>• Fire safe design. | ***GENERAL FEATURES:***<br>• *Ends: Threaded ends EN ISO 228 o NPT.*<br>• *Working temperature:*-from -20°C to +100° with NBR Oring;<br>from -20°C to +160°C with FKM Oring (on request).<br>• *Working pressure: DN6, DN8, DN10, DN15 PN500/7000 psi;*<br>*DN20 e DN25 PN400/6000 psi;*<br>*DN32, DN40, DN50 PN320/4500 psi.*<br>• *Working media: Self-lubricating liquids and gaseous, compatible with the constructive materials.*<br>• *Antistatic device.*<br>• *Fire safe design.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***SPECIAL EXECUTION ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.<br>• Certificato ATEX a richiesta.<br>• Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.<br>• Conforme alla Direttiva Europea 2014/68/UE PED. | ***CERTIFICATIONS:***<br>• *ATEX version in conformity with European Directive 2014/34/EU.*<br>• *ATEX certificate on request.*<br>• *Safety integrity level up to SIL 3 according to the IEC 61508.*<br>• *In compliance with European Directive 2014/68/EU PED.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| | |
|---|---|
| DN6, DN8, DN10, DN15 | PN500/7000 psi |
| DN20 e DN25 | PN400/6000 psi |
| DN32, DN40, DN50 | PN320/4500 psi |




## MATERIALI *MATERIALS*

| | | |
|---|---|---|
| 1 | Corpo *Body* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) Zincato - *Zinc coated* |
| 2 | Sfera *Ball* | A217 CA15 / A479 tp. 410 / A182 F6A + *Hard chromium plated* |
| 3* | O-ring | NBR (*FKM on request*) |
| 4* | Bussola inferiore *Lower bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 5* | Bussola superiore *Upper bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 6 | Stelo *Stem* | A564 Tp 630 (17-4 PH) |
| 7* | O-ring | NBR (*FKM on request*) |
| 8 | Manicotto *Ends* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) Zincato - *Zinc coated* |
| 9* | Seggio *Seats* | EXTREME poliammide aromatica a catena lunga - *Aromatic polyamide long chemical structure* |
| 10 | Molla antistatic device *Antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 11 | Molla antistatic device superiore *Upper antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 12** | Fermo *Holder screw* | X5CrNiMo1713 - 316 S.S. |
| 13** | Leva *Lever* | EN AB 46100 - AL SI 11 CU (FE) Verniciata - *Painted* |
| 14** | Vite *Screw* | A2 - 70 |

* Componenti kit di guarnizioni *Seals kit components*
** Componenti dei kit leva *Lever kit components*

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| PN / Size | DN 6 1/8" | DN8 1/4" | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
|---|---|---|---|---|---|---|---|---|---|
| PN 500 bar | 10 | | 18 | 20 | | | | | |
| PN 400 bar | | | | | 31 | 40 | | | |
| PN 320 bar | | | | | | | 61 | 83 | 125 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

## PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$*

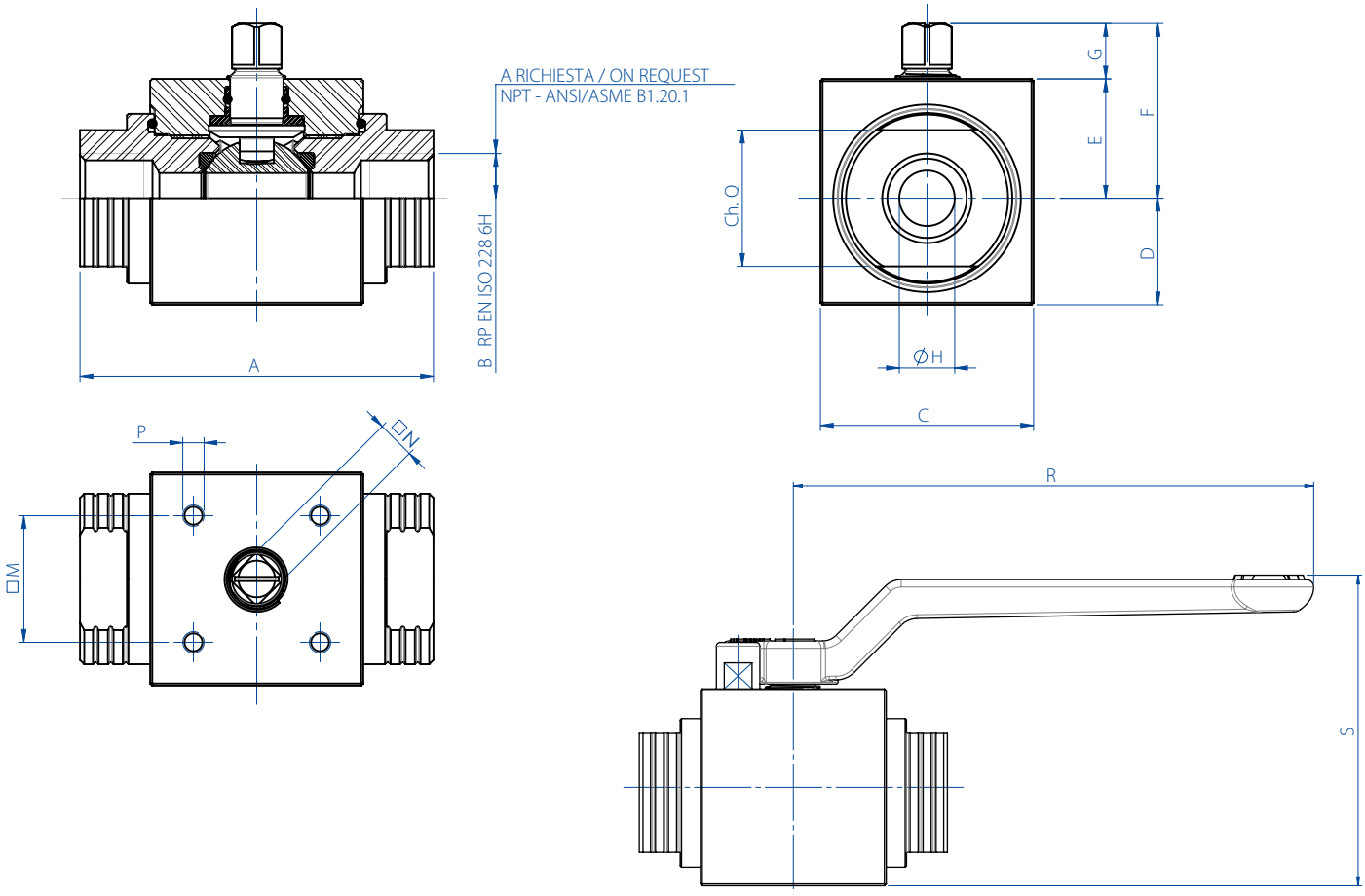
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KV $m^3/h$ | 5,2 | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* | Kg | Kit guarnizioni -Vers. STD *Seals Kit - STD version* |
| DN 6 | 1/8" | VHA5AABAB01 | VHA5AABAB41 | LHA5AABAB01 | LHA5AABAB41 | KLVVH501 | 0,32 | KGBVHPV01D |
| DN 8 | 1/4" | VHA5AABAB02 | VHA5AABAB42 | LHA5AABAB02 | LHA5AABAB42 | KLVVH501 | 0,31 | KGBVHPV01D |
| DN 10 | 3/8" | VHA5BABAB03 | VHA5BABAB43 | LHA5BABAB03 | LHA5BABAB43 | KLVVH503 | 0,76 | KGBVHPV03N |
| DN 15 | 1/2" | VHA5BABAB04 | VHA5BABAB44 | LHA5BABAB04 | LHA5BABAB44 | KLVVH503 | 1,10 | KGBVHPV04N |
| DN 20 | 3/4" | VHA5BABAB05 | VHA5BABAB45 | LHA5BABAB05 | LHA5BABAB45 | KLVVH505 | 1,46 | KGBVHPV05N |
| DN 25 | 1" | VHA5BABAB06 | VHA5BABAB46 | LHA5BABAB06 | LHA5BABAB46 | KLVVH505 | 2,30 | KGBVHPV06N |
| DN 32 | 1" 1/4 | VHA6BABAB07 | VHA6BABAB47 | LHA6BABAB07 | LHA6BABAB47 | KLVVH507 | 3,30 | KGBVHPV07N |
| DN 40 | 1" 1/2 | VHA6BABAB08 | VHA6BABAB48 | LHA6BABAB08 | LHA6BABAB48 | KLVVH507 | 5,14 | KGBVHPV08N |
| DN 50 | 2" | VHA6BABAB09 | VHA6BABAB49 | LHA6BABAB09 | LHA6BABAB49 | KLVVH509 | 9,90 | KGBVHPV09N |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*



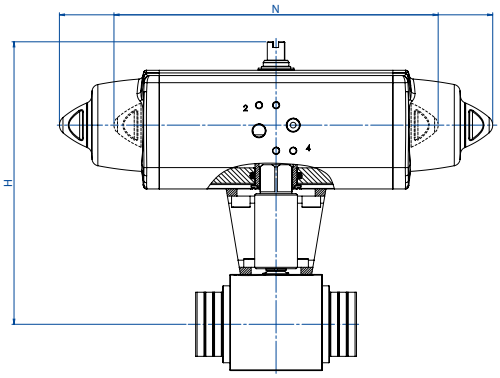

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | E | F | G | ØH | Ch.Q | □M | □N | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | |
| DN 6 | 1/8" | 69 | 1/8" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 8 | 1/4" | 69 | 1/4" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 10 | 3/8" | 72 | 3/8" | 45 | 19,7 | 25,3 | 38,3 | 13 | 9 | 24 | 29,7 (F04) | 9 | M5 | 140 | 75,5 |
| DN 15 | 1/2" | 83 | 1/2" | 50 | 25 | 28 | 41 | 13 | 13 | 32 | 29,7 (F04) | 9 | M5 | 140 | 83,6 |
| DN 20 | 3/4" | 95 | 3/4" | 55 | 27,5 | 31 | 46 | 15 | 19 | 37 | 35,36 (F05) | 11 | M6 | 212 | 94,8 |
| DN 25 | 1" | 113 | 1" | 65 | 32,5 | 35 | 50 | 15 | 25 | 45 | 35,36 (F05) | 11 | M6 | 212 | 103,8 |
| DN 32 | 1"1/4 | 111 | 1"1/4 | 80 | 38 | 42 | 62 | 20 | 32 | 55 | 49,5 (F07) | 14 | M8 | 315 | 121,6 |
| DN 40 | 1"1/2 | 130 | 1"1/2 | 90 | 44 | 46 | 66 | 20 | 38 | 65 | 49,5 (F07) | 14 | M8 | 315 | 131,6 |
| DN 50 | 2" | 140 | 2" | 120 | 59 | 61 | 81 | 20 | 51 | 80 | 49,5 (F07) | 17 | M8 | 315 | 161,7 |

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE *WITH ACTUATOR*








## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 06 | 1/8" | DHA5AABAB01AFBA0 | DHA5AABAB41AFBA0 | DAN0015411S | KCNAADD5401 | 159,0 | 139,2 | 1,5 |
| DN 08 | 1/4" | DHA5AABAB02AFBA0 | DHA5AABAB42AFBA0 | DAN0015411S | KCNAADD5401 | 159,0 | 139,2 | 1,5 |
| DN 10 | 3/8" | DHA5BABAB03AFCA0 | DHA5BABAB43AFCA0 | DAN0030411S | KCNBCDD5403 | 174,2 | 164,5 | 2,4 |
| DN 15 | 1/2" | DHA5BABAB04AFDA0 | DHA5BABAB44AFDA0 | DAN0045412S | KCNBCDD5403 | 188,5 | 175,5 | 2,9 |
| DN 20 | 3/4" | DHA5BABAB05AFEA0 | DHA5BABAB45AFEA0 | DAN0060412S | KCNCCDD5405 | 198,0 | 185,4 | 3,8 |
| DN 25 | 1" | DHA5BABAB06AFGA0 | DHA5BABAB46AFGA0 | DAN0106411S | KCNCCDD5409 | 237,0 | 205,3 | 5,6 |
| DN 32 | 1" 1/4 | DHA6BABAB07AFHA0 | DHA6BABAB47AFHA0 | DAN0120411S | KCNDDDD5406 | 244,1 | 213,0 | 6,9 |
| DN 40 | 1" 1/2 | DHA6BABAB08AFIA0 | DHA6BABAB48AFIA0 | DAN0180411S | KCNDDDD5410 | 289,9 | 258,5 | 10,9 |
| DN 50 | 2" | DHA6BABAB09AFJA0 | DHA6BABAB49AFJA0 | DAN0240411S | KCNDDDD5407 | 313,6 | 262,1 | 16,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 06 | 1/8" | SHA5AABAB01AFCA0 | SHA5AABAB41AFCA0 | SRN0015401S | KCNAADD5401 | 233,2 | 146,2 | 1,9 |
| DN 08 | 1/4" | SHA5AABAB02AFCA0 | SHA5AABAB42AFCA0 | SRN0015401S | KCNAADD5401 | 233,2 | 146,9 | 1,9 |
| DN 10 | 3/8" | SHA5BABAB03AFEA0 | SHA5BABAB43AFEA0 | SRN0030402S | KCNBCDD5408 | 258,8 | 175,7 | 3,4 |
| DN 15 | 1/2" | SHA5BABAB04AFGA0 | SHA5BABAB44AFGA0 | SRN0053401S | KCNBCDD5411 | 304,2 | 191,3 | 4,9 |
| DN 20 | 3/4" | SHA5BABAB05AFHA0 | SHA5BABAB45AFHA0 | SRN0060401S | KCNCCDD5409 | 338,5 | 198,0 | 5,6 |
| DN 25 | 1" | SHA5BABAB06AFIA0 | SHA5BABAB46AFIA0 | SRN0090401S | KCNCDDD5412 | 393,7 | 232,5 | 9,2 |
| DN 32 | 1" 1/4 | SHA6BABAB07AFJA0 | SHA6BABAB47AFJA0 | SRN0120401S | KCNDDDD5410 | 409,6 | 243,1 | 11,2 |
| DN 40 | 1" 1/2 | SHA6BABAB08AFKA0 | SHA6BABAB48AFKA0 | SRN0180401S | KCNDDDD5410 | 474,0 | 254,0 | 15,2 |
| DN 50 | 2" | SHA6BABAB09AFLA0 | SHA6BABAB49AFLA0 | SRN0240401S | KCNDEDD5413 | 520,5 | 306,0 | 23,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX)
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution)*

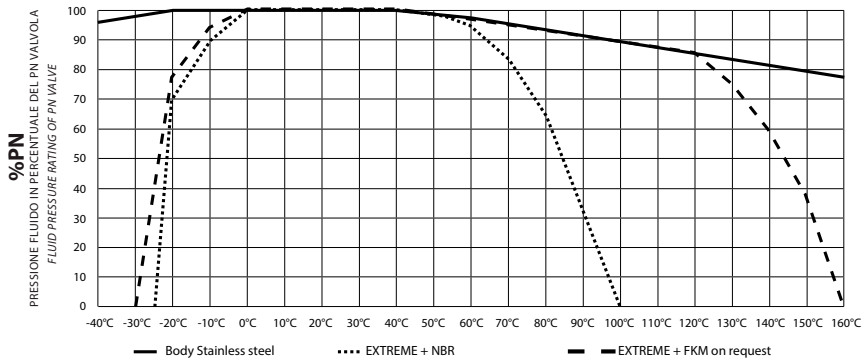
# HERCULES

## ALTA PRESSIONE - ALTA CICLICITÀ **ACCIAIO INOX**
## *HIGH PRESSURE - HIGH CICLICITY* ***STAINLESS STEEL***

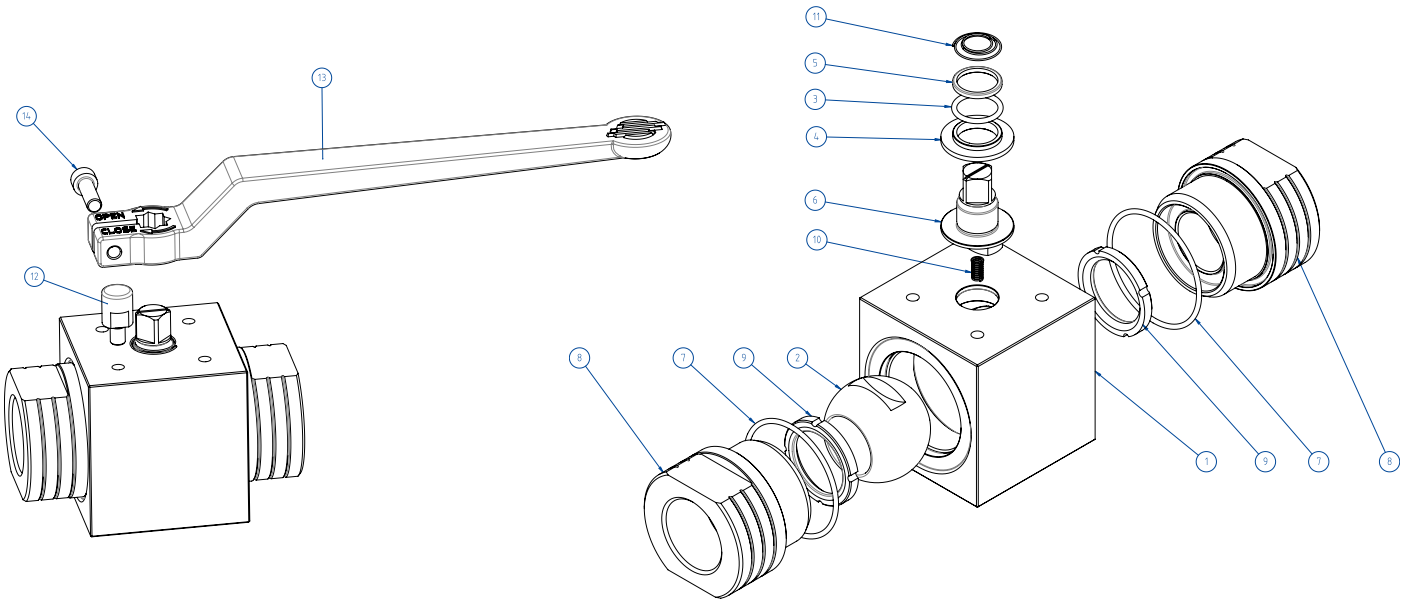



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate EN ISO 228 o NPT.<br>• Temperatura di utilizzo: da -23°C a +100°C con Oring in NBR;<br>• da -30°C a +160°C con Oring in FKM (a richiesta).<br>• Pressione di utilizzo: PN500/7000 psi DN6, DN8, DN10, DN15;<br>• PN400/6000 psi DN20 e DN25;<br>• PN320/4500 psi DN32, DN40, DN50.<br>• Fluido intercettato: fluidi liquidi e gassosi autolubrificanti purchè compatibili con i materiali costruttivi.<br>• Antistatic device.<br>• Fire safe design. | ***GENERAL FEATURES:***<br>• *Threaded ends EN ISO 228 o NPT.*<br>• *Working temperature: from -23°C to +100°C with NBR Oring;*<br>• *from -30°C to +160°C with FKM Oring (on request).*<br>• *Working pressure: DN6, DN8, DN10, DN15 PN500/7000 psi;*<br>• *DN20 e DN25 PN400/6000 psi;*<br>• *DN32, DN40, DN50 PN320/4500 psi.*<br>• *Working media: Self-lubricating liquids and gaseous, compatible with the constructive materials.*<br>• *Antistatic device.*<br>• *Fire safe design.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***SPECIAL EXECUTION ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.<br>• Certificato ATEX a richiesta.<br>• Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.<br>• Conforme alla Direttiva Europea 2014/68/UE PED. | ***CERTIFICATIONS:***<br>• *ATEX version in conformity with European Directive 2014/34/EU.*<br>• *ATEX certificate on request.*<br>• *Safety integrity level up to SIL 3 according to the IEC 61508.*<br>• *In compliance with European Directive 2014/68/EU PED.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| | |
|---|---|
| DN6, DN8, DN10, DN15 | PN500/7000 psi |
| DN20 e DN25 | PN400/6000 psi |
| DN32, DN40, DN50 | PN320/4500 psi |




## MATERIALI *MATERIALS*

| | | |
|---|---|---|
| 1 | Corpo *Body* | Inox 1.4401 / X5CrNiMo17-12-2 / A182 F316 / A479 tp. 316 |
| 2 | Sfera *Ball* | A217 CA15 / A479 tp. 410 / A182 F6A + *Hard chromium plated* |
| 3* | O-ring | NBR (*FKM on request*) |
| 4* | Bussola inferiore *Lower bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 5* | Bussola superiore *Upper bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 6 | Stelo *Stem* | A564 Tp 630 (17-4 PH) |
| 7* | O-ring | NBR (*FKM on request*) |
| 8 | Manicotto *Ends* | Inox 1.4401 / X5CrNiMo17-12-2 / A182 F316 / A479 tp. 316 |
| 9* | Seggio *Seats* | EXTREME poliammide aromatica a catena lunga - *Aromatic polyamide long chemical structure* |
| 10 | Molla antistatic device *Antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 11 | Molla antistatic device superiore *Upper antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 12** | Fermo *Holder screw* | X5CrNiMo1713 - 316 S.S. |
| 13** | Leva *Lever* | EN AB 46100 - AL SI 11 CU (FE) Nichelata - *Nichel coated* |
| 14** | Vite *Screw* | A2 - 70 |

* Componenti kit di guarnizioni *Seals kit components*
*** Componenti del kit leva *Lever kit components*

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| PN / Size | DN 6 1/8" | DN 8 1/4" | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
|---|---|---|---|---|---|---|---|---|---|
| PN 500 bar | 10 | | 18 | 20 | | | | | |
| PN 400 bar | | | | | 31 | 40 | | | |
| PN 320 bar | | | | | | | 61 | 83 | 125 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

## PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$*

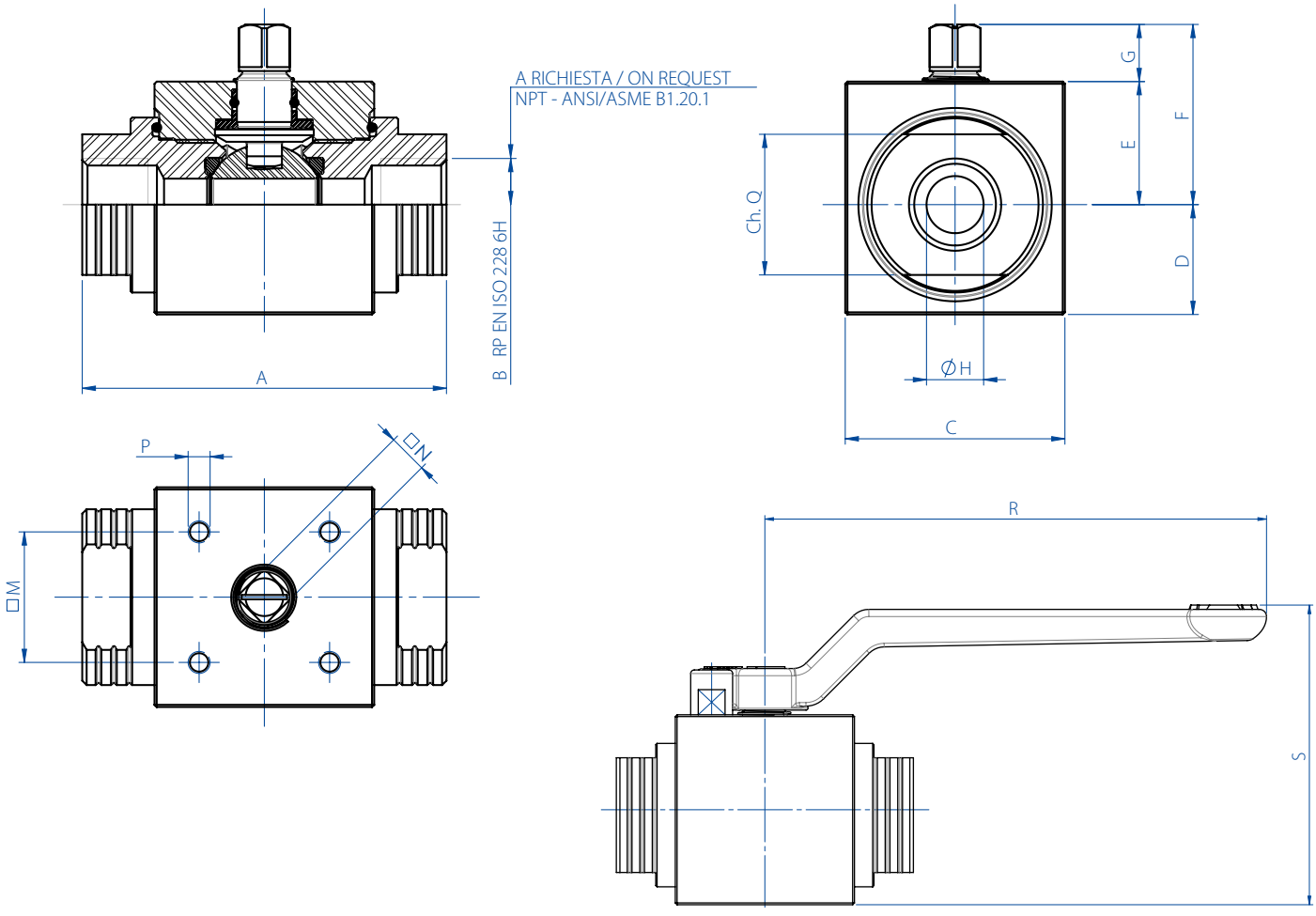
| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KV $m^3/h$ | 5,2 | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* | Kg | Kit guarnizioni -Vers. STD *Seals Kit - STD version* |
| DN 6 | 1/8" | VHA4AABAB01 | VHA4AABAB41 | LHA4AABAB01 | LHA4AABAB41 | KLVVH401 | 0,32 | KGBVHPV01D |
| DN 8 | 1/4" | VHA4AABAB02 | VHA4AABAB42 | LHA4AABAB02 | LHA4AABAB42 | KLVVH401 | 0,31 | KGBVHPV01D |
| DN 10 | 3/8" | VHA4BABAB03 | VHA4BABAB43 | LHA4BABAB03 | LHA4BABAB43 | KLVVH403 | 0,76 | KGBVHPV03N |
| DN 15 | 1/2" | VHA4BABAB04 | VHA4BABAB44 | LHA4BABAB04 | LHA4BABAB44 | KLVVH403 | 1,10 | KGBVHPV04N |
| DN 20 | 3/4" | VHA4BABAB05 | VHA4BABAB45 | LHA4BABAB05 | LHA4BABAB45 | KLVVH405 | 1,46 | KGBVHPV05N |
| DN 25 | 1" | VHA4BABAB06 | VHA4BABAB46 | LHA4BABAB06 | LHA4BABAB46 | KLVVH405 | 2,30 | KGBVHPV06N |
| DN 32 | 1" 1/4 | VHA4BABAB07 | VHA4BABAB47 | LHA4BABAB07 | LHA4BABAB47 | KLVVH407 | 3,30 | KGBVHPV07N |
| DN 40 | 1" 1/2 | VHA4BABAB08 | VHA4BABAB48 | LHA4BABAB08 | LHA4BABAB48 | KLVVH407 | 5,14 | KGBVHPV08N |
| DN 50 | 2" | VHA4BABAB09 | VHA4BABAB49 | LHA4BABAB09 | LHA4BABAB49 | KLVVH409 | 9,90 | KGBVHPV09N |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*



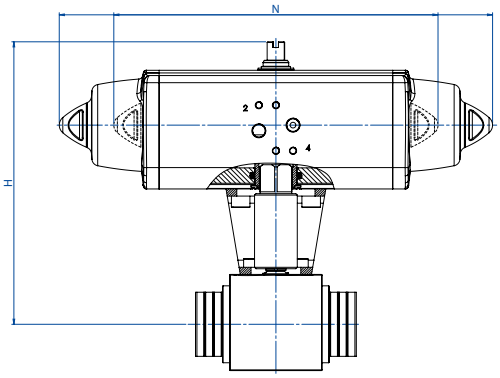

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | E | F | G | ØH | Ch.Q | □M | □N | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | |
| DN 6 | 1/8" | 69 | 1/8" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 8 | 1/4" | 69 | 1/4" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 10 | 3/8" | 72 | 3/8" | 45 | 19,7 | 25,3 | 38,3 | 13 | 9 | 24 | 29,7 (F04) | 9 | M5 | 140 | 75,5 |
| DN 15 | 1/2" | 83 | 1/2" | 50 | 25 | 28 | 41 | 13 | 13 | 32 | 29,7 (F04) | 9 | M5 | 140 | 83,6 |
| DN 20 | 3/4" | 95 | 3/4" | 55 | 27,5 | 31 | 46 | 15 | 19 | 37 | 35,36 (F05) | 11 | M6 | 212 | 94,8 |
| DN 25 | 1" | 113 | 1" | 65 | 32,5 | 35 | 50 | 15 | 25 | 45 | 35,36 (F05) | 11 | M6 | 212 | 103,8 |
| DN 32 | 1"1/4 | 111 | 1"1/4 | 80 | 38 | 42 | 62 | 20 | 32 | 55 | 49,5 (F07) | 14 | M8 | 315 | 121,6 |
| DN 40 | 1"1/2 | 130 | 1"1/2 | 90 | 44 | 46 | 66 | 20 | 38 | 65 | 49,5 (F07) | 14 | M8 | 315 | 131,6 |
| DN 50 | 2" | 140 | 2" | 120 | 59 | 61 | 81 | 20 | 51 | 80 | 49,5 (F07) | 17 | M8 | 315 | 161,7 |

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE *WITH ACTUATOR*








## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 06 | 1/8" | DHA4AABAB01AFBA0 | DHA4AABAB41AFBA0 | DAN0015411S | KCNAADD5401 | 159,0 | 139,2 | 1,5 |
| DN 08 | 1/4" | DHA4AABAB02AFBA0 | DHA4AABAB42AFBA0 | DAN0015411S | KCNAADD5401 | 159,0 | 139,2 | 1,5 |
| DN 10 | 3/8" | DHA4BABAB03AFCA0 | DHA4BABAB43AFCA0 | DAN0030411S | KCNBCDD5403 | 174,2 | 164,5 | 2,4 |
| DN 15 | 1/2" | DHA4BABAB04AFDA0 | DHA4BABAB44AFDA0 | DAN0045412S | KCNBCDD5403 | 188,5 | 175,5 | 2,9 |
| DN 20 | 3/4" | DHA4BABAB05AFEA0 | DHA4BABAB45AFEA0 | DAN0060412S | KCNCCDD5405 | 198,0 | 185,4 | 3,8 |
| DN 25 | 1" | DHA4BABAB06AFGA0 | DHA4BABAB46AFGA0 | DAN0106411S | KCNCCDD5409 | 237,0 | 205,3 | 5,6 |
| DN 32 | 1" 1/4 | DHA4BABAB07AFHA0 | DHA4BABAB47AFHA0 | DAN0120411S | KCNDDDD5406 | 244,1 | 213,0 | 6,9 |
| DN 40 | 1" 1/2 | DHA4BABAB08AFIA0 | DHA4BABAB48AFIA0 | DAN0180411S | KCNDDDD5410 | 289,9 | 258,5 | 10,9 |
| DN 50 | 2" | DHA4BABAB09AFJA0 | DHA4BABAB49AFJA0 | DAN0240411S | KCNDDDD5407 | 313,6 | 262,1 | 16,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

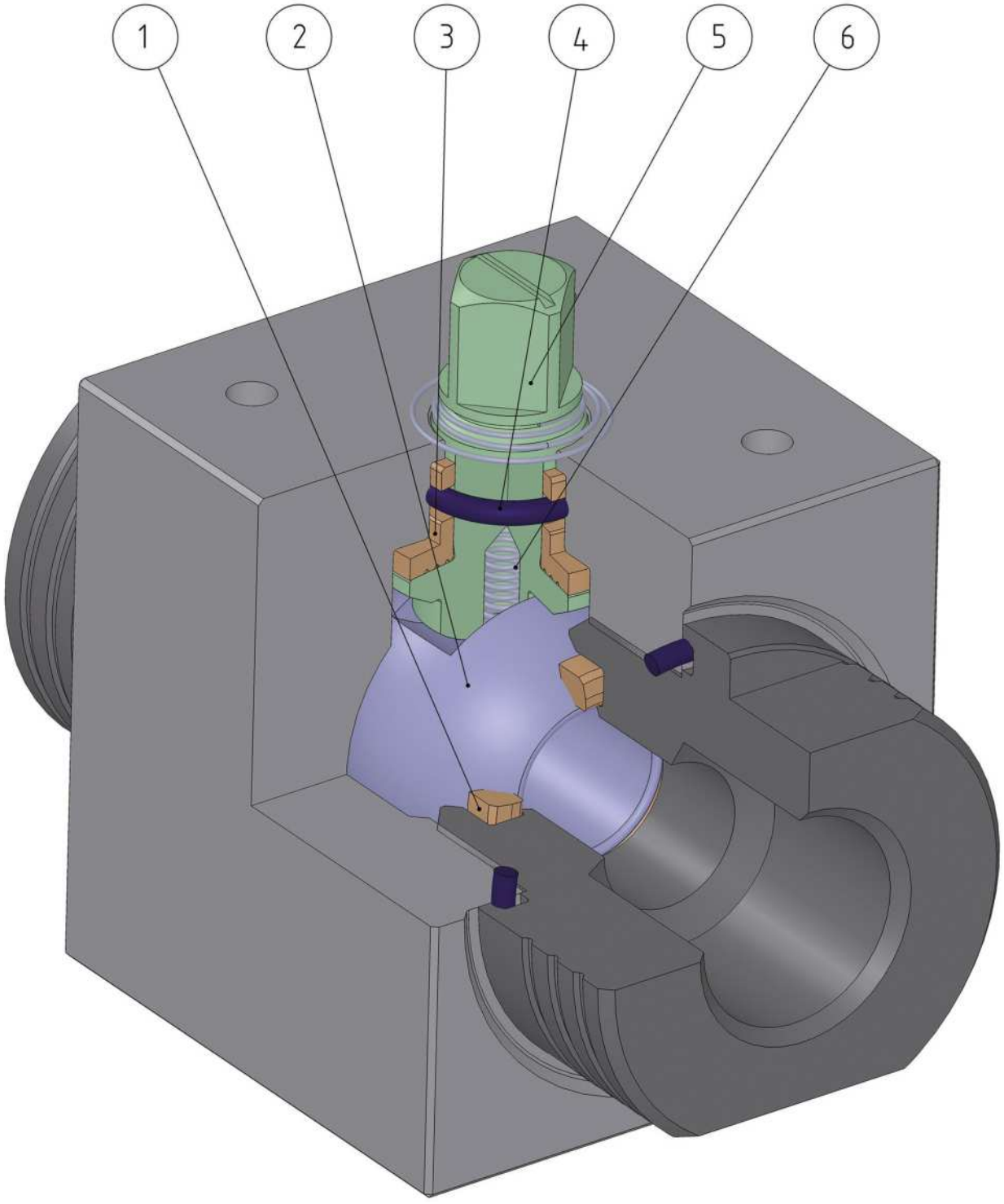
| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 06 | 1/8" | SHA4AABAB01AFCA0 | SHA4AABAB41AFCA0 | SRN0015401S | KCNAADD5401 | 233,2 | 146,2 | 1,9 |
| DN 08 | 1/4" | SHA4AABAB02AFCA0 | SHA4AABAB42AFCA0 | SRN0015401S | KCNAADD5401 | 233,2 | 146,9 | 1,9 |
| DN 10 | 3/8" | SHA4BABAB03AFEA0 | SHA4BABAB43AFEA0 | SRN0030402S | KCNBCDD5408 | 258,8 | 175,7 | 3,4 |
| DN 15 | 1/2" | SHA4BABAB04AFGA0 | SHA4BABAB44AFGA0 | SRN0053401S | KCNBCDD5411 | 304,2 | 191,3 | 4,9 |
| DN 20 | 3/4" | SHA4BABAB05AFHA0 | SHA4BABAB45AFHA0 | SRN0060401S | KCNCCDD5409 | 338,5 | 198,0 | 5,6 |
| DN 25 | 1" | SHA4BABAB06AFIA0 | SHA4BABAB46AFIA0 | SRN0090401S | KCNCDDD5412 | 393,7 | 232,5 | 9,2 |
| DN 32 | 1" 1/4 | SHA4BABAB07AFJA0 | SHA4BABAB47AFJA0 | SRN0120401S | KCNDDDD5410 | 409,6 | 243,1 | 11,2 |
| DN 40 | 1" 1/2 | SHA4BABAB08AFKA0 | SHA4BABAB48AFKA0 | SRN0180401S | KCNDDDD5410 | 474,0 | 254,0 | 15,2 |
| DN 50 | 2" | SHA4BABAB09AFLA0 | SHA4BABAB49AFLA0 | SRN0240401S | KCNDEDD5413 | 520,5 | 306,0 | 23,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX)
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution)*

# HERCULES ALTA CICLICITÀ *HIGH CICLICITY*
# PER FLUIDI NON AUTO-LUBRIFICANTI
# *NON SELF-LUBRICATING MEDIA*



| FEATURES & BENEFITS | | |
|---|---|---|
| 1 | Tenuta in "LUBROSEAT"<br>*Seat in "LUBROSEAT"* | Compound di resina acetalica con additivi a proprietà autolubrificanti.<br>*Acetal resin compound containing self-lubricating additives.* |
| | | Ideale per intercettare fluidi non autolubrificanti.<br>*Ideal for non-lubricating fluids.* |
| | | Elevata resistenza alla sollecitazione.<br>*High resistance to stress.* |
| 2 | Sfera in acciaio inossidabile con rivestimento in Cromo Duro da 40µm<br>*Stainless steel ball, coated with 40µm Hard Chrome* | Maggior tenuta nel tempo grazie alla bassa usura della sfera.<br>*Longer seal life due to the low wear of the ball.* |
| 3 | Supporto stelo in "POWERAMMIDE"<br>*"POWERAMMIDE"* stem bush* | Si ha un perfetto allineamento dell'albero sul corpo e si evitano oscillazioni con alte pressioni.<br>*It grants a perfect alignment of the shaft on the body and prevents oscillations with high pressure.* |
| | | Nessuna possibilità di grippaggio.<br>*No seizing.* |
| | | Elevato numero di azionamenti.<br>*High number of cycles.* |
| 4 | O-ring in elastomero da 90 Shore A<br>*Elastomer O-Ring with a hardness of 90 Shore A* | Nessun deperimento dovuto ad azionamenti estremamente veloci.<br>*No deterioration with quick operations.* |
| 4 | *O-ring a bassa permeabilità "Rapid Gas Decompression"*<br>*Low-permeability O-ring "Rapid Gas Decompression"* | *Buona resistenza alla decompressione esplosiva.*<br>*Good resistance to explosive decompression.* |
| 5 | Stelo in 17-4 PH H900<br>*Stem in 17-4 PH H900* | Maggior resistenza meccanica di circa 5 volte rispetto ad un classico 316 S.S.<br>*Increased mechanical strenght about 5 times more compared to a standard 316 S.S.* |
| 5 | Rullatura stelo<br>Shaft rolling | Minor usura delle guarnizioni grazie alla bassa rugosità (0,4 micron Ra ) dello stelo che facilita lo scorrimento.<br>*Less wear of the seals due to the low roughness (0,4 micron Ra) which facilitate the sliding of the shaft.* |
| 6 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device (electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi.<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment.* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola.<br>*Contact safety throughout the entire life of the valve.* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione (per DN ≥ 32).<br>*Full compliance with European safety standards for pressure equipment (for DN ≥ 32).* |
| | Fire safe design<br>*Fire safe design* | Garantisce la tenuta della valvola anche in caso di incendio.<br>*Guarantees the tightness of the valve also in case of fire.* |
| | Certificato ATEX<br>*Atex Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is possible in a potential explosive environment.* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

# HERCULES ALTA CICLICITÀ *HIGH CICLICITY*

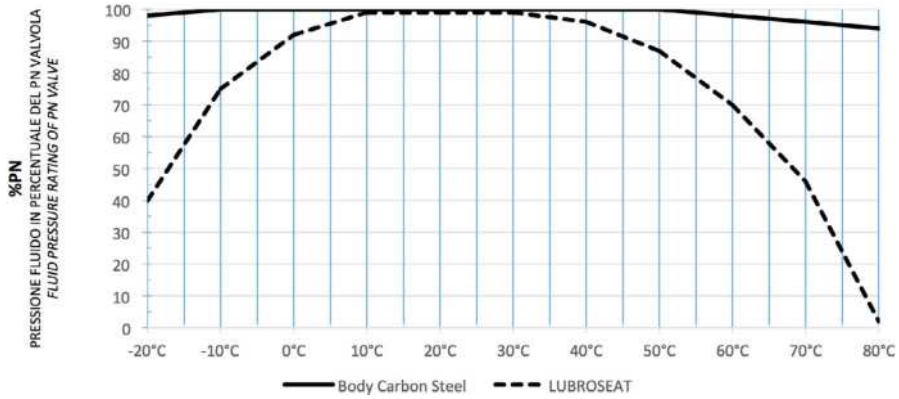
## PER FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*

## ACCIAIO AL CARBONIO *CARBON STEEL*

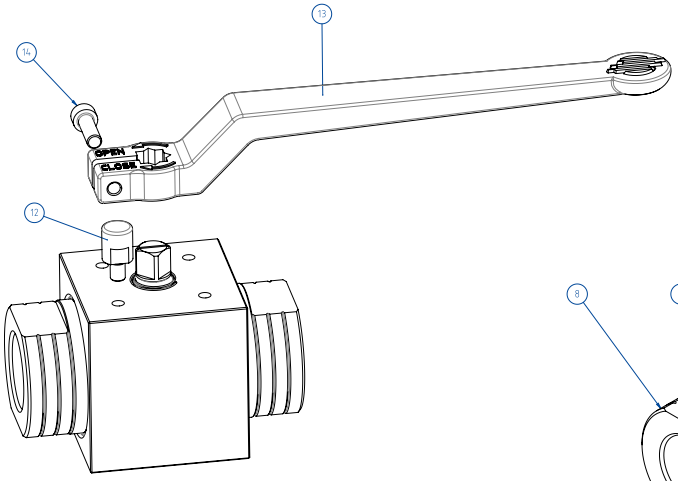


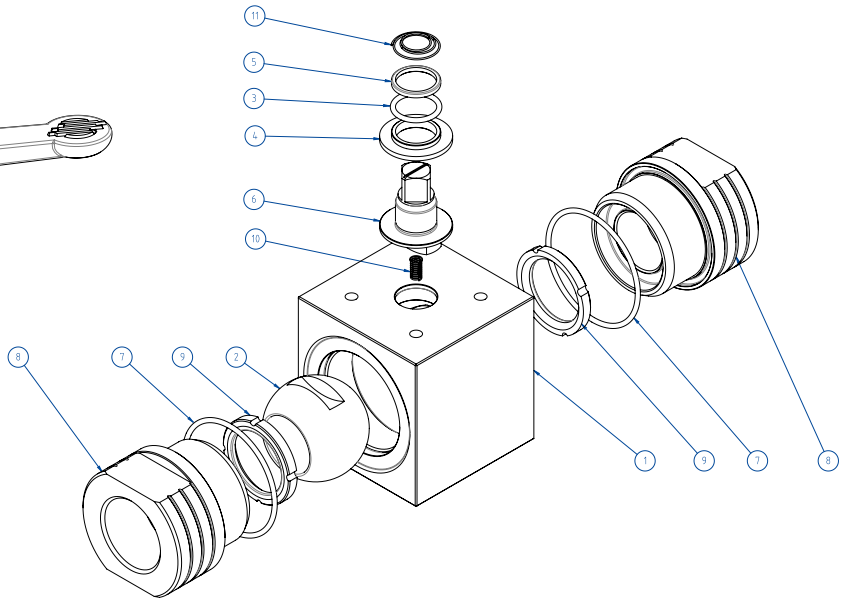

| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate EN ISO 228 o NPT.<br>• Temperatura di utilizzo: da -20°C a +80°C.<br>• Pressioni di utilizzo: PN400/6000 psi DN10, DN15, DN20;<br>PN320/4500 psi DN25, DN32, DN40, DN50.<br>• Fluido intercettato: olii, prodotti petroliferi e petrolchimici, acqua e altri purchè compatibili con i materiali costruttivi.<br>• Antistatic device.<br>• Fire safe design. | ***GENERAL FEATURES:***<br>• *Ends: Threaded ends EN ISO 228 or NPT.*<br>• *Working temperature: from -20°C to +80°C.*<br>• *Working pressure: PN400/6000 psi DN10, DN15, DN20;*<br>*PN320/4500 psi DN25, DN32, DN40, DN50.*<br>• *Working media: oils, petroleum and petrochemical products, water and other compatible with the constructive materials.*<br>• *Antistatic device.*<br>• *Fire safe design.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***SPECIAL EXECUTION ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.<br>• Certificato ATEX a richiesta.<br>• Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.<br>• Conforme alla Direttiva Europea 2014/68/UE PED. | ***CERTIFICATIONS:***<br>• *ATEX version in conformity with European Directive 2014/34/EU.*<br>• *ATEX certificate on request.*<br>• *Safety integrity level up to SIL 3 according to the IEC 61508.*<br>• *In compliance with European Directive 2014/68/EU PED.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| | |
|---|---|
| DN10, DN15, DN20 | PN400/6000 psi |
| DN25, DN32, DN40, DN50 | PN320/4500 psi |




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) Zincato - *Zinc coated* |
| 2 | Sfera *Ball* | A217 CA15 / A479 tp. 410 / A182 F6A + *Hard chromium plated* |
| 3* | O-ring | NBR (*FKM on request*) |
| 4* | Bussola inferiore *Lower bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 5* | Bussola superiore *Upper bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 6 | Stelo *Stem* | A564 Tp 630 (17-4 PH) |
| 7* | O-ring | NBR (*FKM on request*) |
| 8 | Manicotto *Ends* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) Zincato - *Zinc coated* |
| 9* | Seggio *Seats* | LUBROSEAT: Resina acetalica con additivi autolubrificanti. *Acetal resin with self-lubricating additives.* |
| 10 | Molla antistatic device *Antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 11 | Molla antistatic device superiore *Upper antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 12** | Fermo *Holder screw* | X5CrNiMo1713 - 316 S.S. |
| 13** | Leva *Lever* | EN AB 46100 - AL SI 11 CU (FE) Verniciata - *Painted* |
| 14** | Vite *Screw* | A2 - 70 |

* Componenti kit di guarnizioni *Seals kit components*
** Componenti dei kit leva *Lever kit components*

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| PN / *Size* | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
| PN 400 bar | 20 | 31 | 40 | | | | |
| PN 320 bar | 15 | 25 | 34 | 62 | 82 | 125 | 166 |
| PN 100 bar | 10 | 20 | 30 | 39 | 64 | 88 | 126 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

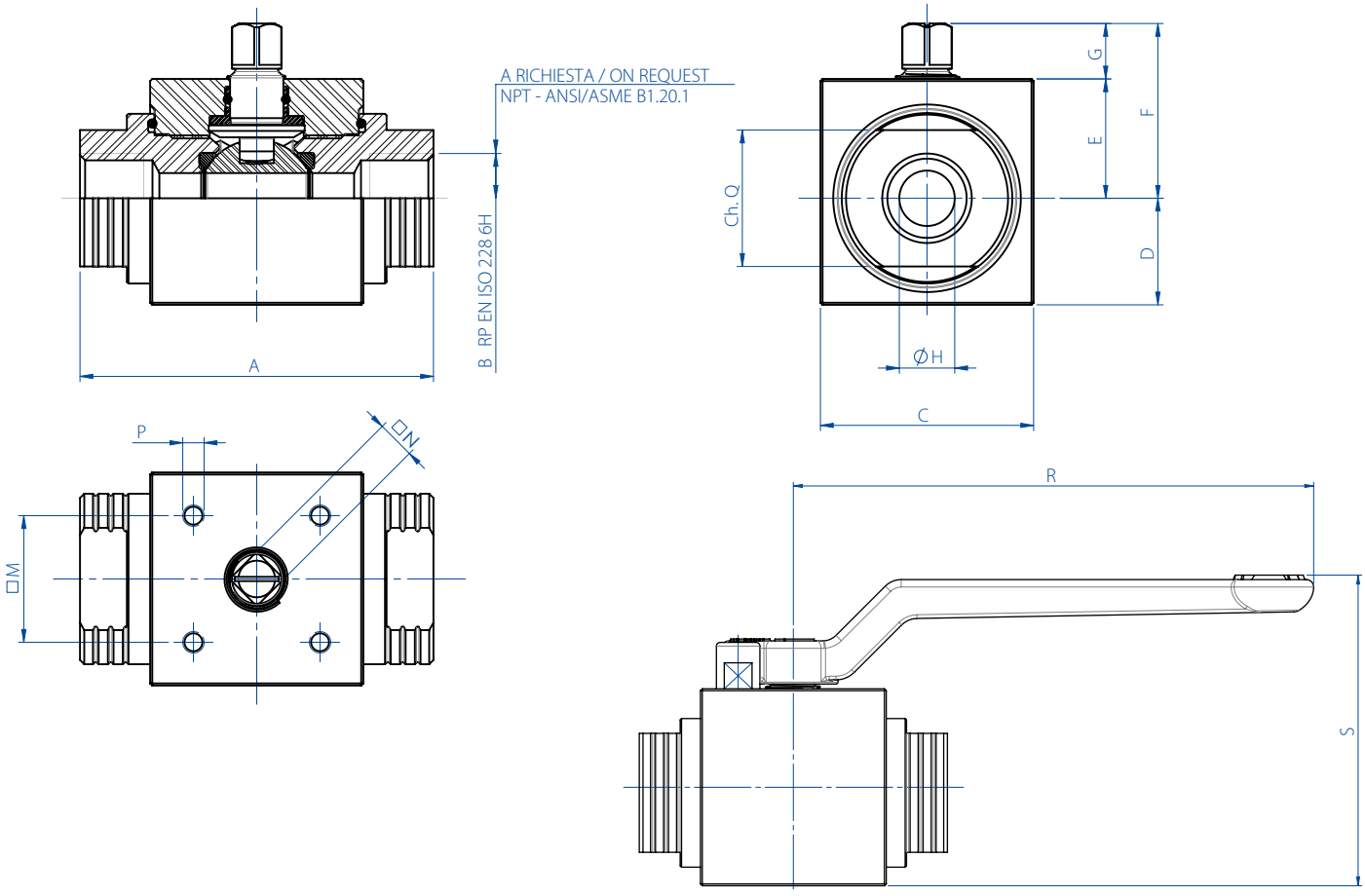
| PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$* | | | | | | | |
|---|---|---|---|---|---|---|---|
| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* | Kg | Kit guarnizioni *Seals Kit* |
| DN 10 | 3/8" | VHA5BABAP03 | VHA5BABAP43 | LHA5BABAP03 | LHA5BABAP43 | KLVVH503 | 0,76 | KGBVHPV03P |
| DN 15 | 1/2" | VHA5BABAP04 | VHA5BABAP44 | LHA5BABAP04 | LHA5BABAP44 | KLVVH503 | 1,10 | KGBVHPV04P |
| DN 20 | 3/4" | VHA5BABAP05 | VHA5BABAP45 | LHA5BABAP05 | LHA5BABAP45 | KLVVH505 | 1,46 | KGBVHPV05P |
| DN 25 | 1" | VHA5BABAP06 | VHA5BABAP46 | LHA5BABAP06 | LHA5BABAP46 | KLVVH505 | 2,30 | KGBVHPV06P |
| DN 32 | 1" 1/4 | VHA6BABAP07 | VHA6BABAP47 | LHA6BABAP07 | LHA6BABAP47 | KLVVH507 | 3,30 | KGBVHPV07P |
| DN 40 | 1" 1/2 | VHA6BABAP08 | VHA6BABAP48 | LHA6BABAP08 | LHA6BABAP48 | KLVVH507 | 5,14 | KGBVHPV08P |
| DN 50 | 2" | VHA6BABAP09 | VHA6BABAP49 | LHA6BABAP09 | LHA6BABAP49 | KLVVH509 | 9,90 | KGBVHPV09P |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*



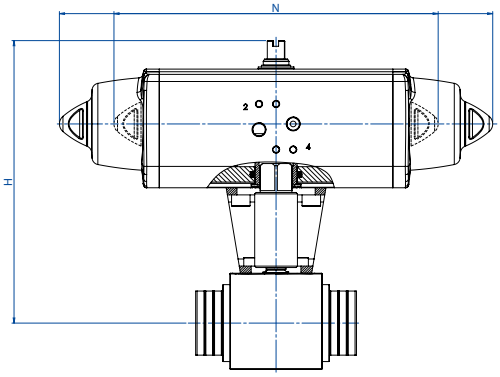

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | E | F | G | ØH | Ch.Q | □M | □N | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | |
| DN 6 | 1/8" | 69 | 1/8" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 8 | 1/4" | 69 | 1/4" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 10 | 3/8" | 72 | 3/8" | 45 | 19,7 | 25,3 | 38,3 | 13 | 9 | 24 | 29,7 (F04) | 9 | M5 | 140 | 75,5 |
| DN 15 | 1/2" | 83 | 1/2" | 50 | 25 | 28 | 41 | 13 | 13 | 32 | 29,7 (F04) | 9 | M5 | 140 | 83,6 |
| DN 20 | 3/4" | 95 | 3/4" | 55 | 27,5 | 31 | 46 | 15 | 19 | 37 | 35,36 (F05) | 11 | M6 | 212 | 94,8 |
| DN 25 | 1" | 113 | 1" | 65 | 32,5 | 35 | 50 | 15 | 25 | 45 | 35,36 (F05) | 11 | M6 | 212 | 103,8 |
| DN 32 | 1"1/4 | 111 | 1"1/4 | 80 | 38 | 42 | 62 | 20 | 32 | 55 | 49,5 (F07) | 14 | M8 | 315 | 121,6 |
| DN 40 | 1"1/2 | 130 | 1"1/2 | 90 | 44 | 46 | 66 | 20 | 38 | 65 | 49,5 (F07) | 14 | M8 | 315 | 131,6 |
| DN 50 | 2" | 140 | 2" | 120 | 59 | 61 | 81 | 20 | 51 | 80 | 49,5 (F07) | 17 | M8 | 315 | 161,7 |

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE *WITH ACTUATOR*










## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DHA5BABAP03AFCA0 | DHA5BABAP43AFCA0 | DAN0030411S | KCNBCDD5403 | 174,2 | 164,5 | 2,4 |
| DN 15 | 1/2" | DHA5BABAP04AFDA0 | DHA5BABAP44AFDA0 | DAN0045412S | KCNBCDD5403 | 188,5 | 175,5 | 2,9 |
| DN 20 | 3/4" | DHA5BABAP05AFEA0 | DHA5BABAP45AFEA0 | DAN0060412S | KCNCCDD5405 | 198,0 | 185,4 | 3,8 |
| DN 25 | 1" | DHA5BABAP06AFGA0 | DHA5BABAP46AFGA0 | DAN0106411S | KCNCCDD5409 | 237,0 | 205,3 | 5,6 |
| DN 32 | 1" 1/4 | DHA6BABAP07AFHA0 | DHA6BABAP47AFHA0 | DAN0120411S | KCNDDDD5406 | 244,1 | 213,0 | 6,9 |
| DN 40 | 1" 1/2 | DHA6BABAP08AFIA0 | DHA6BABAP48AFIA0 | DAN0180411S | KCNDDDD5410 | 289,9 | 258,5 | 10,9 |
| DN 50 | 2" | DHA6BABAP09AFJA0 | DHA6BABAP49AFJA0 | DAN0240411S | KCNDDDD5407 | 313,6 | 262,1 | 16,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SHA5BABAP03AFEA0 | SHA5BABAP43AFEA0 | SRN0030402S | KCNBCDD5408 | 258,8 | 175,7 | 3,4 |
| DN 15 | 1/2" | SHA5BABAP04AFGA0 | SHA5BABAP44AFGA0 | SRN0053401S | KCNBCDD5411 | 304,2 | 191,3 | 4,9 |
| DN 20 | 3/4" | SHA5BABAP05AFHA0 | SHA5BABAP45AFHA0 | SRN0060401S | KCNCCDD5409 | 338,5 | 198,0 | 5,6 |
| DN 25 | 1" | SHA5BABAP06AFIA0 | SHA5BABAP46AFIA0 | SRN0090401S | KCNCDDD5412 | 393,7 | 232,5 | 9,2 |
| DN 32 | 1" 1/4 | SHA6BABAP07AFJA0 | SHA6BABAP47AFJA0 | SRN0120401S | KCNDDDD5410 | 409,6 | 243,1 | 11,2 |
| DN 40 | 1" 1/2 | SHA6BABAP08AFKA0 | SHA6BABAP48AFKA0 | SRN0180401S | KCNDDDD5410 | 474,0 | 254,0 | 15,2 |
| DN 50 | 2" | SHA6BABAP09AFLA0 | SHA6BABAP49AFLA0 | SRN0240401S | KCNDEDD5413 | 520,5 | 306,0 | 23,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX)
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution)*

# HERCULES ALTA CICLICITÀ *HIGH CICLICITY*

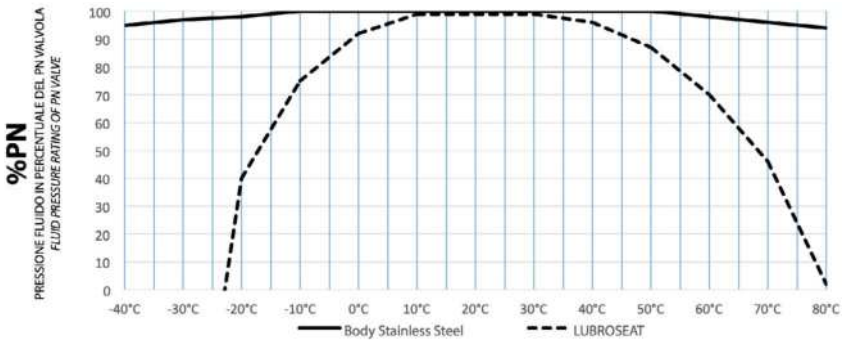
## PER FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*

## ACCIAIO INOX *STAINLESS STEEL*



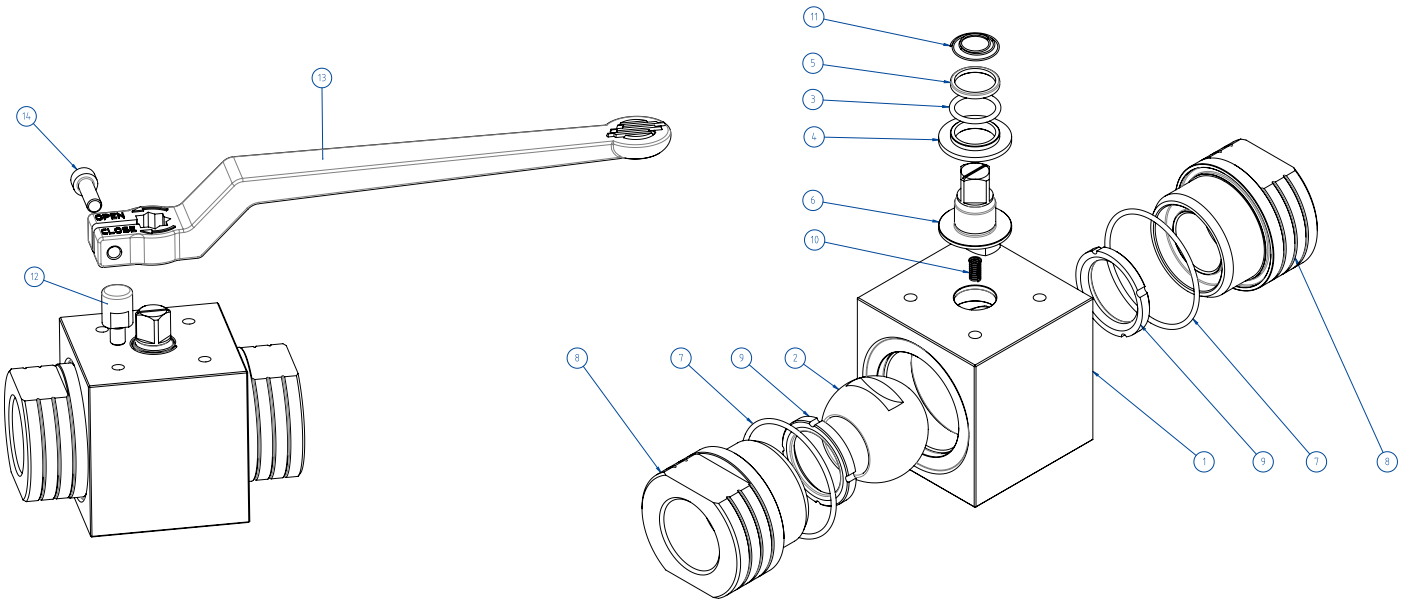

| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate EN ISO 228 o NPT.<br>• Temperatura di utilizzo: da -20°C a +80°C.<br>• Pressioni di utilizzo: PN400/6000 psi DN10, DN15, DN20;<br>PN320/4500 psi DN25, DN32, DN40, DN50.<br>• Fluido intercettato: olii, prodotti petroliferi e petrolchimici, acqua e altri purchè compatibili con i materiali costruttivi.<br>• Antistatic device.<br>• Fire safe design. | ***GENERAL FEATURES:***<br>• *Ends: Threaded ends EN ISO 228 or NPT.*<br>• *Working temperature: from -20°C to +80°C.*<br>• *Working pressure: PN400/6000 psi DN10, DN15, DN20;*<br>*PN320/4500 psi DN25, DN32, DN40, DN50.*<br>• *Working media: oils, petroleum and petrochemical products, water and other compatible with the constructive materials.*<br>• *Antistatic device.*<br>• *Fire safe design.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***SPECIAL EXECUTION ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.<br>• Certificato ATEX a richiesta.<br>• Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.<br>• Conforme alla Direttiva Europea 2014/68/UE PED. | ***CERTIFICATIONS:***<br>• *ATEX version in conformity with European Directive 2014/34/EU.*<br>• *ATEX certificate on request.*<br>• *Safety integrity level up to SIL 3 according to the IEC 61508.*<br>• *In compliance with European Directive 2014/68/EU PED.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| | |
|---|---|
| DN10, DN15, DN20 | PN400/6000 psi |
| DN25, DN32, DN40, DN50 | PN320/4500 psi |






| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | Inox 1.4401 / X5CrNiMo17-12-2 / A182 F316 / A479 tp. 316 |
| 2 | Sfera *Ball* | A217 CA15 / A479 tp. 410 / A182 F6A + *Hard chromium plated* |
| 3* | O-ring | NBR (*FKM on request*) |
| 4* | Bussola inferiore *Lower bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 5* | Bussola superiore *Upper bush* | POWERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 6 | Stelo *Stem* | A564 Tp 630 (17-4 PH) |
| 7* | O-ring | NBR (*FKM on request*) |
| 8 | Manicotto *Ends* | Inox 1.4401 / X5CrNiMo17-12-2 / A182 F316 / A479 tp. 316 |
| 9* | Seggio *Seats* | LUBROSEAT: Resina acetalica con additivi autolubrificanti. *Acetal resin with self-lubricating additives.* |
| 10 | Molla antistatic device *Antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 11 | Molla antistatic device superiore *Upper antistatic device spring* | 1.4310 - X12CrNi17-7 |
| 12** | Fermo *Holder screw* | X5CrNiMo1713 - 316 S.S. |
| 13** | Leva *Lever* | EN AB 46100 - AL SI 11 CU (FE) Nichelata - *Nichel coated* |
| 14** | Vite *Screw* | A2 - 70 |

* Componenti kit di guarnizioni *Seals kit components*
*** Componenti del kit leva Lever kit components*

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| PN / *Size* | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
| PN 400 bar | 20 | 31 | 40 | | | | |
| PN 320 bar | 15 | 25 | 34 | 62 | 82 | 125 | 166 |
| PN 100 bar | 10 | 20 | 30 | 39 | 64 | 88 | 126 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

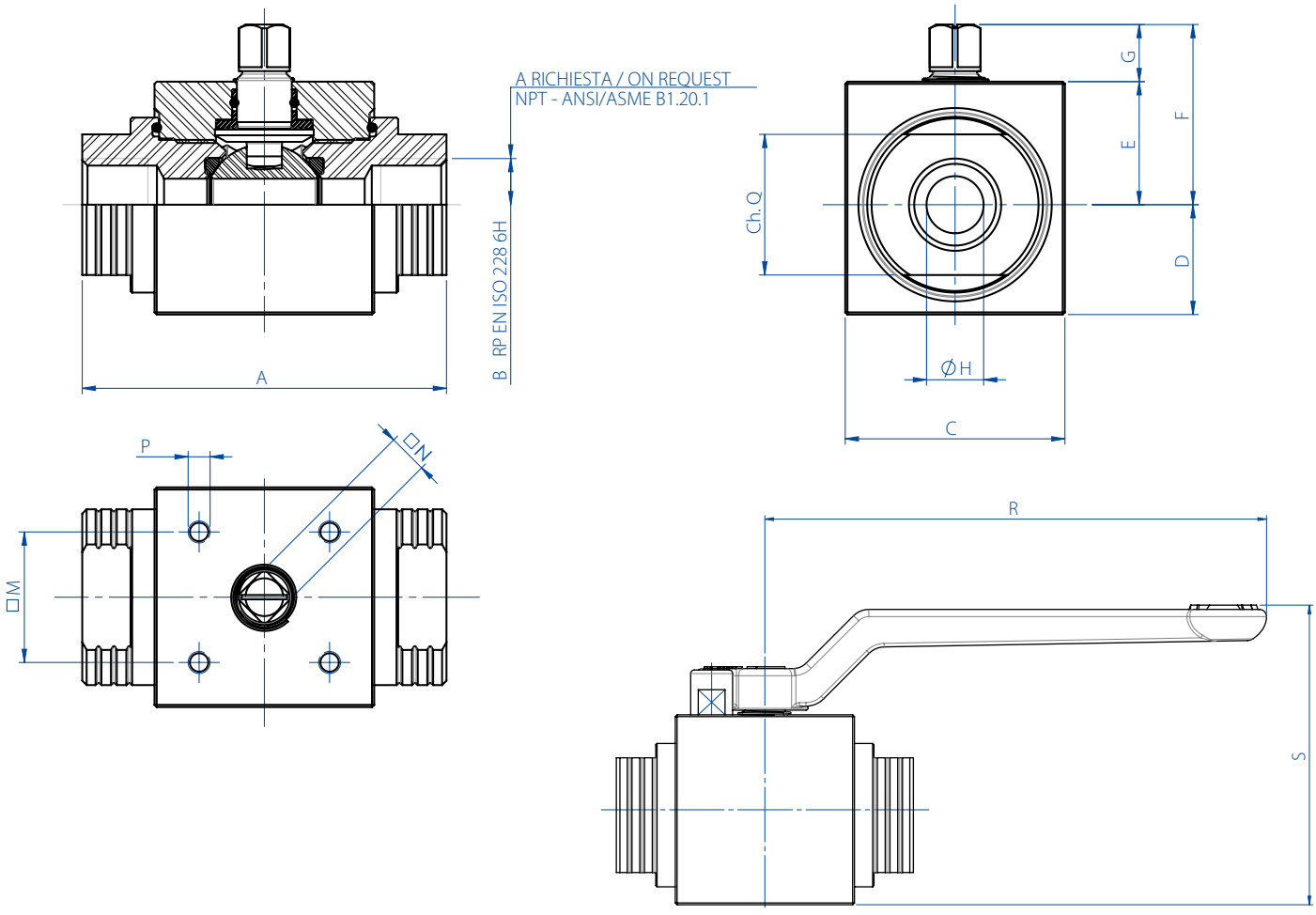
| PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$* | | | | | | | |
|---|---|---|---|---|---|---|---|
| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO INOX *STAINLESS STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* | Kg | Kit guarnizioni *Seals Kit* |
| DN 10 | 3/8" | VHA4BABAP03 | VHA4BABAP43 | LHA4BABAP03 | LHA4BABAP43 | KLVVH403 | 0,76 | KGBVHPV03P |
| DN 15 | 1/2" | VHA4BABAP04 | VHA4BABAP44 | LHA4BABAP04 | LHA4BABAP44 | KLVVH403 | 1,10 | KGBVHPV04P |
| DN 20 | 3/4" | VHA4BABAP05 | VHA4BABAP45 | LHA4BABAP05 | LHA4BABAP45 | KLVVH405 | 1,46 | KGBVHPV05P |
| DN 25 | 1" | VHA4BABAP06 | VHA4BABAP46 | LHA4BABAP06 | LHA4BABAP46 | KLVVH405 | 2,30 | KGBVHPV06P |
| DN 32 | 1" 1/4 | VHA4BABAP07 | VHA4BABAP47 | LHA4BABAP07 | LHA4BABAP47 | KLVVH407 | 3,30 | KGBVHPV07P |
| DN 40 | 1" 1/2 | VHA4BABAP08 | VHA4BABAP48 | LHA4BABAP08 | LHA4BABAP48 | KLVVH407 | 5,14 | KGBVHPV08P |
| DN 50 | 2" | VHA4BABAP09 | VHA4BABAP49 | LHA4BABAP09 | LHA4BABAP49 | KLVVH409 | 9,90 | KGBVHPV09P |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*



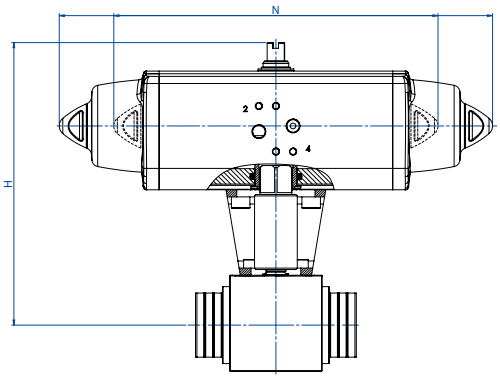

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | E | F | G | ØH | Ch.Q | □M | □N | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | |
| DN 6 | 1/8" | 69 | 1/8" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 8 | 1/4" | 69 | 1/4" | 30 | 13 | 17 | 27 | 10 | 6 | 19 | 21x30 | 6 | M5 | 103,5 | 56,1 |
| DN 10 | 3/8" | 72 | 3/8" | 45 | 19,7 | 25,3 | 38,3 | 13 | 9 | 24 | 29,7 (F04) | 9 | M5 | 140 | 75,5 |
| DN 15 | 1/2" | 83 | 1/2" | 50 | 25 | 28 | 41 | 13 | 13 | 32 | 29,7 (F04) | 9 | M5 | 140 | 83,6 |
| DN 20 | 3/4" | 95 | 3/4" | 55 | 27,5 | 31 | 46 | 15 | 19 | 37 | 35,36 (F05) | 11 | M6 | 212 | 94,8 |
| DN 25 | 1" | 113 | 1" | 65 | 32,5 | 35 | 50 | 15 | 25 | 45 | 35,36 (F05) | 11 | M6 | 212 | 103,8 |
| DN 32 | 1"1/4 | 111 | 1"1/4 | 80 | 38 | 42 | 62 | 20 | 32 | 55 | 49,5 (F07) | 14 | M8 | 315 | 121,6 |
| DN 40 | 1"1/2 | 130 | 1"1/2 | 90 | 44 | 46 | 66 | 20 | 38 | 65 | 49,5 (F07) | 14 | M8 | 315 | 131,6 |
| DN 50 | 2" | 140 | 2" | 120 | 59 | 61 | 81 | 20 | 51 | 80 | 49,5 (F07) | 17 | M8 | 315 | 161,7 |

# HERCULES - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE *WITH ACTUATOR*










## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DHA4BABAP03AFCA0 | DHA4BABAP43AFCA0 | DAN0030411S | KCNBCDD5403 | 174,2 | 164,5 | 2,4 |
| DN 15 | 1/2" | DHA4BABAP04AFDA0 | DHA4BABAP44AFDA0 | DAN0045412S | KCNBCDD5403 | 188,5 | 175,5 | 2,9 |
| DN 20 | 3/4" | DHA4BABAP05AFEA0 | DHA4BABAP45AFEA0 | DAN0060412S | KCNCCDD5405 | 198,0 | 185,4 | 3,8 |
| DN 25 | 1" | DHA4BABAP06AFGA0 | DHA4BABAP46AFGA0 | DAN0106411S | KCNCCDD5409 | 237,0 | 205,3 | 5,6 |
| DN 32 | 1" 1/4 | DHA4BABAP07AFHA0 | DHA4BABAP47AFHA0 | DAN0120411S | KCNDDDD5406 | 244,1 | 213,0 | 6,9 |
| DN 40 | 1" 1/2 | DHA4BABAP08AFIA0 | DHA4BABAP48AFIA0 | DAN0180411S | KCNDDDD5410 | 289,9 | 258,5 | 10,9 |
| DN 50 | 2" | DHA4BABAP09AFJA0 | DHA4BABAP49AFJA0 | DAN0240411S | KCNDDDD5407 | 313,6 | 262,1 | 16,6 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SHA4BABAP03AFEA0 | SHA4BABAP43AFEA0 | SRN0030402S | KCNBCDD5408 | 258,8 | 175,7 | 3,4 |
| DN 15 | 1/2" | SHA4BABAP04AFGA0 | SHA4BABAP44AFGA0 | SRN0053401S | KCNBCDD5411 | 304,2 | 191,3 | 4,9 |
| DN 20 | 3/4" | SHA4BABAP05AFHA0 | SHA4BABAP45AFHA0 | SRN0060401S | KCNCCDD5409 | 338,5 | 198,0 | 5,6 |
| DN 25 | 1" | SHA4BABAP06AFIA0 | SHA4BABAP46AFIA0 | SRN0090401S | KCNCDDD5412 | 393,7 | 232,5 | 9,2 |
| DN 32 | 1" 1/4 | SHA4BABAP07AFJA0 | SHA4BABAP47AFJA0 | SRN0120401S | KCNDDDD5410 | 409,6 | 243,1 | 11,2 |
| DN 40 | 1" 1/2 | SHA4BABAP08AFKA0 | SHA4BABAP48AFKA0 | SRN0180401S | KCNDDDD5410 | 474,0 | 254,0 | 15,2 |
| DN 50 | 2" | SHA4BABAP09AFLA0 | SHA4BABAP49AFLA0 | SRN0240401S | KCNDEDD5413 | 520,5 | 306,0 | 23,6 |

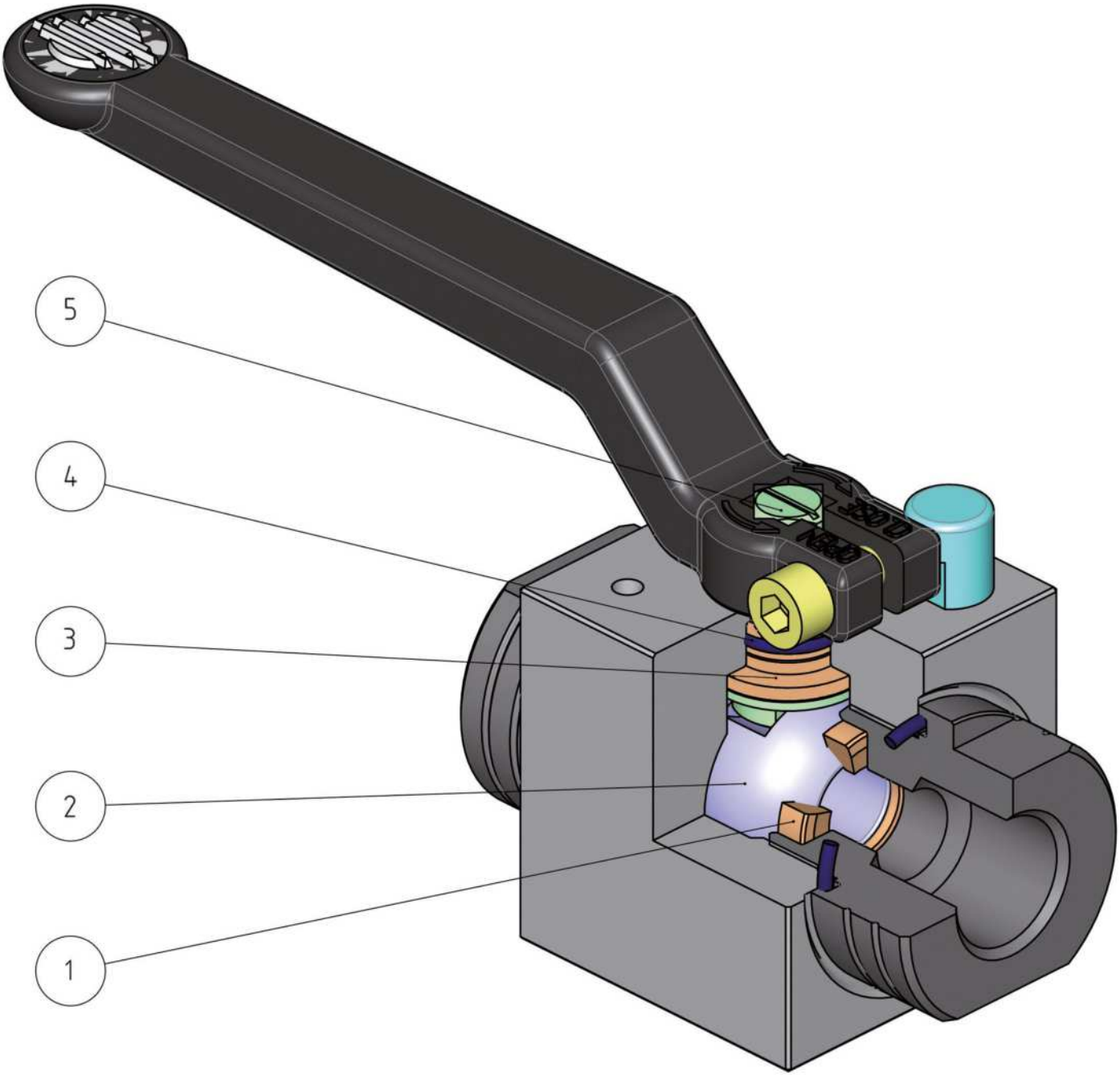
A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX)
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution)*

# HERCULES

## MANUALE *MANUAL*



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Tenuta in "MASTERAMMIDE"*<br>*Seat in "MASTERAMMIDE"** | Minor usura rispetto a tenute non modificate<br>Less wear comparing with not modify seat |
| | | Elevata resistenza alla sollecitazione<br>*High resistance to stress* |
| 2 | Sfera in acciaio inossidabile con rivestimento in Cromo Duro da 40µm<br>*Stainless steel ball, coated with 40µm Hard Chrome* | Maggior tenuta nel tempo grazie alla bassa usura della sfera<br>*Longer seal life due to the low wear of the ball* |
| 3 | Supporto stelo in "MASTERAMMIDE"*<br>*"MASTERAMMIDE"* stem bush* | Si ha un perfetto allineamento dell'albero sul corpo e si evitano oscillazioni con alte pressioni<br>*It grants a perfect alignment of the shaft on the body and prevents oscillations with high pressure* |
| | | Nessuna possibilità di grippaggio<br>*No seizing* |
| 4 | O-ring in elastomero con durezza di 90 Shore A<br>*Elastomer O-Ring with a hardness of 90 Shore A* | Nessun deperimento dovuto ad azionamenti estremamente veloci<br>*No deterioration with quick operations* |
| 4 | O-ring a bassa permeabilità "Rapid Gas Decompression"<br>*Low-permeability O-ring "Rapid Gas Decompression"* | Buona resistenza alla decompressione esplosiva<br>*Good resistance to explosive decompression* |
| 5 | Stelo in 17-4 PH H900<br>*Stem in 17-4 PH H900* | Maggior resistenza meccanica di circa 5 volte rispetto ad un classico 316 S.S.<br>*Increased mechanical strenght about 5 times more compared to a standard 316 S.S.* |
| 5 | Rullatura stelo<br>*Shaft rolling* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,4 micron Ra) dello stelo che facilita lo scorrimento<br>*Less wear of the seals due to the low roughness (0,4 micron Ra) which facilitate the sliding of the shaft* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione (per DN > di 25)<br>*Full compliance with European safety standards for pressure equipment (for DN> 25)* |

*Blend di tecnopolimeri e di cariche aramidiche
**Blend of polymers and aramid filler*

# HERCULES MANUALE *MANUAL*

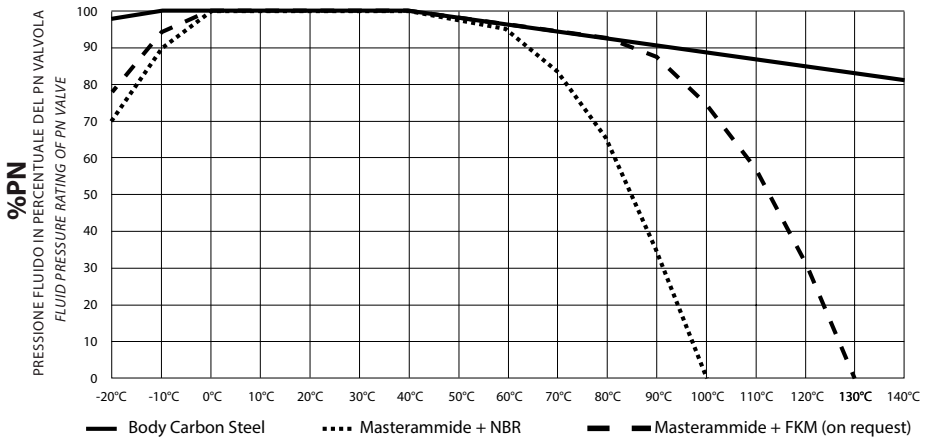
## ALTA PRESSIONE *HIGH PRESSURE*

## ACCIAIO AL CARBONIO *CARBON STEEL*

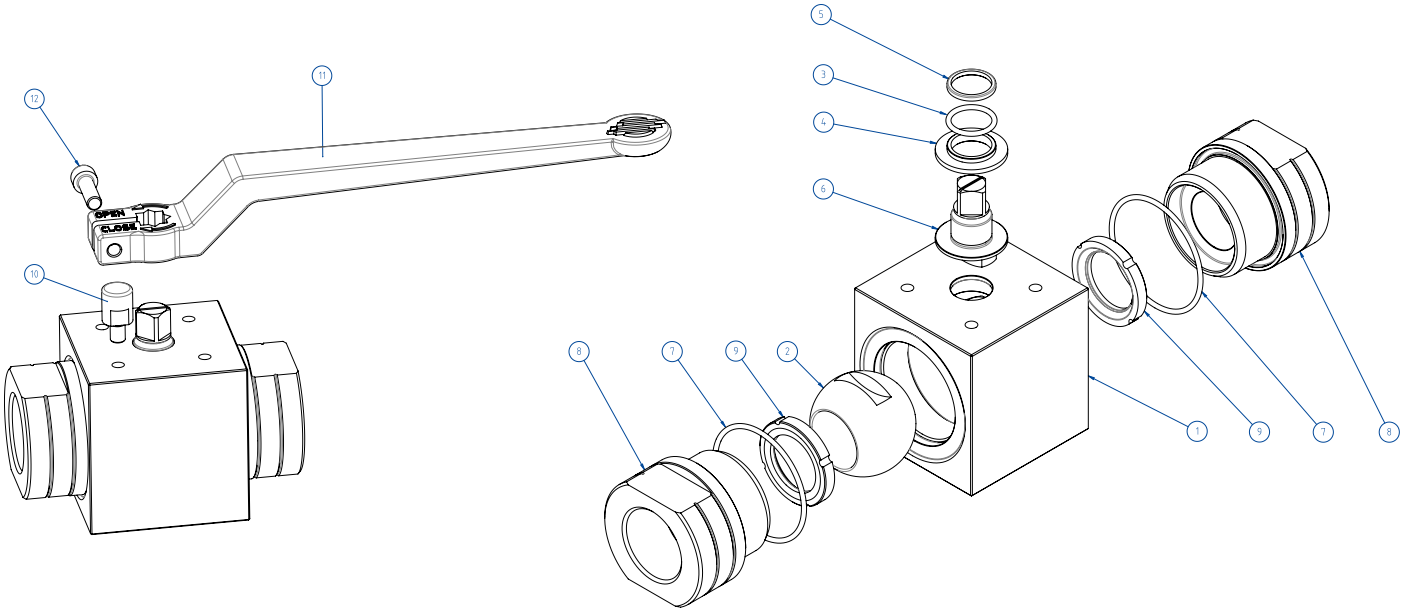



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate EN ISO 228 o NPT.<br>• Temperatura di utilizzo: -20°C +100°C con O-ring in NBR;<br>-20°C +130°C con O-ring in FKM (a richiesta).<br>• Pressione di utilizzo: PN500/7000 psi DN6, DN8, DN10, DN15;<br>PN400/6000 psi DN20 e DN25;<br>PN320/4500 psi DN32, DN40, DN50.<br>• Fluido intercettato: fluidi liquidi e gassosi, di qualsiasi genere purchè compatibili con i materiali costruttivi. | ***GENERAL FEATURES:***<br>• *Threaded ends EN ISO 228 or NPT.*<br>• *Working temperature: -20°C +100°C with NBR O-ring;*<br>*-20°C +130°C with FKM O-ring (on request).*<br>• *Working pressure: DN6, DN8, DN10, DN15 PN500/7000 psi;*<br>*DN20 e DN25 PN400/6000 psi;*<br>*DN32, DN40, DN50 PN320/4500 psi.*<br>• *Fluid range: Different fluids, liquid and gaseous, compatible with the constructive materials.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***SPECIAL EXECUTION ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Conforme alla Direttiva Europea 2014/68/UE PED. | ***CERTIFICATIONS:***<br>• *In compliance with European Directive 2014/68/EU PED.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| | |
|---|---|
| DN6, DN8, DN10, DN15 | PN500/7000 psi |
| DN20 e DN25 | PN400/6000 psi |
| DN32, DN40, DN50 | PN320/4500 psi |




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) Zincato *Galvanized* |
| 2 | Sfera *Ball* | A217 CA15 / A479 tp. 410 / A182 F6A + *Hard chromium plated* |
| 3 | O-ring | NBR (*FKM on request*) |
| 4 | Bussola inferiore *Lower bush* | MASTERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 5 | Bussola superiore *Upper bush* | MASTERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 6 | Stelo *Stem* | A564 Tp 630 (17-4 PH) |
| 7 | O-ring | NBR (FKM on request) |
| 8 | Manicotto *Ends* | ≤DN25: 1.0737 (11SMnPb37); ≥DN32: 1.0577 (S355J2) |
| 9 | Seggio *Seats* | MASTERAMMIDE blend di tecnopolimeri e di cariche aramidiche - *Blend of polymers and aramid filler* |
| 10* | Fermo *Holder screw* | X5CrNiMo1713 - 316 S.S. |
| 11* | Leva *Lever* | EN AB 46100 - AL SI 11 CU (FE) Verniciata *Painted* |
| 12* | Vite *Screw* | A2 - 70 |
| * Componenti del kit leva *Kit lever components* | | |

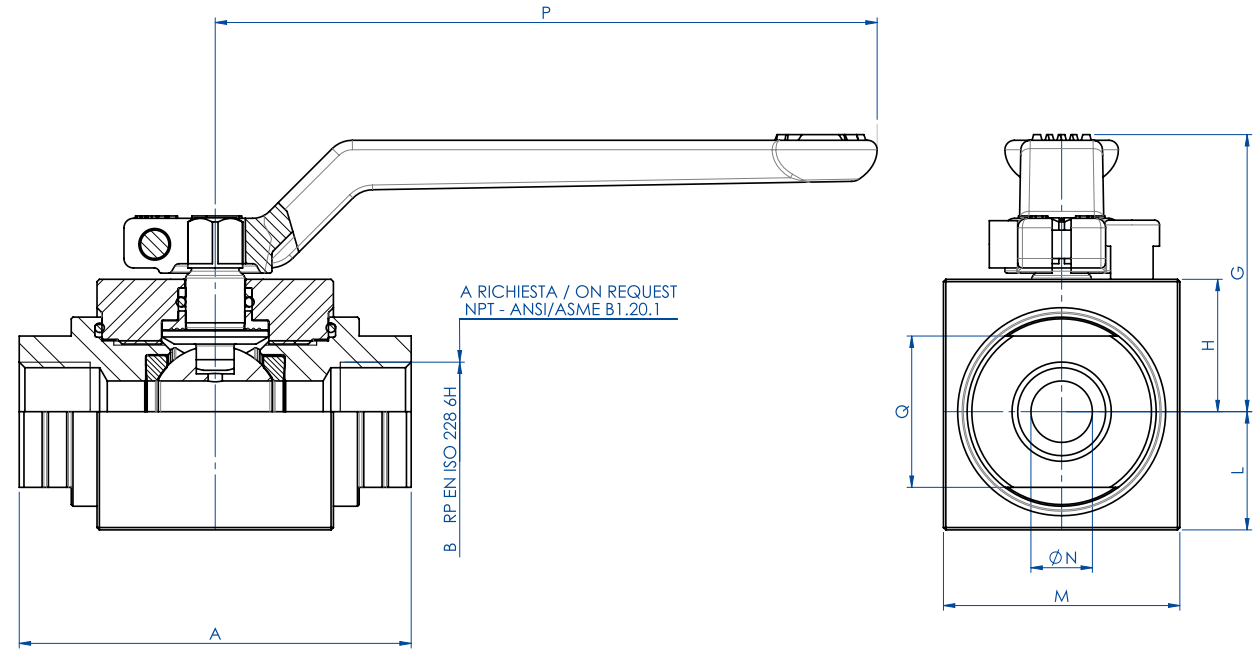
| PORTATA *FLOW RATE* KV $m^3/h$ | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PN / *Size* | DN 6 1/8" | DN8 1/4" | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
| KV $m^3/h$ | 5,2 | | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

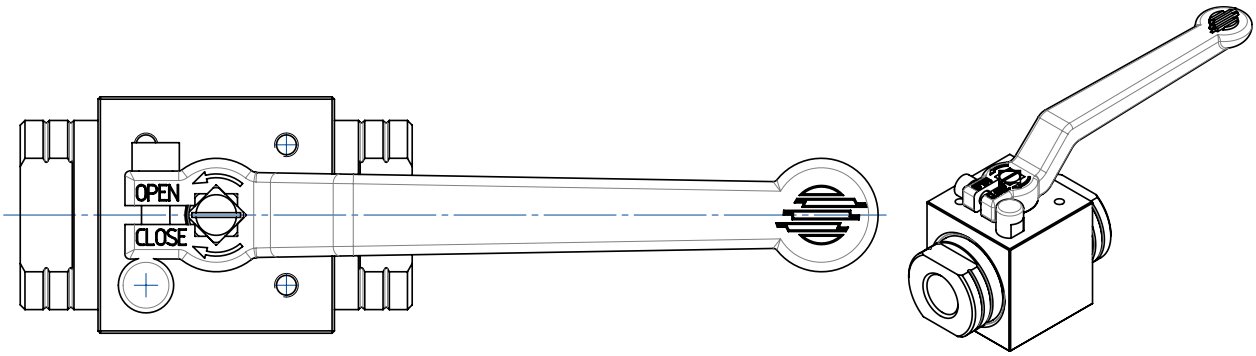
Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# HERCULES - MANUALE *MANUAL*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON LEVA *WITH LEVER*

| MISURA *SIZE* | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|
| DN [mm] | [inch] | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* | Kg |
| DN 6 | 1/8" | LHM5AAAAA01 | LHM5AAAAA41 | KLVVH501 | 0,35 |
| DN 8 | 1/4" | LHM5AAAAA02 | LHM5AAAAA42 | KLVVH501 | 0,34 |
| DN 10 | 3/8" | LHM5AAAAA03 | LHM5AAAAA43 | KLVVH503 | 0,82 |
| DN 15 | 1/2" | LHM5AAAAA04 | LHM5AAAAA44 | KLVVH503 | 1,16 |
| DN 20 | 3/4" | LHM5AAAAA05 | LHM5AAAAA45 | KLVVH505 | 1,57 |
| DN 25 | 1" | LHM5AAAAA06 | LHM5AAAAA46 | KLVVH505 | 2,41 |
| DN 32 | 1" 1/4 | LHM6AAAAA07 | LHM6AAAAA47 | KLVVH507 | 3,55 |
| DN 40 | 1" 1/2 | LHM6AAAAA08 | LHM6AAAAA48 | KLVVH507 | 5,39 |
| DN 50 | 2" | LHM6AAAAA09 | LHM6AAAAA49 | KLVVH509 | 10,15 |

A = Versione standard con O-ring in NBR. *Standard line with NBR O-ring.*
V = Con O-ring in FKM a richiesta. *With FKM O-ring on request.*




| DIMENSIONI *DIMENSIONS* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | G | H | L | M | ØN | P | Ch.Q |
| DN [mm] | [inch] | | | | | | | | | |
| DN 6 | 1/8" | 69 | 1/8" | 43,1 | 17 | 13 | 30 | 6 | 103,5 | 19 |
| DN 8 | 1/4" | 69 | 1/4" | 43,1 | 17 | 13 | 30 | 6 | 103,5 | 19 |
| DN 10 | 3/8" | 72 | 3/8" | 55,8 | 25,3 | 19,7 | 45 | 9 | 140 | 24 |
| DN 15 | 1/2" | 83 | 1/2" | 58,6 | 28 | 25 | 50 | 13 | 140 | 32 |
| DN 20 | 3/4" | 95 | 3/4" | 67,3 | 31 | 27,5 | 55 | 19 | 212 | 37 |
| DN 25 | 1" | 113 | 1" | 71,3 | 35 | 32,5 | 65 | 25 | 212 | 45 |
| DN 32 | 1"1/4 | 111 | 1"1/4 | 83,6 | 42 | 38 | 80 | 32 | 315 | 55 |
| DN 40 | 1"1/2 | 130 | 1"1/2 | 87,6 | 46 | 44 | 90 | 38 | 315 | 65 |
| DN 50 | 2" | 140 | 2" | 102,7 | 61 | 59 | 120 | 51 | 315 | 80 |



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04D01HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
Consortio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115

ATTESTA
ATTESTS
che il sistema qualità adottato da
that the quality system operated by

FABBRICANTE / MANUFACTURER: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa / Operational Office Address: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, modulo H, della Direttiva 2014/68/UE.
for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.

AUTORIZZA
AUTHORIZES
ad apporre, sui prodotti di seguito specificati, il marchio / to provide the above mentioned products, the mark CE 1115

ACCESSORI A PRESSIONE / PRESSURE ACCESSORIES: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO / BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES

Modelli coperti / Covered models: Vedere elenco riportato in Appendice A / See list in Appendix A
Rapporti di valutazione / Evaluation Reports: 004_ROQ_2018_07_23 / 004_RAQ_2019_08_13

CONDIZIONI DI VALIDITA' / VALIDITY TERMS AND CONDITIONS

ACCREDIA

| Prima Emissione / First Issue | Emissione corrente / Current Issue | Data di Scadenza / Expiring date |
|---|---|---|
| 16/08/2007 | 16/08/2019 | 17/08/2022 |

Consorzio PASCAL s.r.l.

Pagina / Page 1 of 2

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives.*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
Non electrical equipment intended for use in potentially explosive atmospheres
Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva

Directive 2014/34/UE
Directive 2014/34/EU / Direttiva 2014/34/UE

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION
AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO

Appareil / Equipment / Apparecchiatura : BALL VALVES

Type(s)/ Type(s) / Tipo(i) : Wafer type, Split body type, Split Wafer type steel ball valves / Two-piece, Three-piece steel ball valve High-pressure - threaded ends / Two-piece brass ball valves threaded ends

Marquage/ Marking / Marcatura : Ex II 2 GD

Dépositaire / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 febraury 2014, acknowledges receipt of file according to the procedure described chaptier 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3., articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VS-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035241/19.

The technical documentation referenced : VS-19 dated 10/10/2019 is consigned under the reference : no INERIS-EQEN 035241/19.

La documentazione tecnica di riferimento : VS-19 datata 10/10/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 035241/19.

Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07

Validity completion date : 2029.11.07

Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,

The Chief Executive Officer of INERIS, By delegation,

Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél. +33(0)3 44 55 66 77 fax. +33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Établissement public à caractère industriel et commercial - RCS Compiègne B 381 984 926 - Siret 381 984 921 00859 - APE 7120B - TVA Intracom FR 75 381 984 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



TÜV INTERCERT SAAR

CERTIFICATE

Certificate no. 17-SIL-0010015-07-TIC

WE HEREBY CERTIFY THAT

Product description: HIGH PRESSURE AUTOMATED FLOATING BALL VALVES

Models: SERIES HERCULES

Manufacturer: OMAL S.p.A.
Via Ponte Nuovo 11 – 25050 Rodengo Saiano BS

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1–7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION SET OUT IN THE ABOVE-MENTIONED STANDARDS

Summary Report no. RC-0618-SIL-TIC-PC-0010015-17-02

Expiry date 04.07.2021

Note: This certificate is issued upon the request of the manufacturer as voluntary certification; it does not include the production surveillance.
This certificate does not allow the manufacturer to use the safety mark of TÜV INTERCERT.

Reggio Emilia, 05.07.2018

Dott. Ing. Feridoon Sergizzarea
TÜV InterCert Certification Body

Page 1 of 2

**▲ SIL**

Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification of compliance to the IEC 61508 requirements, of the functional safety level provided by the product intended to be integrated in systems with required safety integrity level up to SIL 3.*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФИКАТ ЭКСПЕРТИЗЫ ТИПА / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2324-17

Термін дії з 25.07.2017 р. до 03.09.2020 р.

Сертифікат видано 'OMAL S.p.A.' Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Продукція Крани кульові без електричного обладнання (згідно з додатком) 8481

Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT)
Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі

Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11 25050 Rodengo Saiano (BS), Італія

Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Італія

Додаткова інформація

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ"
Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.

На підставі Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ "ПРОМТЕСТ"

Керівник органу з оцінки відповідності Самотой В.І.

МП ЦЕН Старт

**▲ UKR**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.
*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*



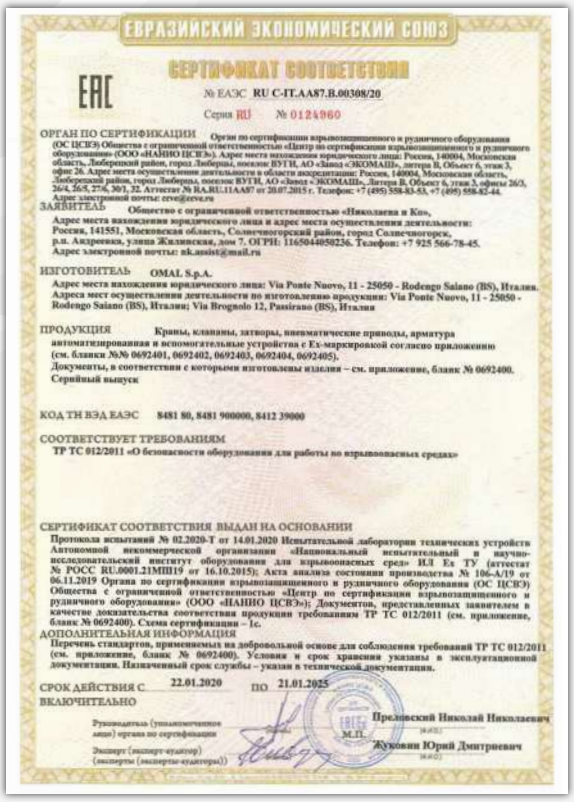
ЕАС ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко". ОГРН: 1165044050236
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +79255667845. Адрес электронной почты: nk.assist@mail.ru.
**в лице** генерального директора Николаевой Нины Сергеевны

**заявляет, что** Арматура промышленная трубопроводная: краны шаровые, серия MAGNUM, типы M1, M4, M5, M6; серия THOR, типы T1, T2, T3; серия SUPREME, тип S; серия HERCULES, типы VHA4, VHA5, VHA6, LHA4, LHA5, LHA6; типы 100, 101, 153, 400, 401, 410, 412, 432, 414, 415, 417, 510, 512, 514, 515, 517, 532.
**изготовитель** "OMAL S.p.A"
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.
Код ТН ВЭД 8481808199. Серийный выпуск.
**соответствует требованиям**
Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)
**Декларация о соответствии принята на основании**
Протоколы испытаний Испытательной лаборатории изготовителя № ОМ 000589 от 30.06.2015, № ОМ 000863 от 30.06.2015, № ОМ 000589 от 30.06.2015, № 15BM001184 от 30.06.2015.
Обоснование безопасности OMAL ОБ.
Технический паспорт шарового крана VS.14.
Руководство по установке, эксплуатации и обслуживанию UMAH1000-RUS.
Чертежи 1_2350, 1_2437, Y_4321, Y_4322, Y_2395, Y_1104, Y_1118.
Сертификаты испытания материалов изготовителем № Y_4279-2015 от 20.05.2015, № OA 011390 от 10.06.2015, № 2015-VE 000801 от 30.07.2015, № OA 015204 от 31.07.2015.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 № 236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д
**Дополнительная информация**
Применяемый стандарт: ГОСТ Р 53672-2009 "Арматура трубопроводная. Общие требования безопасности". Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 15 лет.
Общество с ограниченной ответственностью "Николаева и Ко" (уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017)
**Декларация о соответствии действительна с даты регистрации по 17.07.2020 включительно**

Николаева Нина Сергеевна

**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10610**
**Дата регистрации декларации о соответствии: 18.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ
ЕАС
№ ЕАЭС RU C-IT.AA87.B.00308/20
Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11AA87 от 20.07.2015 г. Телефон: +7 (495) 558-83-83, +7 (495) 558-82-44. Адрес электронной почты: oreo@eteos.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации Предивский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).
*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*





1.4

# KRATOS

# TABELLA DI CODIFICA PER KRATOS
# *CODIFICATION TABLE FOR KRATOS*

## 1° blocco: Tipologia della valvola *1st part: Valve's type*

| V | KR | 04 | B | 00 |
|---|---|---|---|---|
| 1° | 2°-3° | 4°-5° | 6° | 7°-8° |

| 1° CIFRA: Tipo di azionamento<br>*1° FIGURE: Drive Type* | |
|---|---|
| **D** | Doppio effetto anodizzato *Double acting, anodized* |
| **E** | Elettrico ON-OFF *Electrical ON-OFF* |
| **F** | Doppio effetto verniciato *Double acting, painting* |
| **G** | Doppio effetto nichelato *Double acting, nickel plated* |
| **I** | Doppio effetto inox *Inox double acting* |
| **K** | Con Leva ( INOX ) *With lever ( INOX )* |
| **L** | Con Leva ( std ) *With lever ( std )* |
| **M** | Elettrico modulante *Electrical modulating* |
| **R** | Con riduttore *With gear box* |
| **S** | Semplice effetto anodizzato *Spring return, anodized* |
| **T** | Semplice effetto verniciato *Spring return, painting* |
| **U** | Semplice effetto nichelato *Spring return, nickel plated* |
| **V** | Valvola asse libero *Free shaft valve* |
| **X** | Semplice effetto inox *Inox spring return* |

| 2°e 3° CIFRA: Famiglia di appartenenza<br>*2°& 3° FIGURE: Valve's family* | |
|---|---|
| **KR** | Kratos |

| 4° e 5° CIFRA Misura della valvola<br>*4° & 5° FIGURE: Valve's size* | |
|---|---|
| **03** | DN 10 |
| **04** | DN 15 |
| **05** | DN 20 |
| **06** | DN 25 |
| **07** | DN 32 |
| **08** | DN 40 |
| **09** | DN 50 |

| 6° CIFRA: Attacco tubazione<br>*6° FIGURE: Tube connection* | |
|---|---|
| **B** | BW /BW (*) |
| **C** | GAS ISO 228-1 / BW (*) |
| **D** | NPT / BW (*) |
| **G** | GAS / GAS ISO 228-1 |
| **N** | NPT / NPT |
| **P** | P.E.N / P.E.N. (*) |
| **Q** | GAS ISO 228-1 / P.E.N. (*) |
| **R** | NPT / P.E.N. (*) |
| **S** | SW / SW (*) |
| **T** | GAS ISO 228-1 / SW (*) |
| **U** | NPT / SW. (*) |
| (*): spessore tubo da definire usando 7° e 8° cifra<br>(*): *tube thickness to be definied with 7° and 8° figure* | |

| 7° e 8° CIFRA: Schedula tubo<br>*7° & 8° FIGURE: Tube schedule* | |
|---|---|
| **00** | Corpo e manicotto filettati *Body and ends Screwed* |
| **01** | SCH.10 |
| **02** | SCH.40 |
| **03** | SCH.80 |
| **04** | SCH.160 |
| **05** | SCH. XS |
| **06** | SCH. XXS |

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# 2° blocco: Materiali ferrosi *2nd part: Metallic parts*

| CB | 4 | D | A |
|---|---|---|---|
| 9°-10° | 11° | 12° | 13° |

| 9° e 10° CIFRA: Materiale corpo valvole<br>*9° & 10° FIGURE: Body material* | |
|---|---|
| **CB** | A350 LF2 |
| **AB** | A182 F316 / A479 TP.316 |
| **AD** | A182 316L / A479 TP.316L |
| **AI** | Duplex |

| 11° CIFRA: Materiale sfera<br>*11° FIGURE: Ball material* | |
|---|---|
| **4** | F6A / 410 / CA15 |
| **E** | A182 F316 / A479 TP.316 |
| **C** | A182 F316L / A479 TP.316L |
| **D** | A995 CD3MN (DUPLEX FUSO) |
| **F** | Sfera forata CF8 *Monodirectional ball CF8* |
| **G** | Sfera forata CF8M *Monodirectional ball CF8* |
| **N** | Sfera forata A182 F316 / A479 TP. 316<br>*Monodirectional ball A182 F316 / A479 TP. 316* |

| 13° CIFRA: Materiale dello stelo<br>*13°FIGURE: Stem material* | |
|---|---|
| **A** | 17-4PH |
| **C** | Duplex |
| **D** | 17-4PH NACE |
| **E** | A479 Tp.316 |
| **F** | 17-4PH con dado + rondella inox *With nut + inox washer* |
| **I** | INCONEL 718 |

| 12° CIFRA: Trattamenti della sfera<br>*12° FIGURE: Ball surface treatments* | |
|---|---|
| **0** | Nessun trattamento *No treatment* |
| **A** | Nichelatura *Nickeled* ENP 25 micron |
| **B** | Nichelatura *Nickeled* ENP 50 micron |
| **D** | Cromatura *Hard chrome plated* 20-40 micron |

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# 3° blocco: Materiali delle tenute *3rd part: Seat materials*

| 0 | D | D | D |
|---|---|---|---|
| 14° | 15° | 16° | 17° |

**14° CIFRA: Materiale OR corpo-manicotto**
***14° FIGURE: Body-end OR material***

| | |
|---|---|
| **0** | NBR 90 SH |
| **F** | FKM 90 SH |

**15° CIFRA: Materiale seggio**
***15° FIGURE: Seat material***

| | |
|---|---|
| **N** | TFM1600 |
| **J** | PTFE +15 % VETRO |
| **K** | PTFE +25 % C |
| **D** | DEVLON |
| **P** | POM |
| **F** | FILLED PEEK |

**16° CIFRA: Tenuta stelo**
***16° FIGURE: Stem gasket***

| | |
|---|---|
| **N** | TFM1600 |
| **D** | TFM - TFM - Devlon |

**17° CIFRA: Materiale tenuta corpo-manicotto**
***17° FIGURE: Body-end gasket material***

| | |
|---|---|
| **0** | TFM1600 |
| **D** | DEVLON |
| **G** | GRAFOIL |

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# 4° blocco: Trattamenti *4th part: Surface treatments*

| 0 | 0Z |
|---|---|
| 18° | 19°-20° |

| 18° CIFRA: Trattamento principale<br>*18° FIGURE: Standard surface treatment* | |
|---|---|
| **0** | Nessuna verniciatura *Without paint* |
| **X** | Valvola sgrassata *Degrased valve* |

| 19°-20° CIFRA: Tipologia del trattamento<br>*19°-20° FIGURE: Surface treatment type* | |
|---|---|
| **00** | Nessuna verniciatura *Without paint* |
| **0Z** | Zincato *Galvanized* |



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# 5° blocco: Versione azionamenti ATTUATORI PNEUMATICI
## *5th part: PNEUMATIC ACTUATORS drives version*

| A | A | B | A | 0 |
|---|---|---|---|---|
| 21° | 22° | 23° | 24° | 25° |

**21° CIFRA: Kit di connessione con l'azionamento**
***21° FIGURES: Bracket connection drives***

| | |
|---|---|
| **A** | Acciaio verniciatura STD *Steel with standard painting* |
| **B** | Acciaio verniciatura HT *Steel with high temperature painting* |
| **C** | Inox std |
| **D** | Inox HT |
| **G** | Prolunga inox doppia tenuta *Stainless steel shaft extension with double seal* |
| **L** | Valvola con leva lucchettabile *Valve with locking lever* |
| **N** | Valvola con leva "dead man" *Valve with "dead man" lever* |
| **P** | Prolunga Inox 304 *Extension - Steel 304* |
| **Q** | Prolunga Inox con sniffer *Steel extension with sniffer* |

**22° CIFRA: Famiglia di azionamento**
***22° FIGURE: Actuators group***

| | |
|---|---|
| **E** | Serie con volantino **VERSIONE NEW**<br>*Handwheel series **NEW VERSION*** |
| **F** | DIN ISO 5211 **VERSIONE NEW**<br>*DIN ISO 5211 **NEW VERSION*** |
| **G** | DIN ISO 5211 con riduttore standard **VERSIONE NEW**<br>*DIN ISO 5211 with standard gear box **NEW VERSION*** |
| **H** | Inox microfuso<br>*Inox precision casting* |
| **I** | Inox microfuso con riduttore<br>*Inox precision casting with gear box* |
| **K** | Inox microfuso pistone rovesciato<br>*Inox precision casting - reversed piston* |
| **V** | Serie con volantino **VERSIONE NEW - PISTONI ROVESCIATI**<br>*Handwheel series **NEW VERSION - REVERSED PISTONS*** |
| **W** | DIN ISO 5211 pistoni rovesciati **VERSIONE NEW**<br>*DIN ISO 5211 reversed piston **NEW VERSION*** |
| **X** | DIN ISO 5211 pistoni rovesciati + riduttore **VERSIONE NEW**<br>*DIN ISO 5211 reversed piston + gear box **NEW VERSION*** |
| **Y** | Esecuzione speciale<br>*Special execution* |

**25° CIFRA: Altre esecuzioni speciali dell'azionamento**
***25° FIGURE: Actuator in special stroke executions***

| | |
|---|---|
| **0** | Nessuna opzione *No options* |
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **A** | Regolazione 10° *10° adjustment* |
| **B** | Regolazione 30° *30° adjustment* |
| **C** | Regolazione 60° *60° adjustment* |
| **D** | Regolazione 90° *90° adjustment* |
| **M** | STD a magazzino *STD in warehouse* |
| **J** | Dosatore *Two stage connector* |

**24° CIFRA: Esecuzioni particolari dell'azionamento**
***24° FIGURE: Special executions drives***

| | |
|---|---|
| **A** | Esecuzione di serie *Standard executions* |
| **H** | Alta temperatura *High temperature* |
| **L** | Bassa temperatura *Low temperature* |
| **M** | Molle *Springs* 2,8 BAR (40 PSI) |
| **N** | Molle *Springs* 3,5 BAR (50 PSI) |
| **P** | Molle *Springs* 4,2 BAR (60 PSI) |
| **R** | Molle *Springs* 2,8 BAR (40 PSI) Alta temp. *High temp* |
| **S** | Molle *Springs* 3,5 BAR (50 PSI) Alta temp. *High temp* |
| **T** | Molle *Springs* 4,2 BAR (60 PSI) Alta temp. *High temp* |
| **V** | Molle *Springs* 2,8 BAR (40 PSI) Bassa temp *Low temp* |
| **W** | Molle *Springs* 3,5 BAR (50 PSI) Bassa temp *Low temp* |
| **X** | Molle *Springs* 4,2 BAR (60 PSI) Bassa temp *Low temp* |

**23° CIFRA: Taglia di azionamento**
**23° FIGURES: Actuator size**

| | | | |
|---|---|---|---|
| **A** | DA 8 | **L** | DN 100 - DAN480-SRN240 |
| **B** | DN 32 - DAN15 | **M** | DN 115 - DAN720-SRN360 |
| **C** | DN 40 - DAN30-SRN15 | **N** | DN 125 - DAN960-SRN480 |
| **D** | DN 45 - DAN45 | **Q** | DN 145 - DAN1440-SRN720 |
| **E** | DN 50 - DAN60-SRN30 | **R** | DN 160 - DAN1920-SRN960 |
| **G** | DN 60 - DAN106-SRN53 | **S** | DN 240 - DAN2880-SRN1440 |
| **H** | DN 63 - DAN120-SRN60 | **V** | DN 208 - DA3840-SR1920 |
| **I** | DN 72 - DAN180-SRN90 | **W** | DN 240 - DA5760-SR2880 |
| **J** | DN 80 - DAN240-SRN120 | **X** | DN 290 - DA8000-SR4000 |
| **K** | DN 90 - DAN360-SRN180 | | |

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# 5° blocco: Versione azionamenti ATTUATORI ELETTRICI
## *5th part: ELECTRIC ACTUATORS drives version*

| A | M | E | G | 0 |
|---|---|---|---|---|
| 21° | 22° | 23° | 24° | 25° |

**21° CIFRA: Kit di connessione con l'azionamento**
***21° FIGURES: Bracket connection drives***

| | |
|---|---|
| **A** | Acciaio verniciatura std *Steel with standard painting* |
| **B** | Acciaio verniciatura HT *Steel with high temperature painting* |
| **C** | Inox std |
| **D** | Inox HT |
| **G** | Prolunga inox doppia tenuta *Stainless steel shaft extension with double seal* |
| **L** | Valvola con leva lucchettabile *Valve with locking lever* |
| **N** | Valvola con leva "dead man" *Valve with "dead man" lever* |
| **P** | Prolunga Inox 304 *Extension - Steel 304* |
| **Q** | Prolunga Inox con sniffer *Steel extension with sniffer* |

**22° CIFRA: Tensione di alimentazione**
***22° FIGURE: Voltage drive***

| | |
|---|---|
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **B** | 24 V continua |
| **J** | 24 V monofase |
| **L** | 115 V monofase |
| **M** | 230 V monofase |
| **Y** | Esecuzione speciale *Special execution* |

**23° CIFRA: Coppia di azionamento in Nm**
***23° FIGURES: Torque drive***

| | |
|---|---|
| **B** | 10 Nm |
| **C** | 20 Nm |
| **D** | 40 Nm |
| **E** | 35 Nm |
| **F** | 50 Nm |
| **G** | 70 Nm |
| **H** | 100 Nm |
| **I** | 130 Nm |
| **K** | 240 Nm |
| **L** | 200 Nm |
| **N** | 400 Nm |
| **P** | 500 Nm |
| **R** | 600 Nm |
| **T** | 1000 Nm |
| **V** | 1500 Nm |
| **X** | 2000 Nm |

**24° CIFRA: Esecuzioni particolari dell'azionamento**
***24° FIGURES: Special executions drives***

| | |
|---|---|
| **A** | STD linea AE *AE line* |
| **B** | STD linea AE con riduttore *AE line with gear box* |
| **C** | STD linea AE+Kit alta temp. *AE line+bracket for high temp.* |
| **G** | STD linea EA *EA line* |
| **H** | STD linea EA + riduttore *EA line with gear box* |
| **I** | STD linea EA+Kit alta temp. *EA line+bracket for high temp.* |
| **K** | STD linea EA IP67 *line EA IP67* |
| **L** | *STD* linea EA+riduttore IP67 *EA line with gear box IP67* |
| **M** | *STD* linea EA + Kit alta temp. IP67 *EA line bracket for high temp. IP67* |

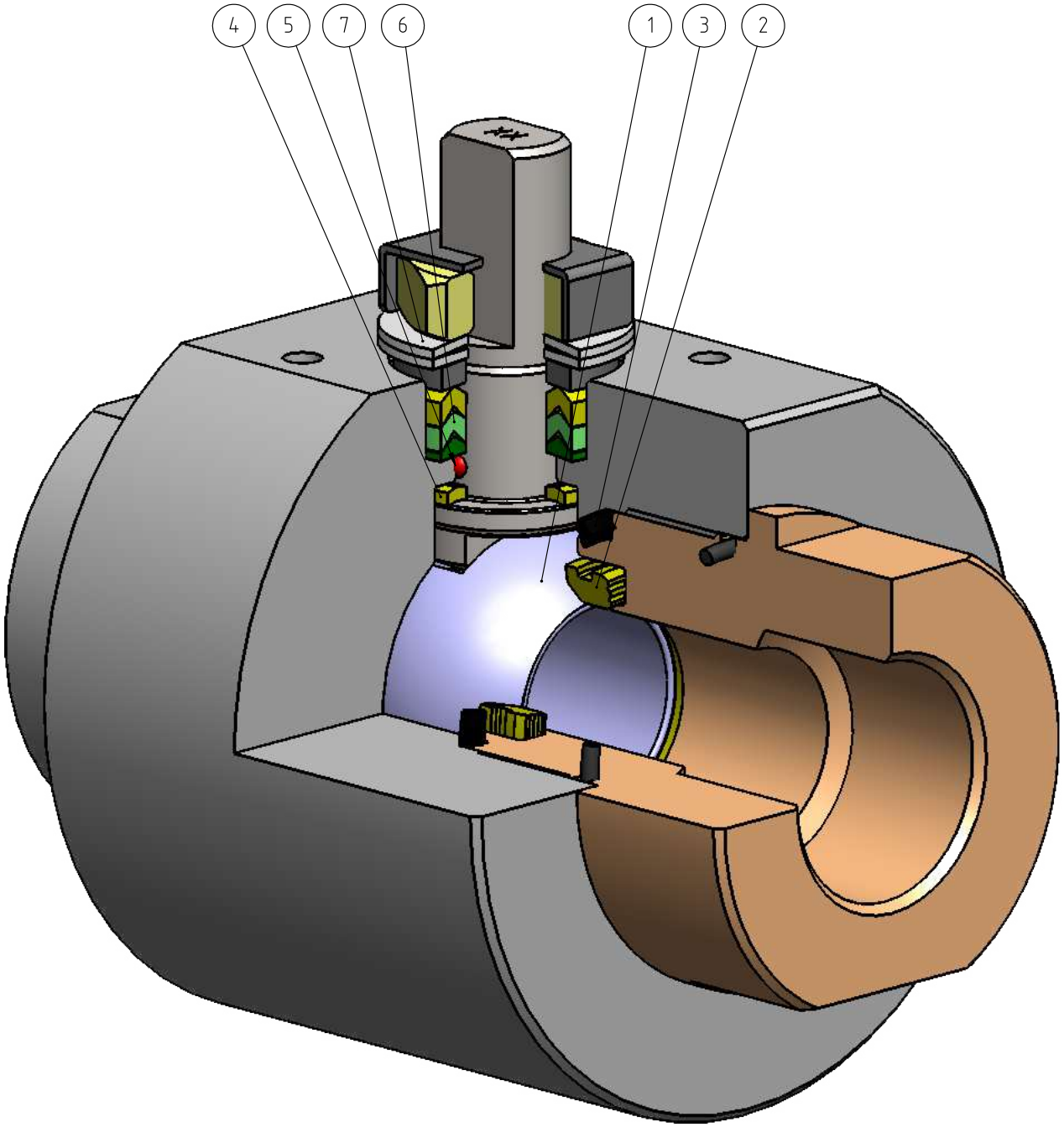
**25° CIFRA: Altre esecuzioni speciali dell'azionamento**
***25° FIGURE: Actuator in special stroke executions***

| | |
|---|---|
| **0** | Nessuna opzione *No option* |
| **1** | Prolunga *Extension* L=100mm |
| **2** | Prolunga *Extension* L=200mm |
| **B** | Connettori a vite (V0) *Electrical connection by screw (V0)* |
| **C** | Precablati *Prewired* 2mt (C2) |
| **D** | Precablati *Prewired* 4mt (C4) |
| **E** | Precablati *Prewired* 8mt (C8) |
| **F** | Connettori a pipa (P0) *Pipe connections (P0)* |



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# KRATOS ALTA CICLICITÀ *HIGH CICLICITY*



| FEATURES & BENEFITS | | |
|---|---|---|
| 1 | Sfera in acciaio inossidabile con rivestimento in Cromo Duro da 40 µm.<br>*Stainless steel ball, coated with 40 µm Hard Chrome.* | Maggior tenuta nel tempo grazie alla bassa usura della sfera.<br>*Longer seal life due to the low wear of the ball.* |
| 2 | Seggio.<br>*Seat.* | Minor usura rispetto a tenute non modificate.<br>*Less wear comparing with not modify seat.* |
| | | Elevata resistenza alla sollecitazione.<br>*High resistance to stress.* |
| 3 | Guarnizione Corpo-Manicotto in DEVLON.<br>*DEVLON Body-End gasket.* | Tenuta supplementare a protezione dell'oring.<br>*Supplementary gasket for oring protection.* |
| 4 | Anello antifrizione in DEVLON.<br>*DEVLON Bottom sealing.* | Minor usura rispetto a tenute non modificate.<br>*Less wear comparing with not modify seat.* |
| | | Elevata resistenza alla sollecitazione.<br>*High resistance to stress.* |
| 5 | Antistatic Device (continuità elettrica tra sfera, stelo e corpo).<br>*Antistatic Device (electrical continuity between ball, stem and body).* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi.<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment.* |
| | | Sicurezza garantita dal contatto durante tutta la via della valvola.<br>*Contact safety throughout the entire life of the valve.* |
| 6 | Pacco guarnizioni a "V" con 3 guarnizioni.<br>*"V" seals pack with 3 seals.* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli.<br>*It ensures a perfect tightness even after a high number of cycles.* |
| 7 | Molle a tazza sulla tenuta dello stelo.<br>*Spring washer on the shaft seal.* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite verso l'esterno.<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizioni tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche.<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions.* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento.<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve.* | Maggior vita della valvola stessa.<br>*Longer lifetime of the valve.* |
| | | Minor coppia di azionamento.<br>*Less breakaway torque.* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard.<br>*Valve body in carbon steel made with NACE certified material as standard.* | Garantisce una maggior resistenza alla corrosione.<br>*Greater corrosion resistance.* |
| | | Maggior duttilita del materiale.<br>*Greater ductility of the material.* |
| | Processo produttivo interamente eseguito in OMAL.<br>*100% in-house manufacturing process technology.* | Massimo controllo in tutte le fasi di lavorazione.<br>*Maximum control and accuracy in all the stages of the manufacturing process.* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente.<br>*Flexibility in supply quickly special executions requested by customers.* |
| | Certificato PED.<br>*PED Certificate.* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.<br>*Full compliance with European Safety Standards for Pressure Equipment.* |
| | Certificato Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0).<br>*Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) certificate.* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno.<br>*High level of safety of the tightness towards the outside is granted.* |
| | Certificato ATEX.<br>*ATEX Certificate.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is possible in a potential explosive environment.* |

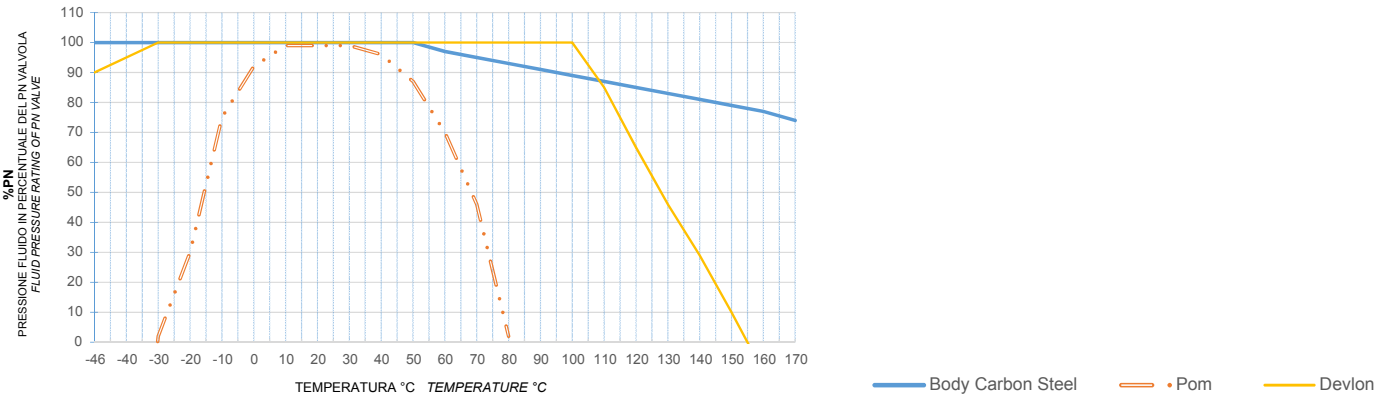
# KRATOS

## ALTA CICLICITÀ **ACCIAIO AL CARBONIO**
## *HIGH CICLICITY* ***CARBON STEEL***

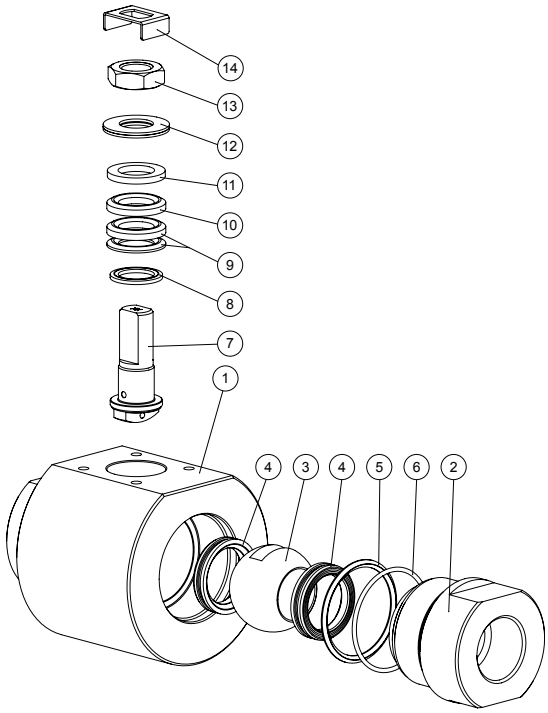


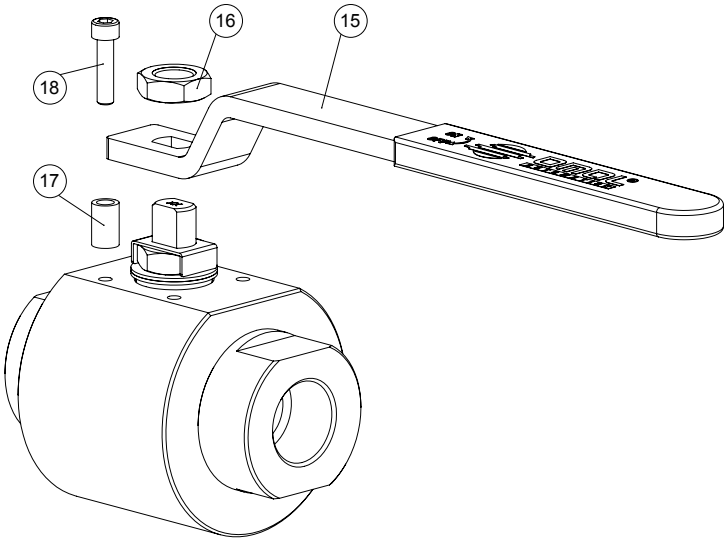
| | |
|---|---|
| **ESECUZIONE STANDARD:**<br>• Estremità filettate EN ISO 228-1o NPT.<br>• Sfera flottante, passaggio totale.<br>• Tenuta soft-seat DEVLON.<br>• Tenuta stelo con pacco a V di serie.<br>• Temperature di utilizzo: da -46°C a +100°C.<br>• Classe di tenuta: EN12266-1 rate A.<br>• Antistatic device EN12266-2.<br>• Stelo anti Blow-out.<br>• Foratura piano per attuatore a norma ISO 5211.<br>• Trattamento superficiale di Zincatura.<br>• Fluido intercettato: fluidi liquidi o gassosi purchè compatibili con i materiali costruttivi. | ***STANDARD FEATURES:***<br>• *Threaded ends EN ISO 228-1or NPT.*<br>• *Floating ball, full bore.*<br>• *Soft-seat seal DEVLON.*<br>• *Stem seal with V-pack.*<br>• *Operating temperature: from -46°C to +100°C.*<br>• *Tightness Class: EN12266-1 rate A.*<br>• *Antistatic device EN12266-2.*<br>• *Anti Blow-out stem.*<br>• *Actuator connection as per standard ISO 5211.*<br>• *Superficial treatment: Galvanized.*<br>• *Intercepted fluid: liquid or gaseous fluids as long as they are compatible with the construction materials.* |
| **ESECUZIONI A RICHIESTA:**<br>• Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF), TFM1600, PEEK. Per altri tipi di materiale contattare il nostro ufficio commerciale.<br>• Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.<br>• Leva inox; dadi e molle stelo inox. Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.<br>• Per altri trattamenti superficiali contattare il nostro ufficio commerciale.<br>• Marcatura e certificato ATEX A RICHIESTA. | ***FEATURES ON REQUEST:***<br>• *Sealing: PTFE glass filled (RPTFE-GF), PTFE carbon-graphite filled (RPTFE-CF), TFM1600, PEEK. For other types of materials please contact our sales department.*<br>• *Mono-directional version with pressure-relief hole in the ball.*<br>• *Stainless steel lever . For versions in materials different from the standard (body, ball, stem), please contact our sales department.*<br>• *For other coating please contact our sales department.*<br>• *ATEX marking and certificate ON REQUEST.* |
| **CERTIFICAZIONI:**<br>• Conforme alla Direttiva Europea 2014/68/UE PED.<br>• Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.<br>• **Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.**<br>• Conforme alla Direttiva Europea 2014/34/UE ATEX (certificato ATEX A RICHIESTA). | ***CERTIFICATIONS:***<br>• *In compliance with European Directive 2014/68/EU PED.*<br>• *Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0) -50°C/+100°C.*<br>• ***Safety integrity level up to SIL 3 according to IEC 61508.***<br>• *In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).* |
| **NORME DI PROGETTAZIONE:**<br>• Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516. | ***ENGINEERING STANDARDS:***<br>• *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*






| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ASTM A350 LF2 Zincato - *Galvanized* |
| 2 | Manicotto *End* | ASTM A350 LF2 Zincato - *Galvanized* |
| 3 | Sfera *Ball* | A217 CA15 / A479 TP.410 / A182 F6A + *Hard chromium plated* |
| 4 | Seggio *Seats* | DEVLON |
| 5 | Guarnizione Corpo-Manicotto *Body-Ends gasket* | DEVLON |
| 6 | O'ring Corpo-Manicotto *Body-Ends o'ring* | HNBR |
| 7 | Stelo *Stem* | A564 TP.630 (17-4 PH) |
| 8 | Anello antifizione *Bottom sealing* | DEVLON |
| 9 | Pacco a V *Chevron rings* | TFM1600 |
| 10 | Pacco a V *Chevron ring* | DEVLON |
| 11 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 12 | Molle a tazza *Springs washer* | 50CrV4 Zincato - *Galvanized* |
| 13 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 14 | Fermo dado *Stop nut plate* | 304 S.S. |
| 15 | Leva *Lever* | Fe37 Zincato - *Galvanized* |
| 16 | Controdado *Lock nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| PN / *Size* | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
| 6000 PSI / 413 bar | 22 | 25 | 33 | 48 | | | |
| 5000 PSI / 344 bar | | | | | 66 | 91 | |
| 4000 PSI / 276 bar | | | | | | | 140 |

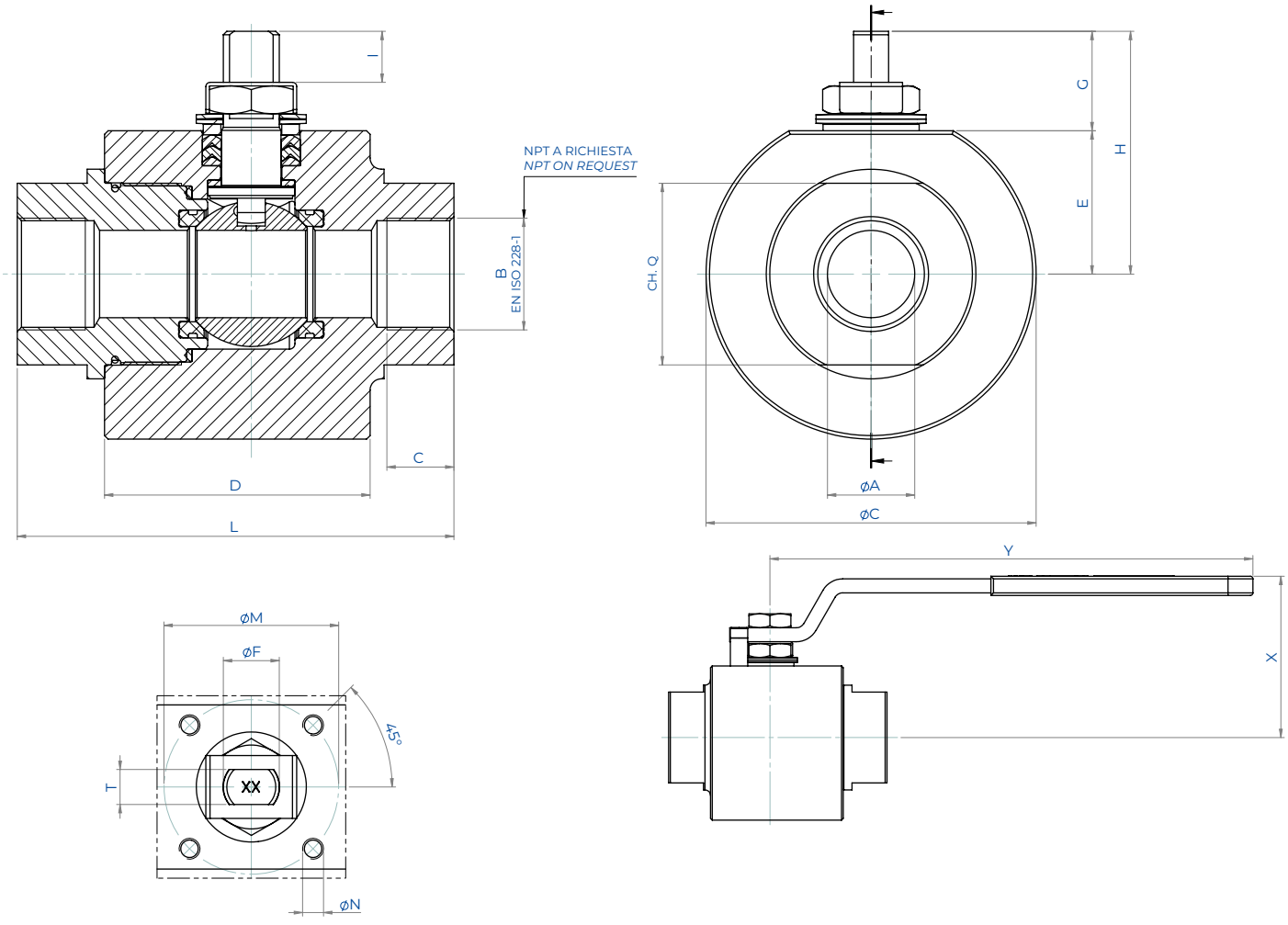
I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

| PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$* | | | | | | | |
|---|---|---|---|---|---|---|---|
| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* |
| DN 10 | 3/8" | VKR03G00CB4DA0DDD00Z | VKR03N00CB4DA0DDD00Z | LKR03G00CB4DA0DDD00Z | LKR03N00CB4DA0DDD00Z | KLV58004 |
| DN 15 | 1/2" | VKR04G00CB4DA0DDD00Z | VKR04N00CB4DA0DDD00Z | LKR04G00CB4DA0DDD00Z | LKR04N00CB4DA0DDD00Z | KLV58006 |
| DN 20 | 3/4" | VKR05G00CB4DA0DDD00Z | VKR05N00CB4DA0DDD00Z | LKR05G00CB4DA0DDD00Z | LKR05N00CB4DA0DDD00Z | KLV58006 |
| DN 25 | 1" | VKR06G00CB4DA0DDD00Z | VKR06N00CB4DA0DDD00Z | LKR06G00CB4DA0DDD00Z | LKR06N00CB4DA0DDD00Z | KLV58008 |
| DN 32 | 1" 1/4 | VKR07G00CB4DA0DDD00Z | VKR07N00CB4DA0DDD00Z | LKR07G00CB4DA0DDD00Z | LKR07N00CB4DA0DDD00Z | KLV58008 |
| DN 40 | 1" 1/2 | VKR08G00CB4DA0DDD00Z | VKR08N00CB4DA0DDD00Z | LKR08G00CB4DA0DDD00Z | LKR08N00CB4DA0DDD00Z | KLV58010 |
| DN 50 | 2" | VKR09G00CB4DA0DDD00Z | VKR09N00CB4DA0DDD00Z | LKR09G00CB4DA0DDD00Z | LKR09N00CB4DA0DDD00Z | KLV58010 |



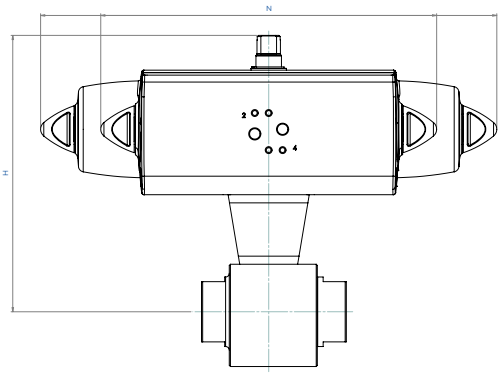

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | øA | B | C | øC | D | E | G | H | I | L | ISO | øM | øN | T/F | CH. Q | Y | X | Kg* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 9 | 3/8" | 11,5 | 60 | 55 | 25,5 | 20 | 45,5 | 8,2 | 85 | F03 | 36 | M5 | 6/M10 | 32 | 141,5 | 67 | 1,5 |
| DN 15 | 1/2" | 13 | 1/2" | 15 | 75 | 60 | 32,5 | 22,5 | 55 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 38 | 151,5 | 80 | 2,5 |
| DN 20 | 3/4" | 19 | 3/4" | 16,5 | 79 | 60 | 35 | 22,5 | 57,5 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 45 | 151,5 | 82 | 2,7 |
| DN 25 | 1" | 25 | 1" | 19,5 | 94,5 | 76 | 41 | 28,5 | 69,5 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 52 | 276,5 | 92 | 4,5 |
| DN 32 | 1" 1/4 | 32 | 1" 1/4 | 22 | 104 | 76 | 46,5 | 28,5 | 75 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 65 | 276,5 | 98 | 5,5 |
| DN 40 | 1" 1/2 | 38 | 1" 1/2 | 22 | 129 | 90 | 56,5 | 41 | 97,5 | 21,9 | 150 | F07 | 70 | M8 | 14/M22 | 75 | 351,5 | 117 | 9,8 |
| DN 50 | 2" | 51 | 2" | 26 | 149,5 | 104 | 68 | 39,5 | 107,5 | 20,9 | 170 | F07 | 70 | M8 | 14/M22 | 95 | 351,5 | 128 | 14,3 |

*Asse libero. *Free shaft.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE *WITH ACTUATOR*









## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DKR03G00CB4DA0DDD00ZAFDA0 | DKR03N00CB4DA0DDD00ZAFDA0 | DAN0045412S | KCNAAHD5782 | 188,5 | 160,0 | 3,0 |
| DN 15 | 1/2" | DKR04G00CB4DA0DDD00ZAFDA0 | DKR04N00CB4DA0DDD00ZAFDA0 | DAN0045412S | KCNBCHD5783 | 188,5 | 177,0 | 4,1 |
| DN 20 | 3/4" | DKR05G00CB4DA0DDD00ZAFEA0 | DKR05N00CB4DA0DDD00ZAFEA0 | DAN0060412S | KCNBCHD5784 | 198,0 | 185,4 | 4,8 |
| DN 25 | 1" | DKR06G00CB4DA0DDD00ZAFGA0 | DKR06N00CB4DA0DDD00ZAFGA0 | DAN0106411S | KCNCCHD5785 | 237,0 | 204,3 | 8,0 |
| DN 32 | 1" 1/4 | DKR07G00CB4DA0DDD00ZAFHA0 | DKR07N00CB4DA0DDD00ZAFHA0 | DAN0120411S | KCNCCHD5785 | 257,5 | 213,5 | 9,1 |
| DN 40 | 1" 1/2 | DKR08G00CB4DA0DDD00ZAFIA0 | DKR08N00CB4DA0DDD00ZAFIA0 | DAN0180411S | KCNDDHD5786 | 290,0 | 254,0 | 16,0 |
| DN 50 | 2" | DKR09G00CB4DA0DDD00ZAFJA0 | DKR09N00CB4DA0DDD00ZAFJA0 | DAN0240411S | KCNDDHD5787 | 313,6 | 269,1 | 22,4 |

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SKR03G00CB4DA0DDD00ZAFGA0 | SKR03N00CB4DA0DDD00ZAFGA0 | SRN0053401S | KCNACHD5788 | 304,3 | 188,8 | 5,0 |
| DN 15 | 1/2" | SKR04G00CB4DA0DDD00ZAFGA0 | SKR04N00CB4DA0DDD00ZAFGA0 | SRN0053401S | KCNBCHD5789 | 304,3 | 195,8 | 6,0 |
| DN 20 | 3/4" | SKR05G00CB4DA0DDD00ZAFHA0 | SKR05N00CB4DA0DDD00ZAFHA0 | SRN0060401S | KCNBCHD5789 | 338,5 | 202,0 | 6,7 |
| DN 25 | 1" | SKR06G00CB4DA0DDD00ZAFIA0 | SKR06N00CB4DA0DDD00ZAFIA0 | SRN0090401S | KCNCDHD5790 | 393,7 | 238,5 | 11,7 |
| DN 32 | 1" 1/4 | SKR07G00CB4DA0DDD00ZAFJA0 | SKR07N00CB4DA0DDD00ZAFJA0 | SRN0120401S | KCNCDHD5790 | 409,6 | 247,6 | 13,6 |
| DN 40 | 1" 1/2 | SKR08G00CB4DA0DDD00ZAFKA0 | SKR08N00CB4DA0DDD00ZAFKA0 | SRN0180401S | KCNDDHD5786 | 474,0 | 264,5 | 20,3 |
| DN 50 | 2" | SKR09G00CB4DA0DDD00ZAFLA0 | SKR09N00CB4DA0DDD00ZAFLA0 | SRN0240401S | KCNDEHD5791 | 520,5 | 313,0 | 29,6 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX).
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution).*

# KRATOS

## ALTA CICLICITÀ **ACCIAIO INOX**
## *HIGH CICLICITY* ***STAINLESS STEEL***



**ESECUZIONE STANDARD:**
- Estremità filettate EN ISO 228-1 o NPT.
- Sfera flottante, passaggio totale.
- Tenuta soft-seat DEVLON.
- Tenuta stelo con pacco a V di serie.
- Temperature di utilizzo: da -50°C a +100°C.
- Classe di tenuta: EN12266-1 rate A.
- Antistatic device EN12266-2.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Fluido intercettato: fluidi liquidi o gassosi purchè compatibili con i materiali costruttivi.

***STANDARD FEATURES:***
- *Threaded ends EN ISO 228-1 or NPT.*
- *Floating ball, full bore.*
- *Soft-seat seal DEVLON.*
- *Stem seal with V-pack.*
- *Operating temperature: from -50°C to +100°C.*
- *Tightness Class: EN12266-1 rate A.*
- *Antistatic device EN12266-2.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Intercepted fluid: liquid or gaseous fluids as long as they are compatible with the construction materials.*

**ESECUZIONI A RICHIESTA:**
- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF), TFM1600, PEEK. Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox; dadi e molle stelo inox. Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Per altri trattamenti superficiali contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX A RICHIESTA.

***FEATURES ON REQUEST:***
- *Sealing: PTFE glass filled (RPTFE-GF), PTFE carbon-graphite filled (RPTFE-CF), TFM1600, PEEK. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever . For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate ON REQUEST.*

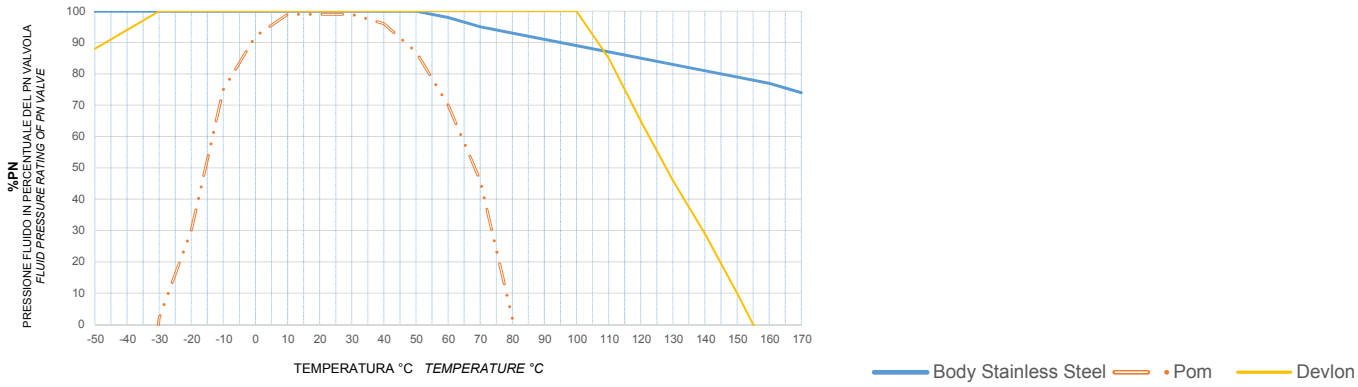
**CERTIFICAZIONI:**
- Conforme alla Direttiva Europea 2014/68/UE PED.
- Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.
- **Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.**
- Conforme alla Direttiva Europea 2014/34/UE ATEX (certificato ATEX A RICHIESTA).

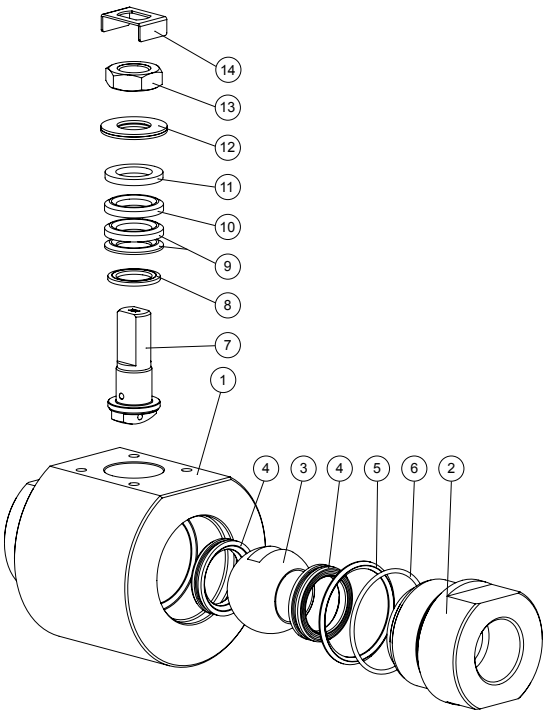
***CERTIFICATIONS:***
- *In compliance with European Directive 2014/68/EU PED.*
- *Fugitive Emisson ISO 15848 (ISO FE BH-C03-SSA 0) -50°C/+100°C.*
- ***Safety integrity level up to SIL 3 according to IEC 61508.***
- *In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).*

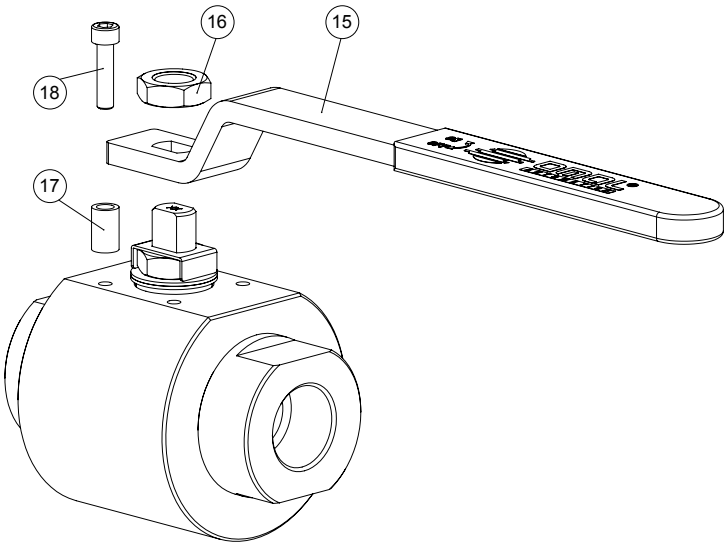
**NORME DI PROGETTAZIONE:**
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.

***ENGINEERING STANDARDS:***
- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ASTM A182 F316 / A479 TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Manicotto *End* | ASTM A182 F316 / A479 TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 3 | Sfera *Ball* | A217 CA15 / A479 TP.410 / A182 F6A + *Hard chromium plated* |
| 4 | Seggio *Seats* | DEVLON |
| 5 | Guarnizione Corpo-Manicotto *Body-Ends gasket* | DEVLON |
| 6 | O'ring Corpo-Manicotto *Body-Ends o'ring* | HNBR |
| 7 | Stelo *Stem* | A564 TP.630 (17-4 PH) |
| 8 | Anello antifizione *Bottom sealing* | DEVLON |
| 9 | Pacco a V *Chevron rings* | TFM1600 |
| 10 | Pacco a V *Chevron ring* | DEVLON |
| 11 | Anello premiguarnizione *Packing gland ring* | 304 S.S. |
| 12 | Molle a tazza *Springs washer* | 50CrV4 Zincato - *Galvanized* |
| 13 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 14 | Fermo dado *Stop nut plate* | 304 S.S. |
| 15 | Leva *Lever* | Fe37 Zincato - *Galvanized* |
| 16 | Controdado *Lock nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| PN / Size | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
|---|---|---|---|---|---|---|---|
| 6000 PSI / 413 bar | 22 | 25 | 33 | 48 | | | |
| 5000 PSI / 344 bar | | | | | 66 | 91 | |
| 4000 PSI / 276 bar | | | | | | | 140 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

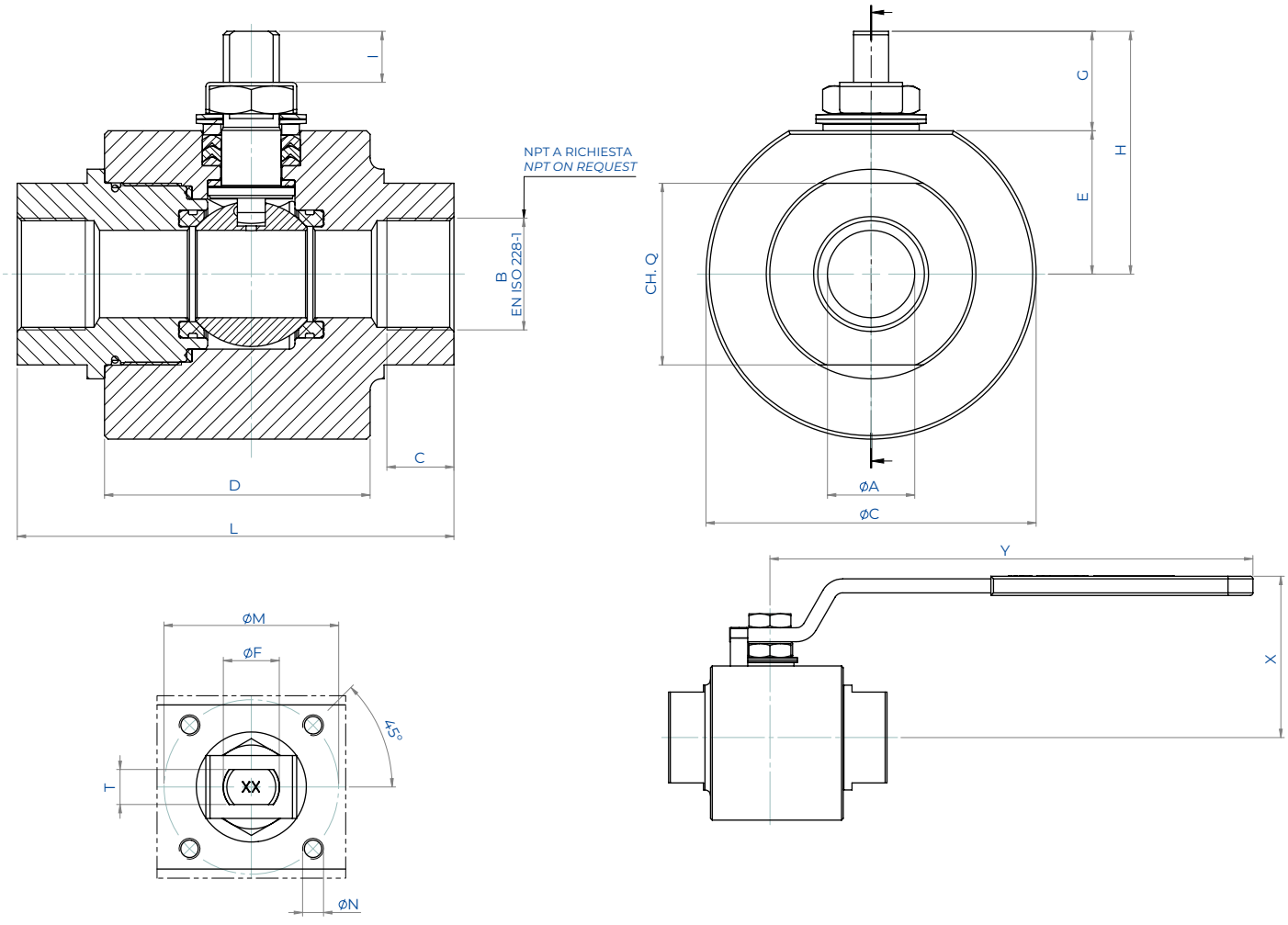
## PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$*

| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |
|---|---|---|---|---|---|---|---|

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* |
| DN 10 | 3/8" | VKR03G00AB4DA0DDD000 | VKR03N00AB4DA0DDD000 | LKR03G00AB4DA0DDD000 | LKR03N00AB4DA0DDD000 | KLV58004 |
| DN 15 | 1/2" | VKR04G00AB4DA0DDD000 | VKR04N00AB4DA0DDD000 | LKR04G00AB4DA0DDD000 | LKR04N00AB4DA0DDD000 | KLV58006 |
| DN 20 | 3/4" | VKR05G00AB4DA0DDD000 | VKR05N00AB4DA0DDD000 | LKR05G00AB4DA0DDD000 | LKR05N00AB4DA0DDD000 | KLV58006 |
| DN 25 | 1" | VKR06G00AB4DA0DDD000 | VKR06N00AB4DA0DDD000 | LKR06G00AB4DA0DDD000 | LKR06N00AB4DA0DDD000 | KLV58008 |
| DN 32 | 1" 1/4 | VKR07G00AB4DA0DDD000 | VKR07N00AB4DA0DDD000 | LKR07G00AB4DA0DDD000 | LKR07N00AB4DA0DDD000 | KLV58008 |
| DN 40 | 1" 1/2 | VKR08G00AB4DA0DDD000 | VKR08N00AB4DA0DDD000 | LKR08G00AB4DA0DDD000 | LKR08N00AB4DA0DDD000 | KLV58010 |
| DN 50 | 2" | VKR09G00AB4DA0DDD000 | VKR09N00AB4DA0DDD000 | LKR09G00AB4DA0DDD000 | LKR09N00AB4DA0DDD000 | KLV58010 |



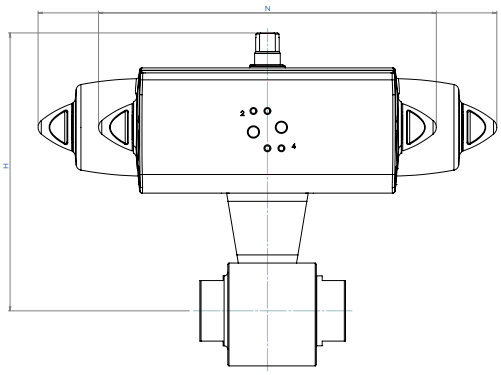

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | øA | B | C | øC | D | E | G | H | I | L | ISO | øM | øN | T/F | CH. Q | Y | X | Kg* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 9 | 3/8" | 11,5 | 60 | 55 | 25,5 | 20 | 45,5 | 8,2 | 85 | F03 | 36 | M5 | 6/M10 | 32 | 141,5 | 67 | 1,5 |
| DN 15 | 1/2" | 13 | 1/2" | 15 | 75 | 60 | 32,5 | 22,5 | 55 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 38 | 151,5 | 80 | 2,5 |
| DN 20 | 3/4" | 19 | 3/4" | 16,5 | 79 | 60 | 35 | 22,5 | 57,5 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 45 | 151,5 | 82 | 2,7 |
| DN 25 | 1" | 25 | 1" | 19,5 | 94,5 | 76 | 41 | 28,5 | 69,5 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 52 | 276,5 | 92 | 4,5 |
| DN 32 | 1" 1/4 | 32 | 1" 1/4 | 22 | 104 | 76 | 46,5 | 28,5 | 75 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 65 | 276,5 | 98 | 5,5 |
| DN 40 | 1" 1/2 | 38 | 1" 1/2 | 22 | 129 | 90 | 56,5 | 41 | 97,5 | 21,9 | 150 | F07 | 70 | M8 | 14/M22 | 75 | 351,5 | 117 | 9,8 |
| DN 50 | 2" | 51 | 2" | 26 | 149,5 | 104 | 68 | 39,5 | 107,5 | 20,9 | 170 | F07 | 70 | M8 | 14/M22 | 95 | 351,5 | 128 | 14,3 |

*Asse libero. *Free shaft.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE *WITH ACTUATOR*










## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DKR03G00AB4DA0DDD000AFDA0 | DKR03N00AB4DA0DDD000AFDA0 | DAN00045412S | KCNAAHD5782 | 188,5 | 160,0 | 3,0 |
| DN 15 | 1/2" | DKR04G00AB4DA0DDD000AFDA0 | DKR04N00AB4DA0DDD000AFDA0 | DAN00045412S | KCNBCHD5783 | 188,5 | 177,0 | 4,1 |
| DN 20 | 3/4" | DKR05G00AB4DA0DDD000AFEA0 | DKR05N00AB4DA0DDD000AFEA0 | DAN00060412S | KCNBCHD5784 | 198,0 | 185,4 | 4,8 |
| DN 25 | 1" | DKR06G00AB4DA0DDD000AFGA0 | DKR06N00AB4DA0DDD000AFGA0 | DAN01060411S | KCNCCHD5785 | 237,0 | 204,3 | 8,0 |
| DN 32 | 1" 1/4 | DKR07G00AB4DA0DDD000AFHA0 | DKR07N00AB4DA0DDD000AFHA0 | DAN01204115 | KCNCCHD5785 | 257,5 | 213,5 | 9,1 |
| DN 40 | 1" 1/2 | DKR08G00AB4DA0DDD000AFIA0 | DKR08N00AB4DA0DDD000AFIA0 | DAN01804115 | KCNDDHD5786 | 290,0 | 254,0 | 16,0 |
| DN 50 | 2" | DKR09G00AB4DA0DDD000AFJA0 | DKR09N00AB4DA0DDD000AFJA0 | DAN02404115 | KCNDDHD5787 | 313,6 | 269,1 | 22,4 |

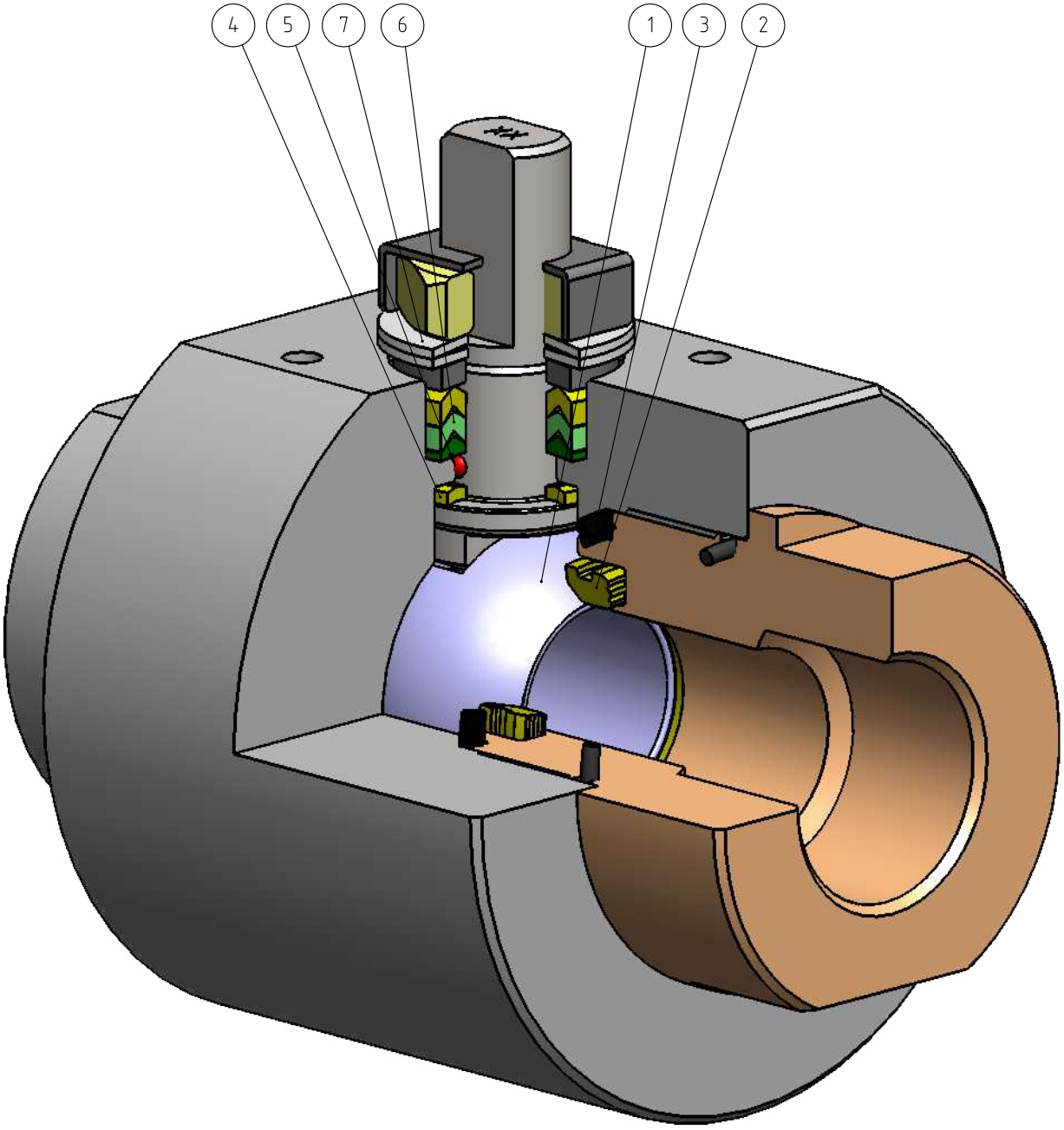
## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SKR03G00AB4DA0DDD000AFGA0 | SKR03N00AB4DA0DDD000AFGA0 | SRN0053401S | KCNACHD5788 | 304,3 | 188,8 | 5,0 |
| DN 15 | 1/2" | SKR04G00AB4DA0DDD000AFGA0 | SKR04N00AB4DA0DDD000AFGA0 | SRN0053401S | KCNBCHD5789 | 304,3 | 195,8 | 6,0 |
| DN 20 | 3/4" | SKR05G00AB4DA0DDD000AFHA0 | SKR05N00AB4DA0DDD000AFHA0 | SRN0060401S | KCNBCHD5789 | 338,5 | 202,0 | 6,7 |
| DN 25 | 1" | SKR06G00AB4DA0DDD000AFIA0 | SKR06N00AB4DA0DDD000AFIA0 | SRN0090401S | KCNCDHD5790 | 393,7 | 238,5 | 11,7 |
| DN 32 | 1" 1/4 | SKR07G00AB4DA0DDD000AFJA0 | SKR07N00AB4DA0DDD000AFJA0 | SRN0120401S | KCNCDHD5790 | 409,6 | 247,6 | 13,6 |
| DN 40 | 1" 1/2 | SKR08G00AB4DA0DDD000AFKA0 | SKR08N00AB4DA0DDD000AFKA0 | SRN0180401S | KCNDDHD5786 | 474,0 | 264,5 | 20,3 |
| DN 50 | 2" | SKR09G00AB4DA0DDD000AFLA0 | SKR09N00AB4DA0DDD000AFLA0 | SRN0240401S | KCNDEHD5791 | 520,5 | 313,0 | 29,6 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX).
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution).*

# KRATOS ALTA CICLICITÀ *HIGH CICLICITY*
# PER FLUIDI NON AUTO-LUBRIFICANTI
# *NON SELF-LUBRICATING MEDIA*



| FEATURES & BENEFITS | | |
|---|---|---|
| 1 | Sfera in acciaio inossidabile con rivestimento in Cromo Duro da 40 µm.<br>*Stainless steel ball, coated with 40 µm Hard Chrome.* | Maggior tenuta nel tempo grazie alla bassa usura della sfera.<br>*Longer seal life due to the low wear of the ball.* |
| 2 | Tenuta in "LUBROSEAT".<br>*Seat in "LUBROSEAT".* | Compound di resina acetalica con additivi a proprietà autolubrificanti.<br>*Acetal resin compound containing self-lubricating additives.* |
| | | Ideale per intercettare fluidi non autolubrificanti.<br>*Ideal for non-lubricating fluids.* |
| | | Elevata resistenza alla sollecitazione.<br>*High resistance to stress.* |
| 3 | Guarnizione Corpo-Manicotto in DEVLON.<br>*DEVLON Body-End gasket.* | Tenuta supplementare a protezione dell'oring.<br>*Supplementary gasket for oring protection.* |
| 4 | Anello antifrizione in DEVLON.<br>*DEVLON Bottom sealing.* | Minor usura rispetto a tenute non modificate.<br>*Less wear comparing with not modify seat.* |
| | | Elevata resistenza alla sollecitazione.<br>*High resistance to stress.* |
| 5 | Antistatic Device (continuità elettrica tra sfera, stelo e corpo).<br>*Antistatic Device (electrical continuity between ball, stem and body).* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi.<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment.* |
| | | Sicurezza garantita dal contatto durante tutta la via della valvola.<br>*Contact safety throughout the entire life of the valve.* |
| 6 | Pacco guarnizioni a "V" con 3 guarnizioni.<br>*"V" seals pack with 3 seals.* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli.<br>*It ensures a perfect tightness even after a high number of cycles.* |
| 7 | Molle a tazza sulla tenuta dello stelo.<br>*Spring washer on the shaft seal.* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite verso l'esterno.<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizioni tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche.<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions.* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento.<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve.* | Maggior vita della valvola stessa.<br>*Longer lifetime of the valve.* |
| | | Minor coppia di azionamento.<br>*Less breakaway torque.* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard.<br>*Valve body in carbon steel made with NACE certified material as standard.* | Garantisce una maggior resistenza alla corrosione.<br>*Greater corrosion resistance.* |
| | | Maggior duttilita del materiale.<br>*Greater ductility of the material.* |
| | Processo produttivo interamente eseguito in OMAL.<br>*100% in-house manufacturing process technology.* | Massimo controllo in tutte le fasi di lavorazione.<br>*Maximum control and accuracy in all the stages of the manufacturing process.* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente.<br>*Flexibility in supply quickly special executions requested by customers.* |
| | Certificato PED.<br>*PED Certificate.* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.<br>*Full compliance with European Safety Standards for Pressure Equipment.* |
| | Certificato Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0).<br>*Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) certificate.* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno.<br>*High level of safety of the tightness towards the outside is granted.* |
| | Certificato ATEX.<br>*ATEX Certificate.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is possible in a potential explosive environment.* |

# KRATOS ALTA CICLICITÀ *HIGH CICLICITY*

## PER FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*

## ACCIAIO AL CARBONIO *CARBON STEEL*



### ESECUZIONE STANDARD:

- Estremità filettate EN ISO 228-1 o NPT.
- Sfera flottante, passaggio totale.
- Tenuta soft-seat **LUBROSEAT**.
- Tenuta stelo con pacco a V di serie.
- Temperature di utilizzo: da -30°C a +80°C.
- Classe di tenuta: EN12266-1 rate A.
- Antistatic device EN12266-2.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Trattamento superficiale di Zincatura.
- Fluido intercettato: fluidi liquidi o gassosi purchè compatibili con i materiali costruttivi.

### *STANDARD FEATURES:*

- *Threaded ends EN ISO 228-1 or NPT.*
- *Floating ball, full bore.*
- *Soft-seat seal **LUBROSEAT**.*
- *Stem seal with V-pack.*
- *Operating temperature: from -30°C to +80°C.*
- *Tightness Class: EN12266-1 rate A.*
- *Antistatic device EN12266-2.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Superficial treatment: Galvanized.*
- *Intercepted fluid: liquid or gaseous fluids as long as they are compatible with the construction materials.*

### ESECUZIONI A RICHIESTA:

- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF), TFM1600, PEEK. Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox; dadi e molle stelo inox. Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Per altri trattamenti superficiali contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX A RICHIESTA.

### *FEATURES ON REQUEST:*

- *Sealing: PTFE glass filled (RPTFE-GF), PTFE carbon-graphite filled (RPTFE-CF), TFM1600, PEEK. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever . For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate ON REQUEST.*

### CERTIFICAZIONI:

- Conforme alla Direttiva Europea 2014/68/UE PED.
- Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.
- **Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.**
- Conforme alla Direttiva Europea 2014/34/UE ATEX (certificato ATEX A RICHIESTA).

### *CERTIFICATIONS:*

- *In compliance with European Directive 2014/68/EU PED.*
- *Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.*
- ***Safety integrity level up to SIL 3 according to IEC 61508.***
- *In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).*

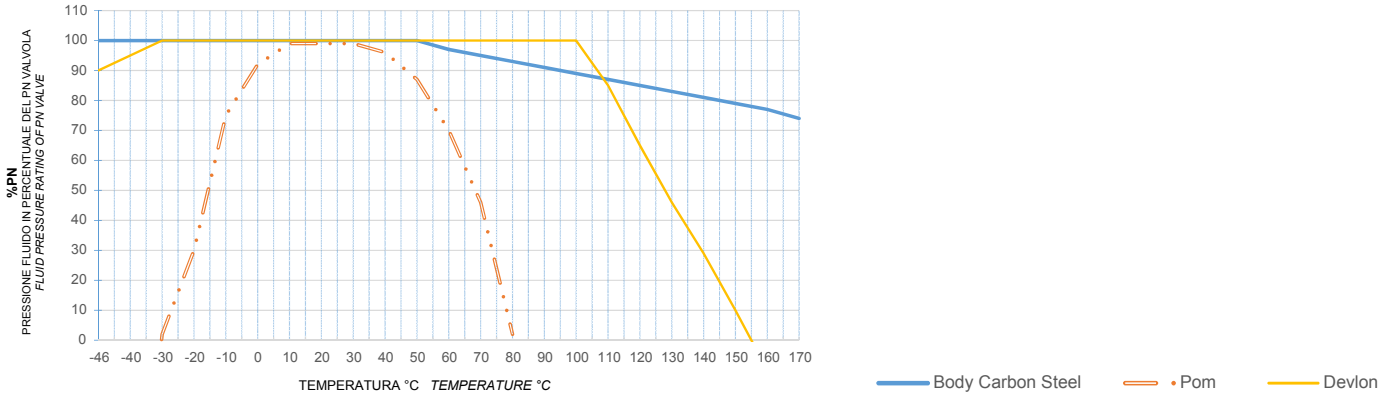
### NORME DI PROGETTAZIONE:

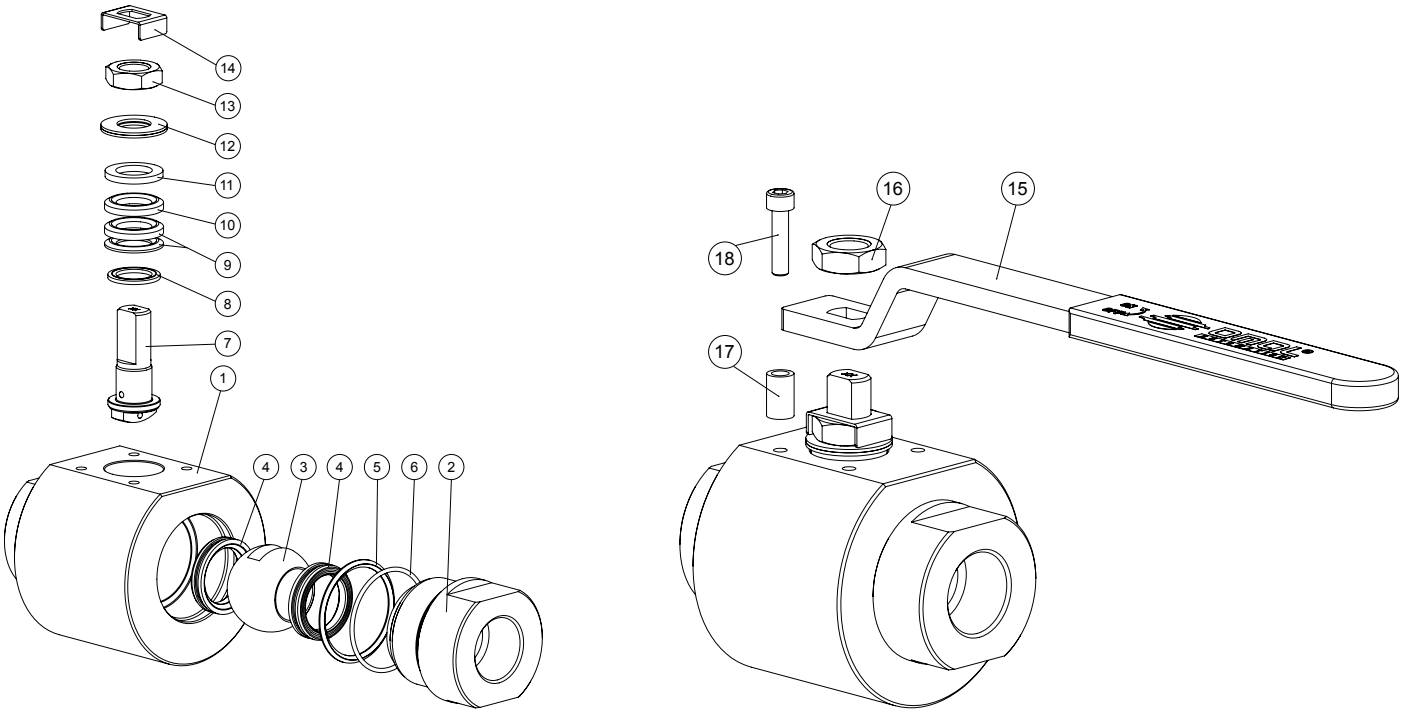
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.

### *ENGINEERING STANDARDS:*

- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ASTM A350 LF2 Zincato - *Galvanized* |
| 2 | Manicotto *End* | ASTM A350 LF2 Zincato - *Galvanized* |
| 3 | Sfera *Ball* | A217 CA15 / A479 TP.410 / A182 F6A + *Hard chromium plated* |
| 4 | Seggio *Seats* | LUBROSEAT: Resina acetalica con additivi autolubrificanti - *Acetal resin with self-lubricating additives.* |
| 5 | Guarnizione Corpo-Manicotto *Body-Ends gasket* | DEVLON |
| 6 | O'ring Corpo-Manicotto *Body-Ends o'ring* | HNBR |
| 7 | Stelo *Stem* | A564 TP.630 (17-4 PH) |
| 8 | Anello antifizione *Bottom sealing* | DEVLON |
| 9 | Pacco a V *Chevron rings* | TFM1600 |
| 10 | Pacco a V *Chevron ring* | DEVLON |
| 11 | Anello premiguarnizione *Packing gland ring* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 12 | Molle a tazza *Springs washer* | 50CrV4 Zincato - *Galvanized* |
| 13 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 14 | Fermo dado *Stop nut plate* | 304 S.S. |
| 15 | Leva *Lever* | Fe37 Zincato - *Galvanized* |
| 16 | Controdado *Lock nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| PN / Size | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
|---|---|---|---|---|---|---|---|
| 6000 PSI / 413 bar | 25 | 32 | 42 | 63 | | | |
| 5000 PSI / 344 bar | | | | | 83 | 126 | |
| 4000 PSI / 276 bar | | | | | | | 168 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

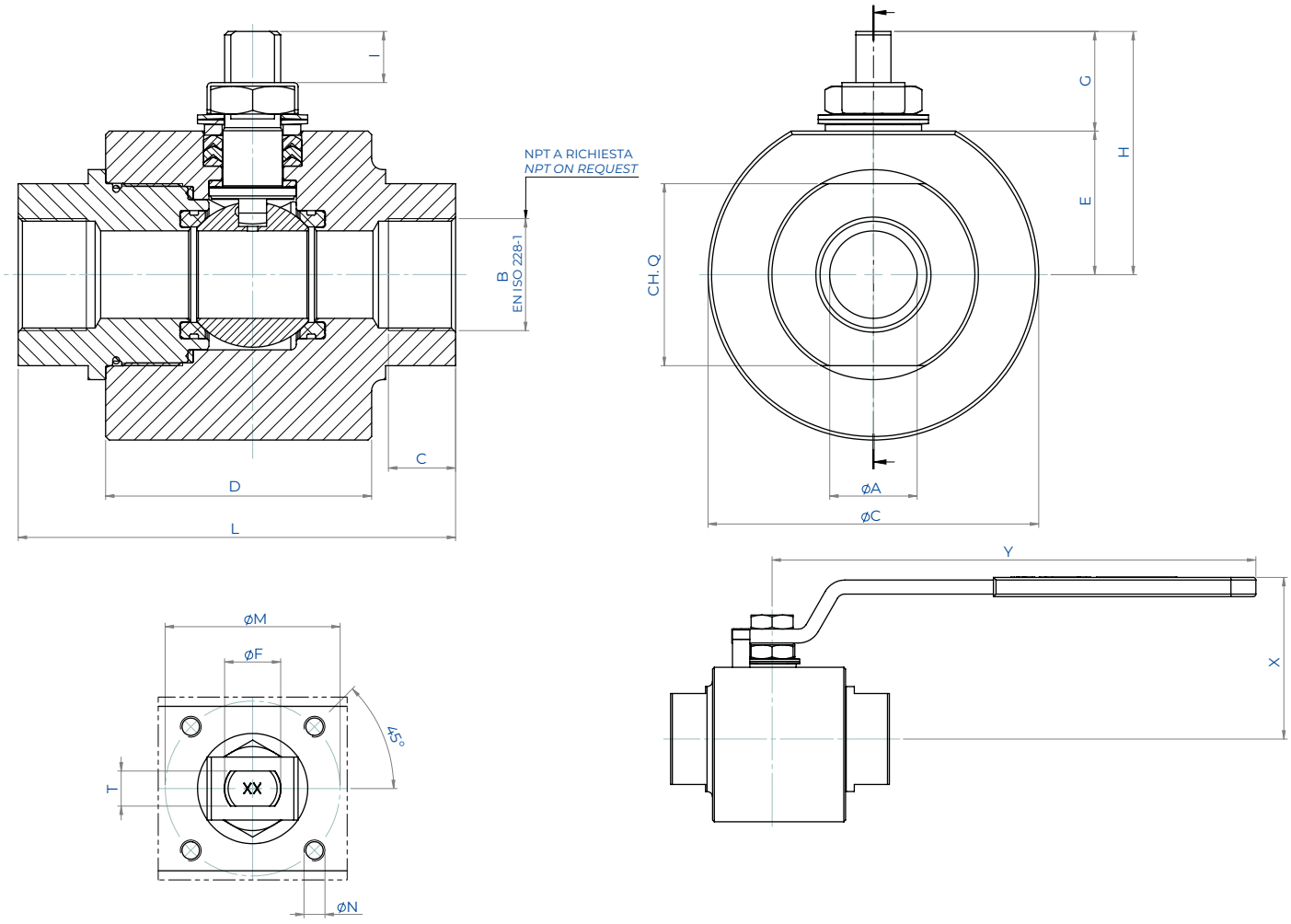
## PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$*

| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |
|---|---|---|---|---|---|---|---|

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* |
| DN 10 | 3/8" | VKR03G00CB4DA0PDD00Z | VKR03N00CB4DA0PDD00Z | LKR03G00CB4DA0PDD00Z | LKR03N00CB4DA0PDD00Z | KLV58004 |
| DN 15 | 1/2" | VKR04G00CB4DA0PDD00Z | VKR04N00CB4DA0PDD00Z | LKR04G00CB4DA0PDD00Z | LKR04N00CB4DA0PDD00Z | KLV58006 |
| DN 20 | 3/4" | VKR05G00CB4DA0PDD00Z | VKR05N00CB4DA0PDD00Z | LKR05G00CB4DA0PDD00Z | LKR05N00CB4DA0PDD00Z | KLV58006 |
| DN 25 | 1" | VKR06G00CB4DA0PDD00Z | VKR06N00CB4DA0PDD00Z | LKR06G00CB4DA0PDD00Z | LKR06N00CB4DA0PDD00Z | KLV58008 |
| DN 32 | 1" 1/4 | VKR07G00CB4DA0PDD00Z | VKR07N00CB4DA0PDD00Z | LKR07G00CB4DA0PDD00Z | LKR07N00CB4DA0PDD00Z | KLV58008 |
| DN 40 | 1" 1/2 | VKR08G00CB4DA0PDD00Z | VKR08N00CB4DA0PDD00Z | LKR08G00CB4DA0PDD00Z | LKR08N00CB4DA0PDD00Z | KLV58010 |
| DN 50 | 2" | VKR09G00CB4DA0PDD00Z | VKR09N00CB4DA0PDD00Z | LKR09G00CB4DA0PDD00Z | LKR09N00CB4DA0PDD00Z | KLV58010 |




## DIMENSIONI *DIMENSIONS*

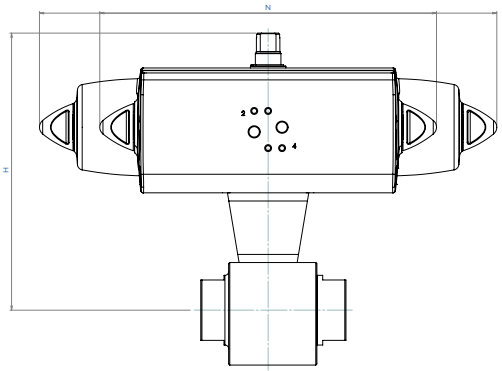
| MISURA *SIZE* | | øA | B | C | øC | D | E | G | H | I | L | ISO | øM | øN | T/F | CH. Q | Y | X | Kg* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 9 | 3/8" | 11,5 | 60 | 55 | 25,5 | 20 | 45,5 | 8,2 | 85 | F03 | 36 | M5 | 6/M10 | 32 | 141,5 | 67 | 1,5 |
| DN 15 | 1/2" | 13 | 1/2" | 15 | 75 | 60 | 32,5 | 22,5 | 55 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 38 | 151,5 | 80 | 2,5 |
| DN 20 | 3/4" | 19 | 3/4" | 16,5 | 79 | 60 | 35 | 22,5 | 57,5 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 45 | 151,5 | 82 | 2,7 |
| DN 25 | 1" | 25 | 1" | 19,5 | 94,5 | 76 | 41 | 28,5 | 69,5 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 52 | 276,5 | 92 | 4,5 |
| DN 32 | 1" 1/4 | 32 | 1" 1/4 | 22 | 104 | 76 | 46,5 | 28,5 | 75 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 65 | 276,5 | 98 | 5,5 |
| DN 40 | 1" 1/2 | 38 | 1" 1/2 | 22 | 129 | 90 | 56,5 | 41 | 97,5 | 21,9 | 150 | F07 | 70 | M8 | 14/M22 | 75 | 351,5 | 117 | 9,8 |
| DN 50 | 2" | 51 | 2" | 26 | 149,5 | 104 | 68 | 39,5 | 107,5 | 20,9 | 170 | F07 | 70 | M8 | 14/M22 | 95 | 351,5 | 128 | 14,3 |

*Asse libero. *Free shaft.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO AL CARBONIO *CARBON STEEL*
# CON ATTUATORE *WITH ACTUATOR*










## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DKR03G00CB4DA0PDD00ZAFDA0 | DKR03N00CB4DA0PDD00ZAFDA0 | DAN0045412S | KCNAAHD5782 | 188,5 | 160,0 | 3,0 |
| DN 15 | 1/2" | DKR04G00CB4DA0PDD00ZAFDA0 | DKR04N00CB4DA0PDD00ZAFDA0 | DAN0045412S | KCNBCHD5783 | 188,5 | 177,0 | 4,1 |
| DN 20 | 3/4" | DKR05G00CB4DA0PDD00ZAFEA0 | DKR05N00CB4DA0PDD00ZAFEA0 | DAN0060412S | KCNBCHD5784 | 198,0 | 185,4 | 4,8 |
| DN 25 | 1" | DKR06G00CB4DA0PDD00ZAFGA0 | DKR06N00CB4DA0PDD00ZAFGA0 | DAN0106411S | KCNCCHD5785 | 237,0 | 204,3 | 8,0 |
| DN 32 | 1" 1/4 | DKR07G00CB4DA0PDD00ZAFHA0 | DKR07N00CB4DA0PDD00ZAFHA0 | DAN0120411S | KCNCCHD5785 | 257,5 | 213,5 | 9,1 |
| DN 40 | 1" 1/2 | DKR08G00CB4DA0PDD00ZAFIA0 | DKR08N00CB4DA0PDD00ZAFIA0 | DAN0180411S | KCNDDHD5786 | 290,0 | 254,0 | 16,0 |
| DN 50 | 2" | DKR09G00CB4DA0PDD00ZAFJA0 | DKR09N00CB4DA0PDD00ZAFJA0 | DAN0240411S | KCNDDHD5787 | 313,6 | 269,1 | 22,4 |

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SKR03G00CB4DA0PDD00ZAFGA0 | SKR03N00CB4DA0PDD00ZAFGA0 | SRN0053401S | KCNACHD5788 | 304,3 | 188,8 | 5,0 |
| DN 15 | 1/2" | SKR04G00CB4DA0PDD00ZAFGA0 | SKR04N00CB4DA0PDD00ZAFGA0 | SRN0053401S | KCNBCHD5789 | 304,3 | 195,8 | 6,0 |
| DN 20 | 3/4" | SKR05G00CB4DA0PDD00ZAFHA0 | SKR05N00CB4DA0PDD00ZAFHA0 | SRN0060401S | KCNBCHD5789 | 338,5 | 202,0 | 6,7 |
| DN 25 | 1" | SKR06G00CB4DA0PDD00ZAFIA0 | SKR06N00CB4DA0PDD00ZAFIA0 | SRN0090401S | KCNCDHD5790 | 393,7 | 238,5 | 11,7 |
| DN 32 | 1" 1/4 | SKR07G00CB4DA0PDD00ZAFJA0 | SKR07N00CB4DA0PDD00ZAFJA0 | SRN0120401S | KCNCDHD5790 | 409,6 | 247,6 | 13,6 |
| DN 40 | 1" 1/2 | SKR08G00CB4DA0PDD00ZAFKA0 | SKR08N00CB4DA0PDD00ZAFKA0 | SRN0180401S | KCNDDHD5786 | 474,0 | 264,5 | 20,3 |
| DN 50 | 2" | SKR09G00CB4DA0PDD00ZAFLA0 | SKR09N00CB4DA0PDD00ZAFLA0 | SRN0240401S | KCNDEHD5791 | 520,5 | 313,0 | 29,6 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX).
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution).*

# KRATOS ALTA CICLICITÀ *HIGH CICLICITY*

## PER FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*

## ACCIAIO INOX *STAINLESS STEEL*



### ESECUZIONE STANDARD:

- Estremità filettate EN ISO 228-1 o NPT.
- Sfera flottante, passaggio totale.
- Tenuta soft-seat **LUBROSEAT**.
- Tenuta stelo con pacco a V di serie.
- Temperature di utilizzo: da -30°C a +80°C.
- Classe di tenuta: EN12266-1 rate A.
- Antistatic device EN12266-2.
- Stelo anti Blow-out.
- Foratura piano per attuatore a norma ISO 5211.
- Fluido intercettato: fluidi liquidi o gassosi purchè compatibili con i materiali costruttivi.

### *STANDARD FEATURES:*

- *Threaded ends EN ISO 228-1 or NPT.*
- *Floating ball, full bore.*
- *Soft-seat seal **LUBROSEAT**.*
- *Stem seal with V-pack.*
- *Operating temperature: from -30°C to +80°C.*
- *Tightness Class: EN12266-1 rate A.*
- *Antistatic device EN12266-2.*
- *Anti Blow-out stem.*
- *Actuator connection as per standard ISO 5211.*
- *Intercepted fluid: liquid or gaseous fluids as long as they are compatible with the construction materials.*

### ESECUZIONI A RICHIESTA:

- Guarnizioni di tenuta in: PTFE caricato vetro (RPTFE-GF), PTFE caricato carbografite (RPTFE-CF), TFM1600, PEEK. Per altri tipi di materiale contattare il nostro ufficio commerciale.
- Esecuzione monodirezionale con foro di compensazione della pressione nella sfera.
- Leva inox; dadi e molle stelo inox. Per esecuzioni con materiali (corpo/sfera/stelo) diversi dallo standard contattare il nostro ufficio commerciale.
- Per altri trattamenti superficiali contattare il nostro ufficio commerciale.
- Marcatura e certificato ATEX A RICHIESTA.

### *FEATURES ON REQUEST:*

- *Sealing: PTFE glass filled (RPTFE-GF), PTFE carbon-graphite filled (RPTFE-CF), TFM1600, PEEK. For other types of materials please contact our sales department.*
- *Mono-directional version with pressure-relief hole in the ball.*
- *Stainless steel lever . For versions in materials different from the standard (body, ball, stem), please contact our sales department.*
- *For other coating please contact our sales department.*
- *ATEX marking and certificate ON REQUEST.*

### CERTIFICAZIONI:

- Conforme alla Direttiva Europea 2014/68/UE PED.
- Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.
- **Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.**
- Conforme alla Direttiva Europea 2014/34/UE ATEX (certificato ATEX A RICHIESTA).

### *CERTIFICATIONS:*

- *In compliance with European Directive 2014/68/EU PED.*
- *Fugitive Emisson ISO 15848 (ISO FE AH-C03-SSA 0) -50°C/+100°C.*
- ***Safety integrity level up to SIL 3 according to IEC 61508.***
- *In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).*

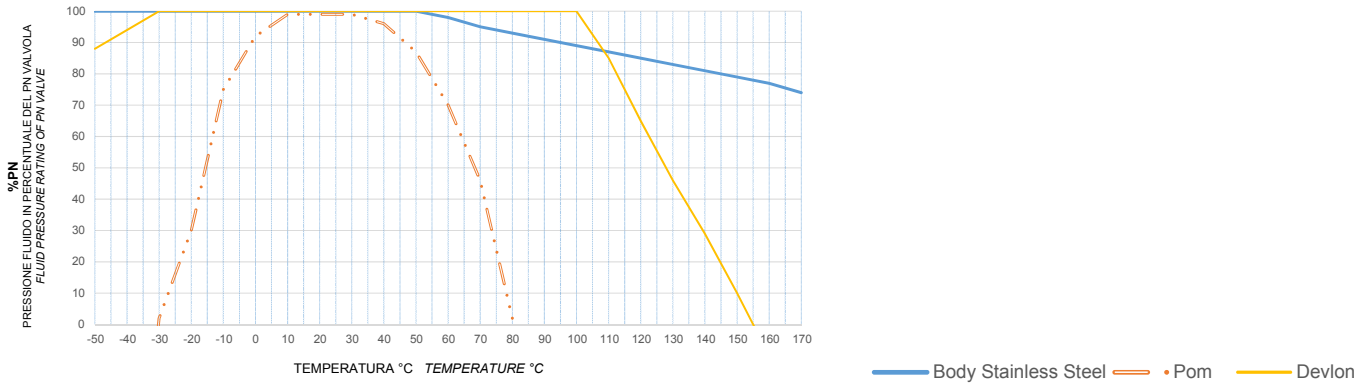
### NORME DI PROGETTAZIONE:

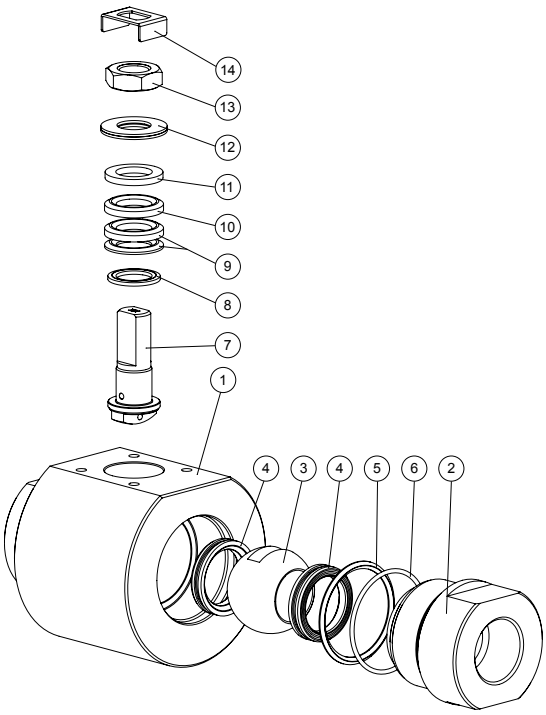
- Spessori corpo in accordo a: ASME B16.34, ASME VIII div.1, EN 12516.

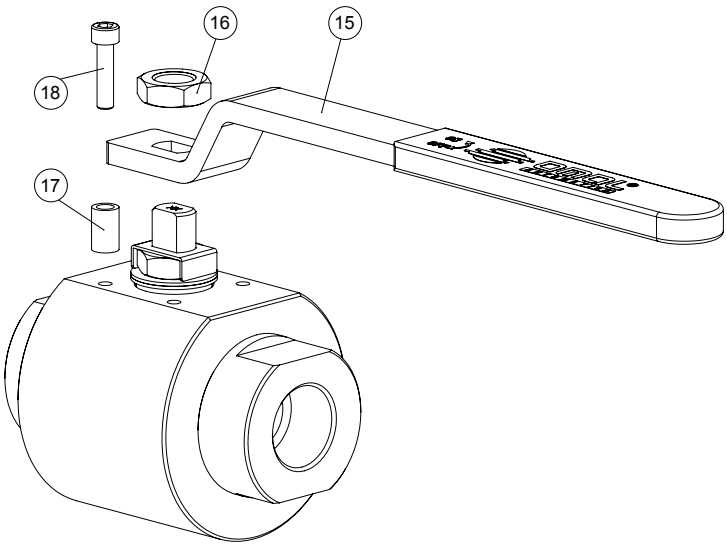
### *ENGINEERING STANDARDS:*

- *Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.*

## DIAGRAMMA PRESSIONE/TEMPERATURA *PRESSURE/TEMPERATURE DIAGRAM*




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | ASTM A182 F316 / A479 TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 2 | Manicotto *End* | ASTM A182 F316 / A479 TP.316 (1.4401 / X5CrNiMo 17-12-2) |
| 3 | Sfera *Ball* | A217 CA15 / A479 TP.410 / A182 F6A + *Hard chromium plated* |
| 4 | Seggio *Seats* | LUBROSEAT: Resina acetalica con additivi autolubrificanti - *Acetal resin with self-lubricating additives.* |
| 5 | Guarnizione Corpo-Manicotto *Body-Ends gasket* | DEVLON |
| 6 | O'ring Corpo-Manicotto *Body-Ends o'ring* | HNBR |
| 7 | Stelo *Stem* | A564 TP.630 (17-4 PH) |
| 8 | Anello antifizione *Bottom sealing* | DEVLON |
| 9 | Pacco a V *Chevron rings* | TFM1600 |
| 10 | Pacco a V *Chevron ring* | DEVLON |
| 11 | Anello premiguarnizione *Packing gland ring* | 304 S.S. |
| 12 | Molle a tazza *Springs washer* | 50CrV4 Zincato - *Galvanized* |
| 13 | Dado stelo *Stem nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 14 | Fermo dado *Stop nut plate* | 304 S.S. |
| 15 | Leva *Lever* | Fe37 Zincato - *Galvanized* |
| 16 | Controdado *Lock nut* | UNI 3740-1 6S Zincato - *Galvanized* |
| 17 | Fermo di posizione *Holder screw* | Acciaio al carbonio Zincato - *Carbon steel Galvanized* |
| 18 | Vite di fermo *Holder screw* | A2-70 UNI 3740 (304 S.S.) |

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| PN / Size | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
|---|---|---|---|---|---|---|---|
| 6000 PSI / 413 bar | 25 | 32 | 42 | 63 | | | |
| 5000 PSI / 344 bar | | | | | 83 | 126 | |
| 4000 PSI / 276 bar | | | | | | | 168 |

I valori della coppia in Nm possono variare in funzione della temperatura e del fluido. Considerare un fattore di sicurezza pari a 1.4.
*Torque can vary depending on temperature and type of fluid, a safety factor 1.4 must be applied.*

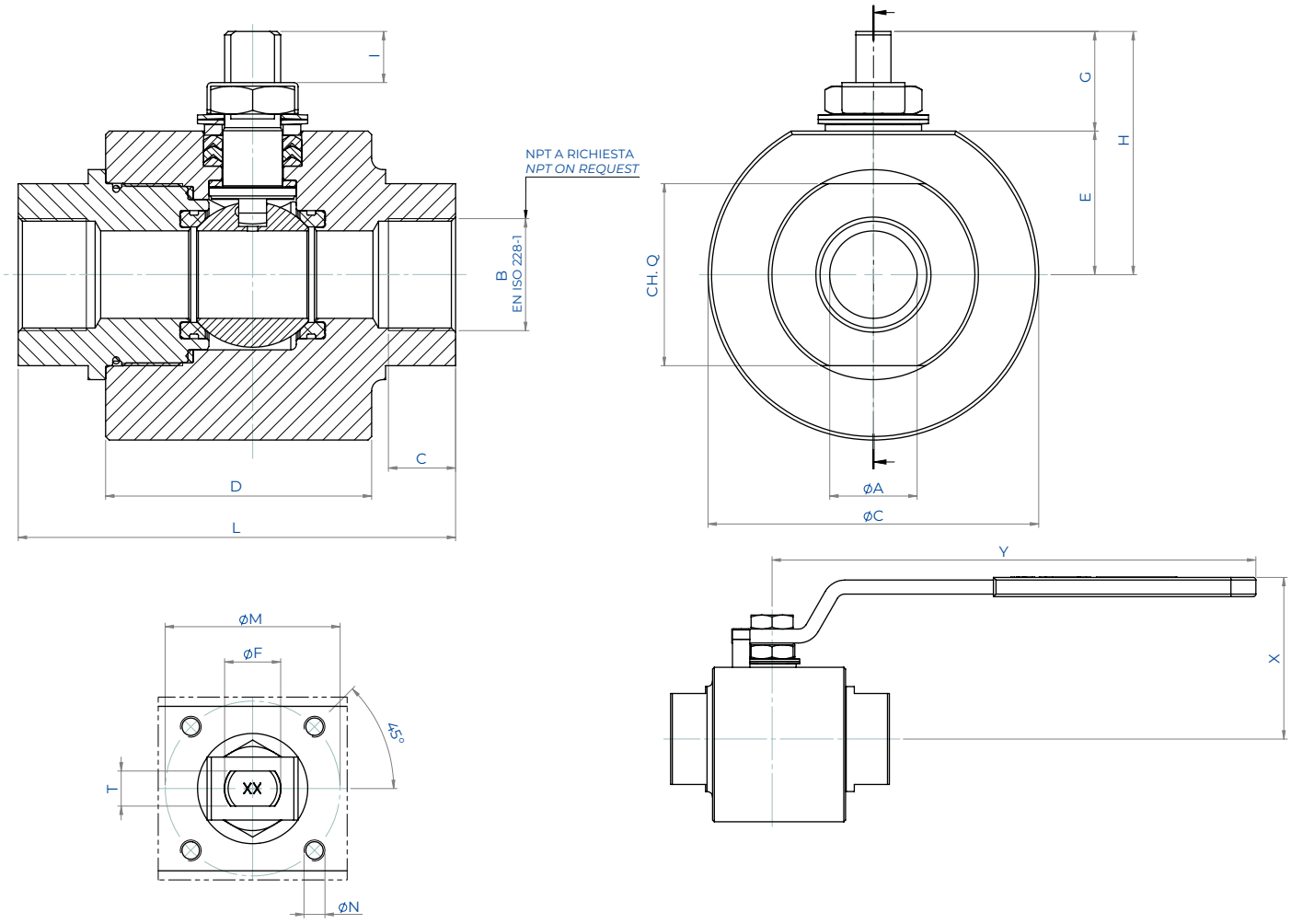
## PORTATA KV $m^3/h$ *FLOW RATE KV $m^3/h$*

| KV $m^3/h$ | 11 | 20 | 60 | 100 | 130 | 170 | 280 |
|---|---|---|---|---|---|---|---|

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO INOX *STAINLESS STEEL*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero - ISO228 *Free shaft - ISO228* | Asse libero - NPT *Free shaft - NPT* | Con leva - ISO228 *With lever - ISO228* | Con leva - NPT *With lever - NPT* | Kit leva *Lever kit* |
| DN 10 | 3/8" | VKR03G00AB4DA0PDD000 | VKR03N00AB4DA0PDD000 | LKR03G00AB4DA0PDD000 | LKR03N00AB4DA0PDD000 | KLV58004 |
| DN 15 | 1/2" | VKR04G00AB4DA0PDD000 | VKR04N00AB4DA0PDD000 | LKR04G00AB4DA0PDD000 | LKR04N00AB4DA0PDD000 | KLV58006 |
| DN 20 | 3/4" | VKR05G00AB4DA0PDD000 | VKR05N00AB4DA0PDD000 | LKR05G00AB4DA0PDD000 | LKR05N00AB4DA0PDD000 | KLV58006 |
| DN 25 | 1" | VKR06G00AB4DA0PDD000 | VKR06N00AB4DA0PDD000 | LKR06G00AB4DA0PDD000 | LKR06N00AB4DA0PDD000 | KLV58008 |
| DN 32 | 1" 1/4 | VKR07G00AB4DA0PDD000 | VKR07N00AB4DA0PDD000 | LKR07G00AB4DA0PDD000 | LKR07N00AB4DA0PDD000 | KLV58008 |
| DN 40 | 1" 1/2 | VKR08G00AB4DA0PDD000 | VKR08N00AB4DA0PDD000 | LKR08G00AB4DA0PDD000 | LKR08N00AB4DA0PDD000 | KLV58010 |
| DN 50 | 2" | VKR09G00AB4DA0PDD000 | VKR09N00AB4DA0PDD000 | LKR09G00AB4DA0PDD000 | LKR09N00AB4DA0PDD000 | KLV58010 |



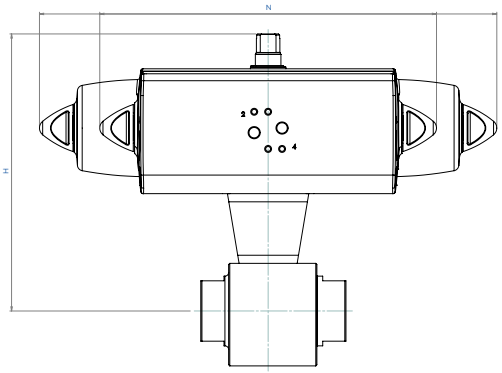

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | øA | B | C | øC | D | E | G | H | I | L | ISO | øM | øN | T/F | CH. Q | Y | X | Kg* |
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 9 | 3/8" | 11,5 | 60 | 55 | 25,5 | 20 | 45,5 | 8,2 | 85 | F03 | 36 | M5 | 6/M10 | 32 | 141,5 | 67 | 1,5 |
| DN 15 | 1/2" | 13 | 1/2" | 15 | 75 | 60 | 32,5 | 22,5 | 55 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 38 | 151,5 | 80 | 2,5 |
| DN 20 | 3/4" | 19 | 3/4" | 16,5 | 79 | 60 | 35 | 22,5 | 57,5 | 9,8 | 90 | F04 | 42 | M5 | 8/M12 | 45 | 151,5 | 82 | 2,7 |
| DN 25 | 1" | 25 | 1" | 19,5 | 94,5 | 76 | 41 | 28,5 | 69,5 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 52 | 276,5 | 92 | 4,5 |
| DN 32 | 1" 1/4 | 32 | 1" 1/4 | 22 | 104 | 76 | 46,5 | 28,5 | 75 | 14,6 | 125 | F05 | 50 | M6 | 10/M16 | 65 | 276,5 | 98 | 5,5 |
| DN 40 | 1" 1/2 | 38 | 1" 1/2 | 22 | 129 | 90 | 56,5 | 41 | 97,5 | 21,9 | 150 | F07 | 70 | M8 | 14/M22 | 75 | 351,5 | 117 | 9,8 |
| DN 50 | 2" | 51 | 2" | 26 | 149,5 | 104 | 68 | 39,5 | 107,5 | 20,9 | 170 | F07 | 70 | M8 | 14/M22 | 95 | 351,5 | 128 | 14,3 |

*Asse libero. *Free shaft.*

# KRATOS - ALTA CICLICITÀ *HIGH CICLICITY*
# FLUIDI NON AUTO-LUBRIFICANTI *NON SELF-LUBRICATING MEDIA*
# ACCIAIO INOX *STAINLESS STEEL*
# CON ATTUATORE *WITH ACTUATOR*










## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
## *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DKR03G00AB4DA0PDD000AFDA0 | DKR03N00AB4DA0PDD000AFDA0 | DAN0045412S | KCNAAHD5782 | 188,5 | 160,0 | 3,0 |
| DN 15 | 1/2" | DKR04G00AB4DA0PDD000AFDA0 | DKR04N00AB4DA0PDD000AFDA0 | DAN0045412S | KCNBCHD5783 | 188,5 | 177,0 | 4,1 |
| DN 20 | 3/4" | DKR05G00AB4DA0PDD000AFEA0 | DKR05N00AB4DA0PDD000AFEA0 | DAN0060412S | KCNBCHD5784 | 198,0 | 185,4 | 4,8 |
| DN 25 | 1" | DKR06G00AB4DA0PDD000AFGA0 | DKR06N00AB4DA0PDD000AFGA0 | DAN0106411S | KCNCCHD5785 | 237,0 | 204,3 | 8,0 |
| DN 32 | 1" 1/4 | DKR07G00AB4DA0PDD000AFHA0 | DKR07N00AB4DA0PDD000AFHA0 | DAN0120411S | KCNCCHD5785 | 257,5 | 213,5 | 9,1 |
| DN 40 | 1" 1/2 | DKR08G00AB4DA0PDD000AFIA0 | DKR08N00AB4DA0PDD000AFIA0 | DAN0180411S | KCNDDHD5786 | 290,0 | 254,0 | 16,0 |
| DN 50 | 2" | DKR09G00AB4DA0PDD000AFJA0 | DKR09N00AB4DA0PDD000AFJA0 | DAN0240411S | KCNDDHD5787 | 313,6 | 269,1 | 22,4 |

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
## *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | CODICE ARTICOLO - versione EN ISO 228 *ITEM CODE - EN ISO 228 version* | CODICE ARTICOLO - versione NPT *ITEM CODE - NPT version* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | N [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SKR03G00AB4DA0PDD000AFGA0 | SKR03N00AB4DA0PDD000AFGA0 | SRN0053401S | KCNACHD5788 | 304,3 | 188,8 | 5,0 |
| DN 15 | 1/2" | SKR04G00AB4DA0PDD000AFGA0 | SKR04N00AB4DA0PDD000AFGA0 | SRN0053401S | KCNBCHD5789 | 304,3 | 195,8 | 6,0 |
| DN 20 | 3/4" | SKR05G00AB4DA0PDD000AFHA0 | SKR05N00AB4DA0PDD000AFHA0 | SRN0060401S | KCNBCHD5789 | 338,5 | 202,0 | 6,7 |
| DN 25 | 1" | SKR06G00AB4DA0PDD000AFIA0 | SKR06N00AB4DA0PDD000AFIA0 | SRN0090401S | KCNCDHD5790 | 393,7 | 238,5 | 11,7 |
| DN 32 | 1" 1/4 | SKR07G00AB4DA0PDD000AFJA0 | SKR07N00AB4DA0PDD000AFJA0 | SRN0120401S | KCNCDHD5790 | 409,6 | 247,6 | 13,6 |
| DN 40 | 1" 1/2 | SKR08G00AB4DA0PDD000AFKA0 | SKR08N00AB4DA0PDD000AFKA0 | SRN0180401S | KCNDDHD5786 | 474,0 | 264,5 | 20,3 |
| DN 50 | 2" | SKR09G00AB4DA0PDD000AFLA0 | SKR09N00AB4DA0PDD000AFLA0 | SRN0240401S | KCNDEHD5791 | 520,5 | 313,0 | 29,6 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

Versione con Attuatore Elettrico A RICHIESTA (NOTA: gli attuatori elettrici OMAL non sono disponibili in versione ATEX).
*Version with Electric Actuator ON REQUEST (PLEASE NOTE: OMAL electric actuators are not available in ATEX execution).*



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04D01HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
Consortio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115

ATTESTA
ATTESTS
che il sistema qualità adottato da
that the quality system operated by

FABBRICANTE / MANUFACTURER: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa / Operational Office Address: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, **modulo H**, della **Direttiva 2014/68/UE**.
*for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.*

AUTORIZZA
AUTHORIZES
ad apporre, sui prodotti di seguito specificati, il marchio / to provide the above mentioned products, the mark CE 1115

ACCESSORI A PRESSIONE / PRESSURE ACCESSORIES: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO
BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES

Modelli coperti / Covered models: Vedere elenco riportato in Appendice A / See list in Appendix A
Rapporti di valutazione / Evaluation Reports: 004_ROD_2018_07_23, 004_RAO_2019_08_13

CONDIZIONI DI VALIDITA' / VALIDITY TERMS AND CONDITIONS

ACCREDIA

| Prima Emissione / First Issue | Emissione corrente / Current Issue | Data di Scadenza / Expiring date |
|---|---|---|
| 16/08/2007 | 16/08/2019 | 17/08/2022 |

Pagina / Page 1 di / of 2

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives.*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION
AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO

Appareil / Equipment / Apparecchiatura : BALL VALVES

Type(s) / Type(s) / Tipo(i) : Wafer type, Split body type, Split Wafer type steel ball valves / Two-piece, Three-piece steel ball valve High-pressure - threaded ends / Two-piece brass ball valves threaded ends

Marquage / Marking / Marcatura : Ex II 2 GD

Déposant / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 febraury 2014, acknowledges receipt of file according to the procedure described chapter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VS-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035241/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

The technical documentation referenced : VS-19 dated 10/10/2019 is consigned under the reference : no INERIS-EQEN 035241/19.
Within the scope of the recording, INERIS did not examine the contents of the technical documentation.

La documentazione tecnica di riferimento : VS-19 dated 10/10/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 035241/19.
Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07
Validity completion date : 2029.11.07
Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,
The Chief Executive Officer of INERIS, By delegation,
Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Etablissement public à caractère industriel et commercial - RCS Compiègne B 381 984 926 - Siret 381 984 921 00859 - APE 7120B - TVA Intracom FR 75 381 984 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



TÜV NORD

CERTIFICATE

This certifies, that the company

**Omal S.p.A.**
**Via Ponte Nuovo, 11**
**25050 Rodengo Saiano (BS)**
**Italy**

Is authorized to provide the product mentioned below

Description of product: **High pressure floating ball valve series Kratos**

In accordance with: **EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7**

Registration No 20 20256 01
Test Report No PS-20256-20-L-01
File reference 20256-01

TÜV NORD Italia S.r.l. (TÜV NORD Group)
Via Turati, 70 - 20023 Cerro Maggiore (MI)

www.tuev-nord.it

Validity
from 2020-03-31
until 2023-03-30

Cerro Maggiore, 2020-03-31
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

**▲ SIL**

Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification of compliance to the IEC 61508 requirements, of the functional safety level provided by the product intended to be integrated in systems with required safety integrity level up to SIL 3.*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФИКАТ ЭКСПЕРТИЗЫ ТИПА / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2324-17

Термін дії з 25.07.2017 р. до 03.09.2020 р.

Сертифікат видано 'OMAL S.p.A.' Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Продукція Крани кульові без електричного обладнання (згідно з додатком) 8481

Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT)
Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі

Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Італія

Додаткова інформація

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ"
Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.

На підставі Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ ПРОМТЕСТ

Керівник органу з оцінки відповідності Самотой В.І.

М.П. М.П.

**▲ UKR**

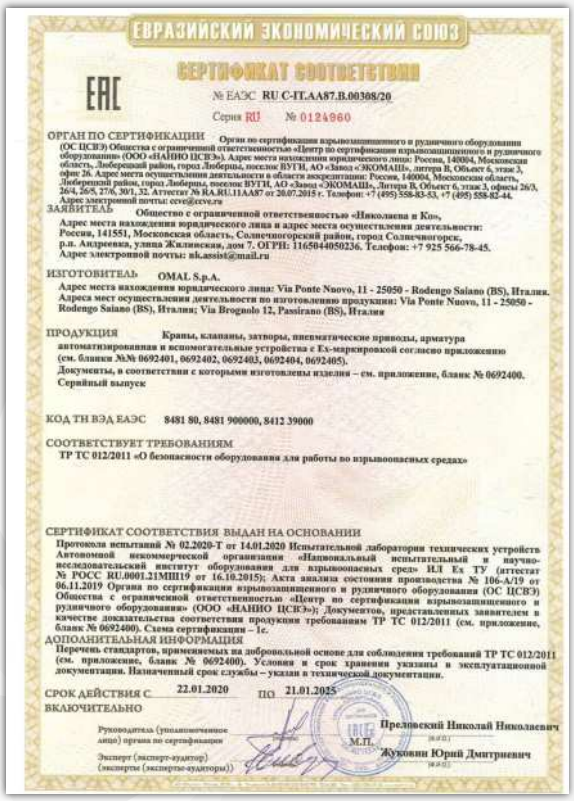
Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.

*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко". ОГРН: 1165044050236
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +79255667845. Адрес электронной почты: nk.assist@mail.ru.
**в лице** генерального директора Николаевой Нины Сергеевны
**заявляет, что** Арматура промышленная трубопроводная: краны шаровые, серия MAGNUM, типы M1, M4, M5, M6; серия THOR, типы T1, T2, T3; серия SUPREME, тип S; серия HERCULES, типы VHA4, VHA5, VHA6, LHA4, LHA5, LHA6; типы 100, 101, 153, 400, 401, 410, 412, 432, 414, 415, 417, 510, 512, 514, 515, 517, 532.
**изготовитель** "OMAL S.p.A"
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.
Код ТН ВЭД 8481808199. Серийный выпуск.
**соответствует требованиям**
Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)
**Декларация о соответствии принята на основании**
Протоколы испытаний Испытательной лаборатории изготовителя № ОМ 000589 от 30.06.2015, № ОМ 000863 от 30.06.2015, № ОМ 000589 от 30.06.2015, № 15BM001184 от 30.06.2015.
Обоснование безопасности OMAL ОБ.
Технический паспорт шарового крана VS.14.
Руководство по установке, эксплуатации и обслуживанию UMAH1000-RUS.
Чертежи 1_2350, 1_2437, Y_4321, Y_4322, Y_2395, Y_1104, Y_1118.
Сертификаты испытания материалов изготовителем № Y_4279-2015 от 20.05.2015, № ОА 011390 от 10.06.2015, № 2015-VE 000801 от 30.07.2015, № ОА 015204 от 31.07.2015.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 № 236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д
**Дополнительная информация**
Применяемый стандарт: ГОСТ Р 53672-2009 "Арматура трубопроводная. Общие требования безопасности". Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 15 лет.
Общество с ограниченной ответственностью "Николаева и Ко" (уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017)
**Декларация о соответствии действительна с даты регистрации по 17.07.2020 включительно**
Николаева Нина Сергеевна
**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10610**
**Дата регистрации декларации о соответствии: 18.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ
№ ЕАЭС RU C-IT.АА87.В.00308/20
Серия RU № 0124960
ОРГАН ПО СЕРТИФИКАЦИИ Органы по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: ccve@ccve.ru
ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru
ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия
ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск
КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000
СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»
СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» НЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.
СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО
Руководитель (уполномоченное лицо) органа по сертификации — Преловский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).
*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



FUGITIVE EMISSION CERTIFICATE

CERTIFICATE NUMBER: FE-063579-885
CLIENT ADDRESS: OMAL Spa, Via Brognolo 12, 25050 Passirano (BS) - Italy
REPORT NUMBER: Doc n.60
SCOPE OF REPORT: Fugitive Emission test carried out according to: ISO 15848-1 Edition 2015
max BAR: 425 Bar
max °C: +100°C
QUALIFIED VALVE: Size: ½" FB (Stem Ø 13 mm); Rating Class: PN420 / 6000psi; Drawing N°: Y_6161; Type: 2 PIECES THREADED FLOATING BALL VALVE
RANGE AND TYPE OF VALVES COVERED: ISO FE AH-C03-SSA 0-t(-29°C, +100°C) PN420 - ISO 15848-1 In accordance with ISO 15848-1, we also extend the certification to valve with same stem and body seals material, design (shape) and construction, with stem size 50% lower and 200% higher than stem tested. Paragraph 8 e): Stem tested Ø13 mm => Ø7.5 mm ≤ Stem certified ≤ Ø26 mm. Paragraph 8 f): Pressure ≤PN420
TÜV INSPECTOR Mastrogiacomo Simone
CERTIFICATION DATE 06/02/2019
Review Witness 06 FEB 2019



FUGITIVE EMISSION CERTIFICATE

CERTIFICATE NUMBER: FE-063579-886
CLIENT ADDRESS: OMAL Spa, Via Brognolo 12, 25050 Passirano (BS) - Italy
REPORT NUMBER: Doc n.61
SCOPE OF REPORT: Fugitive Emission test carried out according to: ISO 15848-1 Edition 2015
max BAR: 430 Bar
max °C: Ambient Temperature (+ 21°C)
QUALIFIED VALVE: Size: ½" FB (Stem Ø 13 mm); Rating Class: PN420 / 6000psi; Drawing N°: Y_6161; Type: 2 PIECES THREADED FLOATING BALL VALVE
RANGE AND TYPE OF VALVES COVERED: ISO FE AH-C03-SSA 0-t(-50°C, Ambient Temp.) PN420 - ISO 15848-1 In accordance with ISO 15848-1, we also extend the certification to valve with same stem and body seals material, design (shape) and construction, with stem size 50% lower and 200% higher than stem tested. Paragraph 8 e): Stem tested Ø13 mm => Ø7.5 mm ≤ Stem certified ≤ Ø26 mm. Paragraph 8 f): Pressure ≤PN420
TÜV INSPECTOR Mastrogiacomo Simone
CERTIFICATION DATE 13/02/2019
Review Witness 13 FEB 2019

**▲ FUGITIVE EMISSION**

Certificazione di conformità ai requisiti di non emissione verso l'esterno di sostanze nocive, in accordo con la norma UNI EN ISO 15848-1, per applicazione con fluidi volatili inquinanti e pericolosi.
*Certification in compliance with UNI EN ISO 15848-1 requirements of non-emission of harmful substances to the outside, referring to volatile air pollutants and hazardous fluids applications.*


OMAL
AUTOMATION
VIA PONTE NUOVO 11
RODENGO SAIANO (BRESCIA) -ITALY-
DN:
Body / Ball / Stem / Seats
Rate:
Pmax / Tmax-Pmax/Tmin
S.n.:
Code:
Date:
CE 1115

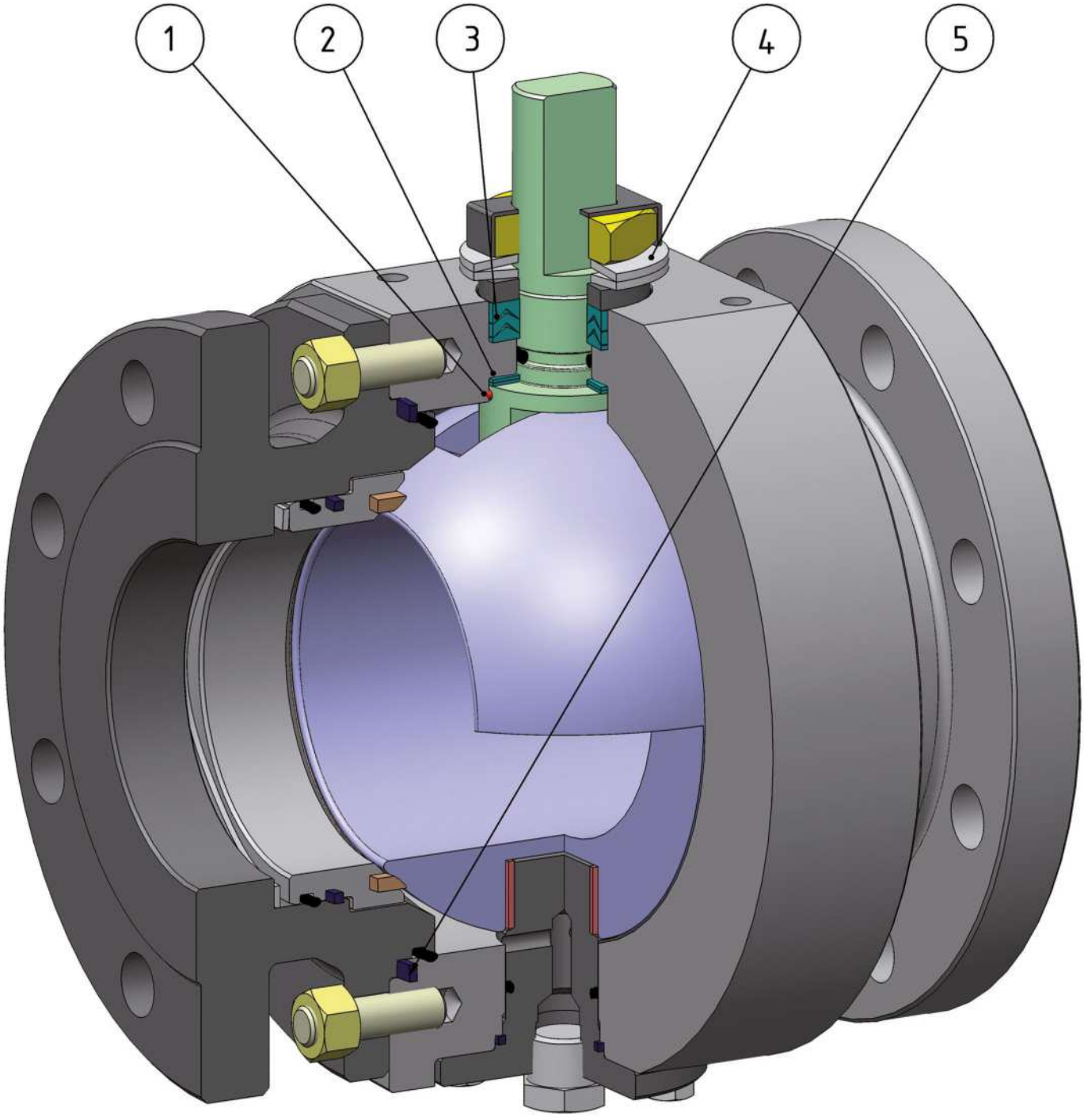
1.5



# SUPREME TRUNNION

# SUPREME
# VALVOLA A SFERA TRUNNION
# *TRUNNION BALL VALVE*

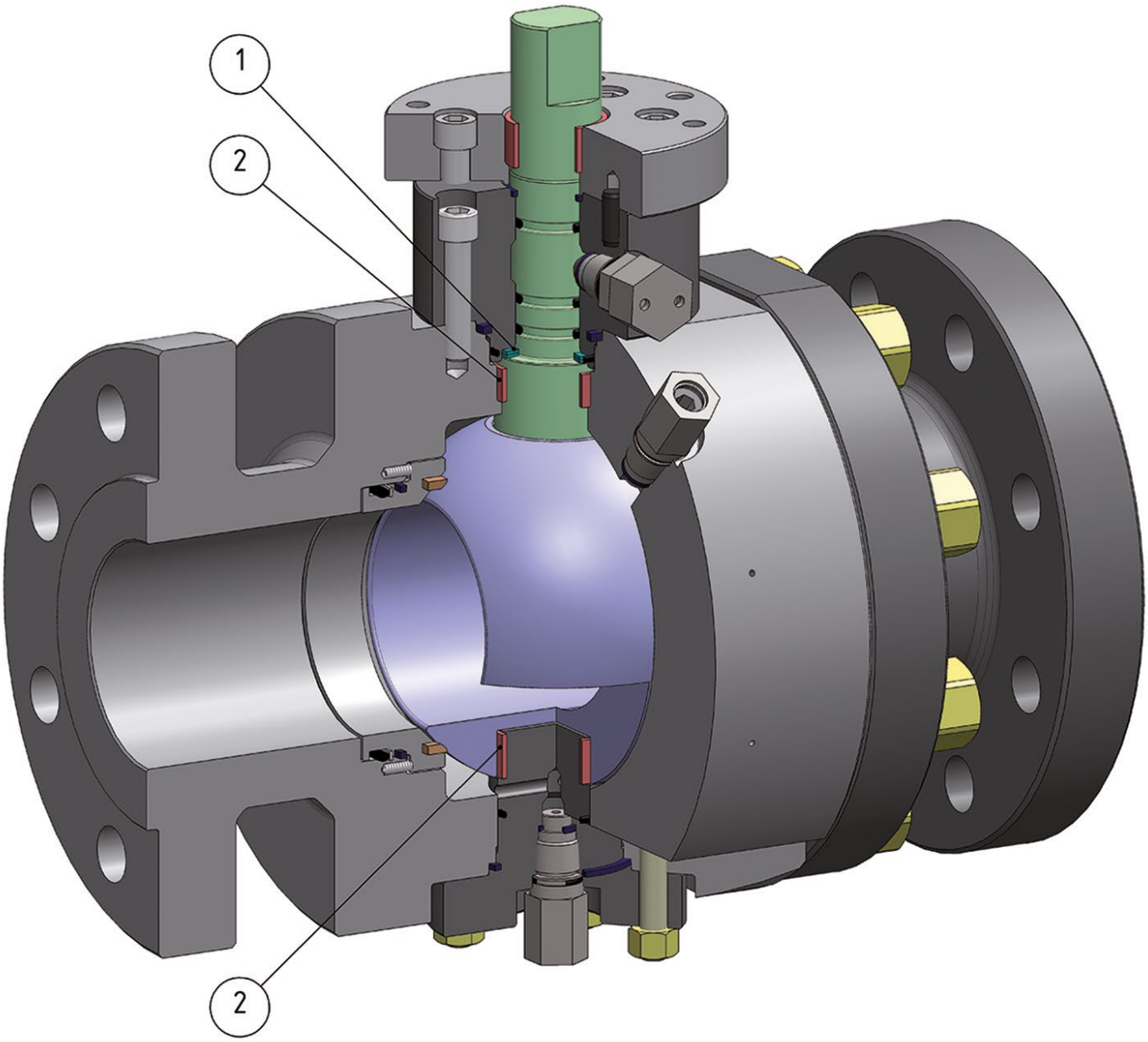
## DN ≤ 100 SIZE ≤ 4” – ANSI 150-300



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| 2 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Break Away Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 3 | Pacco guarnizioni a "v" con 3 guarnizioni più o-ring<br>*"V" seals pack; 3 seals + o-ring* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 4 | Molle a tazza sulla tenuta dello stelo<br>*Spring washer on the shaft seal* | Garantiscono il recupero dei giochi dovuti all'usura causata dal movimento semirotatorio dell'albero evitando perdite verso l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the rotational movement of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzate le guarnizoini tipo "chevron" (a V), evitando perdite verso l'esterno, a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions* |
| 5 | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Maggiore precisione nell'allineamento degli assi grazie alla lavorazione dal grezzo al finito con un unico posizionamento<br>*Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve* | Maggior vita della valvola stessa<br>*Longer lifetime of the valve* |
| | | Minor coppia di azionamento<br>*Less break away torque* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Processo produttivo interamente eseguito in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | | Possibilità di fornire rapidamente esecuzioni speciali richieste dal cliente<br>*Flexibility in supply quickly special executions requested by customers* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificazione "TA LUFT fugitive emission"<br>*TA LUFT fugitive emission Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |
| | Certificato API6D<br>*API6D Certificate* | Possono essere utilizzate nei settori Oil&Gas e Petrolchimico<br>*Can be used in Oil & Gas and Petrochemical applications* |
| | | Massima tracciabilità del processo e del prodotto.<br>*Max traceability of the manufacturing process and of the Product itself.* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

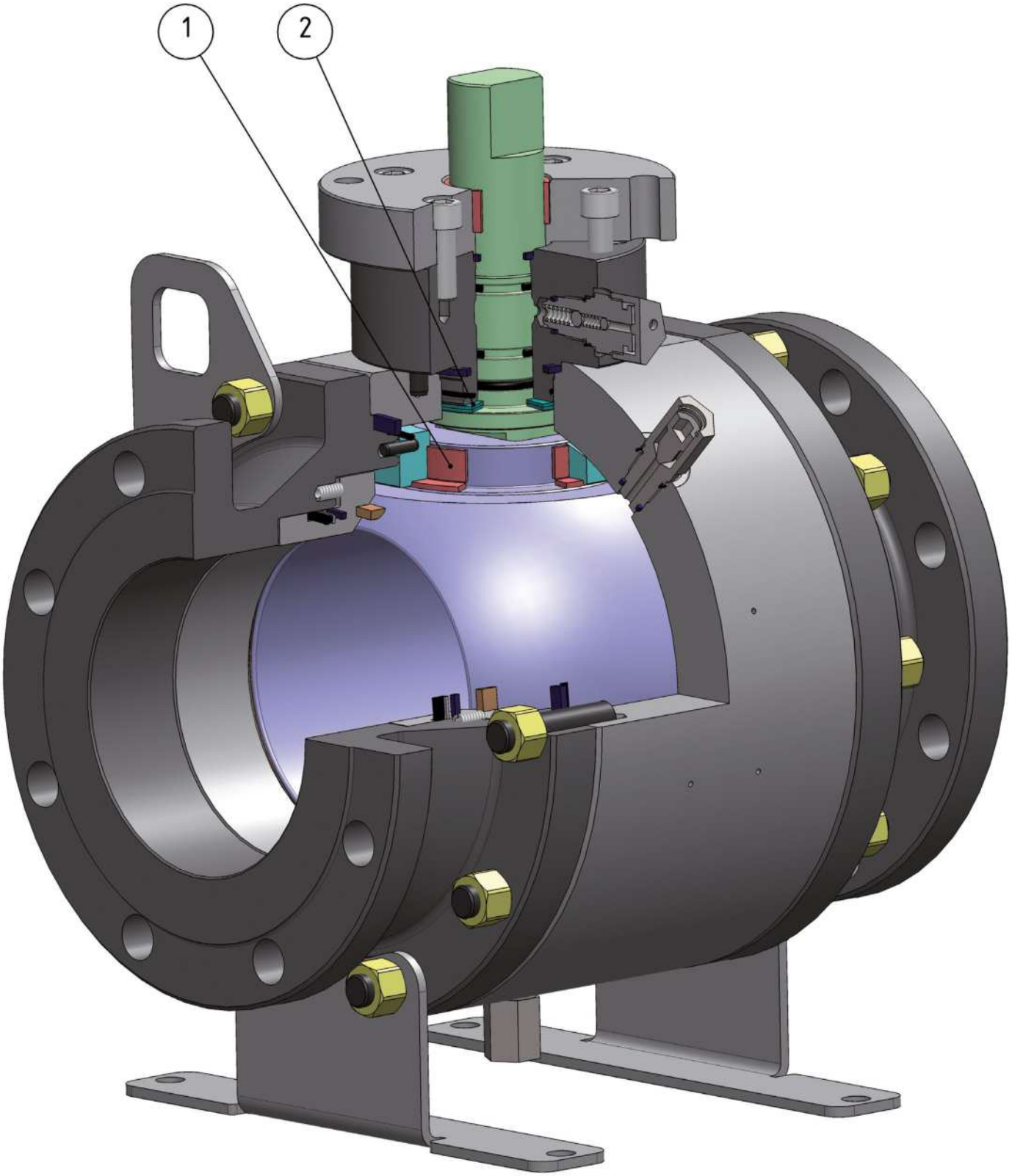
# DN ≤ 100 SIZE ≤ 4” – ANSI ≥ 600



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Break Away Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 2 | Doppie boccole di guida sfera<br>*Two ball guiding bushings* | Diminuiscono la coppia torcente della valvola<br>*Less valve torque* |
| | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificato API6D<br>*API6D Certificate* | Possono essere utilizzate nei settori Oil&Gas e Petrolchimico<br>*Can be used in Oil & Gas and Petrochemical applications* |
| | | Massima tracciabilità del processo e del prodotto.<br>*Max traceability of the manufacturing process and of the Product itself.* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |

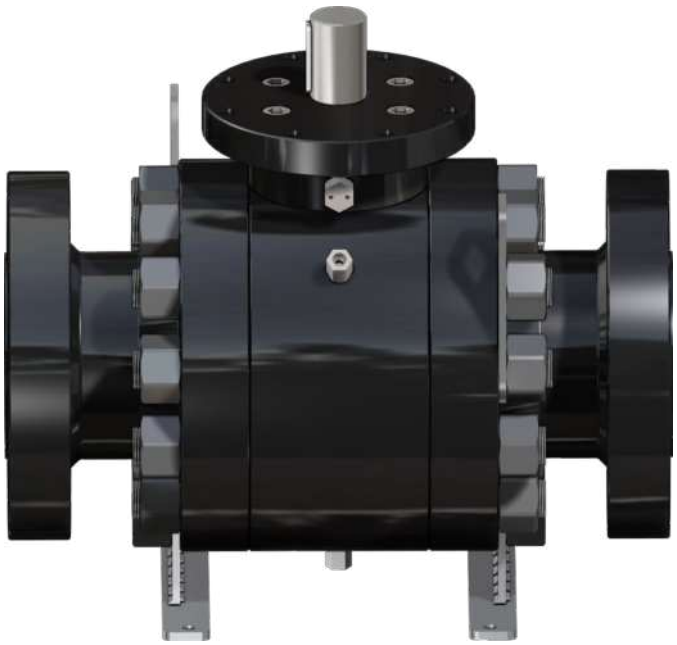
# DN ≥ 150 SIZE ≥ 6”

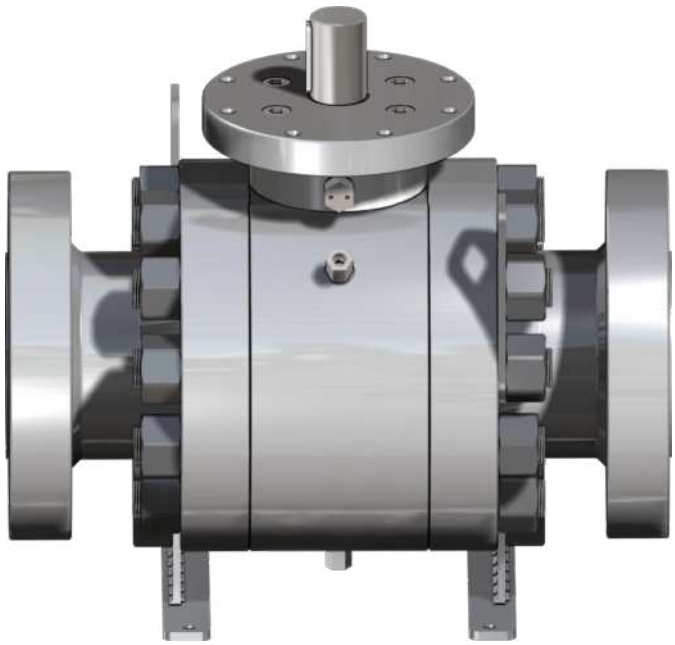


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Doppio anello antifrizione<br>*Double antifriction washer* | Garantisce una minor coppia di azionamento della valvola<br>*Less Break Away Torque is granted* |
| | | Minor usura rispetto all'esecuzione con singolo anello<br>*Less wear comparing with the execution with the single washer* |
| 2 | Doppie boccole di guida sfera<br>*Two ball guiding bushings* | Diminuiscono la coppia torcente della valvola<br>*Less valve torque* |
| | Antistatic device (continuità elettrica tra sfera, stelo e corpo)<br>*Antistatic device ((electrical continuity between ball, stem and body)* | Si evitano cariche elettrostatiche che potrebbero essere causa d'innesco in ambienti infiammabili e/o esplosivi<br>*Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment* |
| | | Sicurezza garantita del contatto durante tutta la vita della valvola<br>*Contact safety throughout the entire life of the valve* |
| | Tenuta elasticizzata in grafite<br>*Stretch Graphite seal* | Garantisce una tenuta verso l'esterno indipendentemente dalle escursioni termiche a cui è sottoposta la valvola<br>*Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected* |
| | Corpo valvola in acciaio al carbonio realizzato con materiale normalizzato certificato NACE in esecuzione standard<br>*Valve body in carbon steel made with NACE certified material as standard* | Garantisce una maggior resistenza alla corrosione<br>*Greater corrosion resistance* |
| | | Maggior duttilità del materiale<br>*Greater ductility of the material* |
| | Certificato "Fire Safe"<br>*"Fire safe" Certificate* | Garantisce la tenuta della valvola anche in caso di incendio<br>*Guarantees the tightness of the valve also in case of fire* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is possible in a potential explosive environment* |
| | Certificato API6D<br>*API6D Certificate* | Possono essere utilizzate nei settori Oil&Gas e Petrolchimico<br>*Can be used in Oil & Gas and Petrochemical applications* |
| | | Massima tracciabilità del processo e del prodotto.<br>*Max traceability of the manufacturing process and of the Product itself.* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |
| | Certificato fino a SIL 3<br>*UP to SIL 3 certified* | Elevato livello di sicurezza funzionale<br>*Guarantee of the high level of functional safety* |
| | Certificazione FUGITIVE EMISSION<br>*FUGITIVE EMISSION Certificate* | Garantisce un elevato grado di sicurezza della tenuta stelo verso l'esterno<br>*High level of safety of the tightness towards the outside is granted* |

# SUPREME - TRUNNION



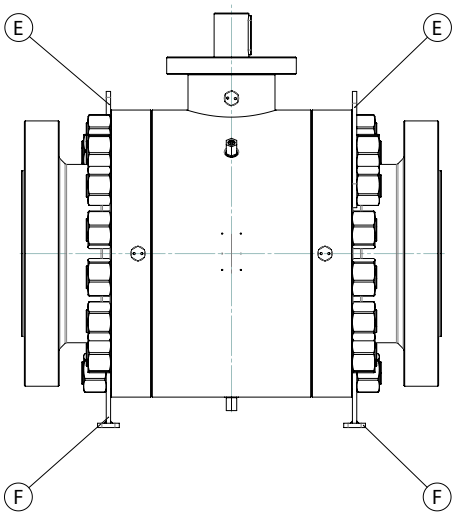


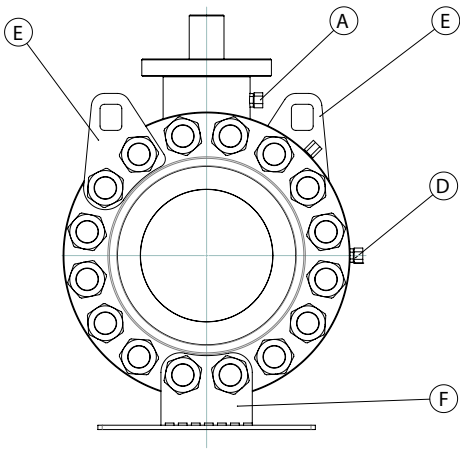
| | |
|---|---|
| **ESECUZIONE STANDARD**<br>• Corpo in due o tre pezzi.<br>• Seggi di tenuta resilienti.<br>• Scarico automatico della sovrappressione nel corpo.<br>• Double Block & Bleed.<br>• Classi di pressione: ANSI 150÷ANSI 2500.<br>• Applicazioni: impianti chimici e petrolchimici, centrali elettriche ed altre applicazioni nell'industria di processo per liquidi, gas, vapore ed idrocarburi.<br>• Stelo anti espulsione. | ***STANDARD EXECUTION***<br>• *Two or three pieces body.*<br>• *Resilient seat.*<br>• *Automatic body cavity relief.*<br>• *Double Block & Bleed.*<br>• *Pressure class: ANSI 150÷ANSI 2500.*<br>• *Applications: chemical and petrochemical plants, oil & gas production, power plants, other process industry applications, liquid, gas and steam, hydrocarbons.*<br>• *Anti blow out stem.* |
| **ESECUZIONI SPECIALI A RICHIESTA**<br>• Doppio effetto pistone.<br>• Materiali ed esecuzioni speciali in accordo alle specifiche del cliente.<br>• Marcatura e certificato ATEX A RICHIESTA. | ***SPECIAL FEATURES ON REQUEST***<br>• *Double piston effect.*<br>• *Material and special execution according to Customer Specifications.*<br>• *ATEX marking and certificate ON REQUEST.* |
| **CERTIFICAZIONI**<br>• Conforme alla Direttiva Europea 2014/68/UE PED.<br>• Conforme alla Direttiva Europea 2014/34/UE ATEX. (certificato ATEX A RICHIESTA).<br>• API 6D: certificato n°6D-1007.<br>• Livello di sicurezza funzionale fino a SIL 3 in accordo a IEC 61508.<br>• FIRE SAFE EN ISO 10497- API607.<br>• Fugitive Emission UNI EN ISO 15848. | ***CERTIFICATIONS***<br>• *In compliance with European Directive 2014/68/EU PED.*<br>• *In compliance with European Directive 2014/34/EU ATEX (ATEX certificate ON REQUEST).*<br>• *API 6D: certificate no 6D-1007.*<br>• *Safety integrity level up to SIL 3 according to IEC 61508.*<br>• *FIRE SAFE EN ISO 10497- API607.*<br>• *Fugitive Emission UNI EN ISO 15848.* |
| **STANDARD DI PROGETTO**<br>• Corpo valvola: ASME B16.34, API6D.<br>• Estremità: ASME B16.5 (RF-RTJ), ASME B16.25 (BW).<br>• Scartamento: API6D, ASME B16.10.<br>• Flangia per il montaggio azionamento: ISO5211. | ***STANDARD DESIGN***<br>• *Valve body: ASME B16.34, API6D.*<br>• *End connections: ASME B16.5 (RF-RTJ), ASME B16.25 (BW).*<br>• *Face to face: API6D, ASME B16.10.*<br>• *Drives mounting flange: ISO5211.* |

# TAGLIE E ACCESSORI *SIZE AND ACCESSORIES*

| DN | | 50 | 80 x 65 | 80 | 100 x 80 | 100 | 150 x 100 | 150 | 200 x 150 | 200 | 250 x 200 | 250 | 300 x 250 | 300 | 350 x 250 | 350 | 400 x 300 | 400 | 450 x 350 | 450 | 500 x 400 | 500 | 600 x 500 | 600 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SIZE | | 2" | 3" x 2"1/2 | 3" | 4" x 3" | 4" | 6" x 4" | 6" | 8" x 6" | 8" | 10" x 8" | 10" | 12" x 10" | 12" | 14" x 10" | 14" | 16" x 12" | 16" | 18" x 14" | 18" | 20" x 16" | 20" | 24" x 20" | 24" |
| ANSI 150 | A | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | B | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | | | | | |
| | C | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | D | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | E | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | F | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ANSI 300 | A | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | B | ● | ● | ● | ● | ● | ● | | | | | | | | | | | | | | | | | |
| | C | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | D | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | E | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | F | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ANSI 600 | A | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | B | | | | | | | | | | | | | | | | | | | | | | | |
| | C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | D | | | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | E | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | F | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| ANSI 900 | A | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| | B | | | | | | | | | | | | | | | | | | | | | | | |
| | C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| | D | | | | | | | | | | | | | ● | ● | ● | ● | ● | ● | | | | | |
| | E | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| | F | | | | | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | |
| ANSI 1500 | A | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | |
| | B | | | | | | | | | | | | | | | | | | | | | | | |
| | C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | |
| | D | | | | | | | | ● | ● | ● | ● | ● | | | | | | | | | | | |
| | E | | | | | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | |
| | F | | | | | ● | ● | ● | ● | ● | ● | ● | ● | | | | | | | | | | | |
| ANSI 2500 | A | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| | B | | | | | | | | | | | | | | | | | | | | | | | |
| | C | ● | ● | ● | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| | D | | | | | | | ● | ● | | | | | | | | | | | | | | | |
| | E | | | | | ● | ● | ● | ● | | | | | | | | | | | | | | | |
| | F | | | | | ● | ● | ● | ● | | | | | | | | | | | | | | | |

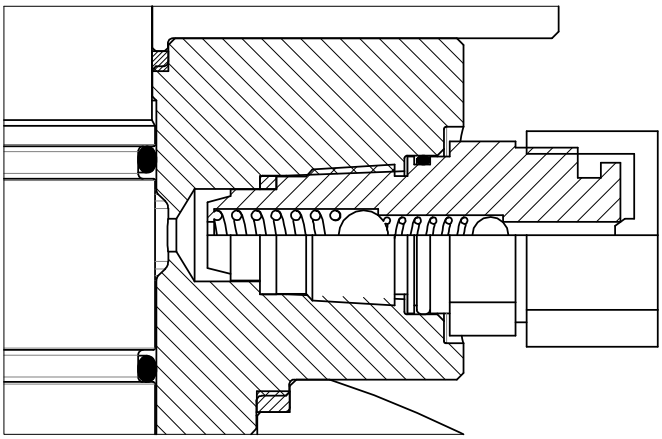
**A)** Ingrassatore stelo *Shaft Sealing Injection*
**B)** Tappo corpo/coperchio inferiore *Vent and Drain Plug*
**C)** Valvola di drenaggio corpo/coperchio inferiore *Vent and Drain valves*
**D)** Ingrassatore seggi *Seats Sealing Injection*
**E)** Asole sollevamento *Lifting lug*
**F)** Piedi di supporto *Supporting feet*



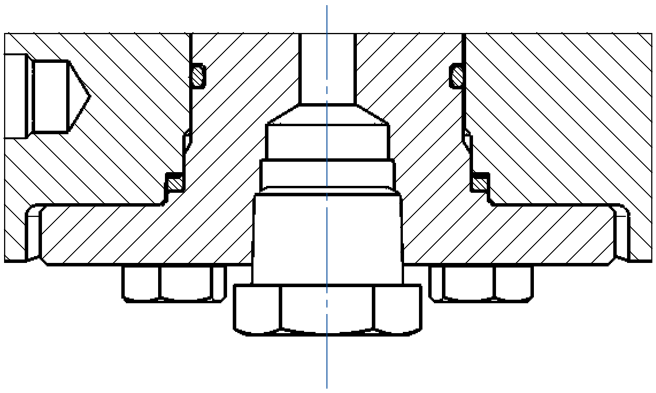



# ACCESSORI *ACCESSORIES*

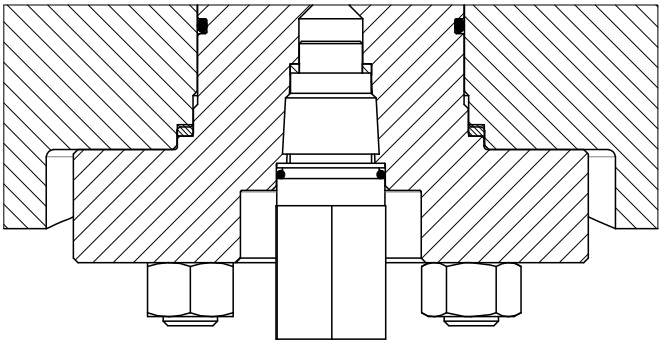
**A** Ingrassatore Stelo
*Shaft Stem Injection / Sealant system*



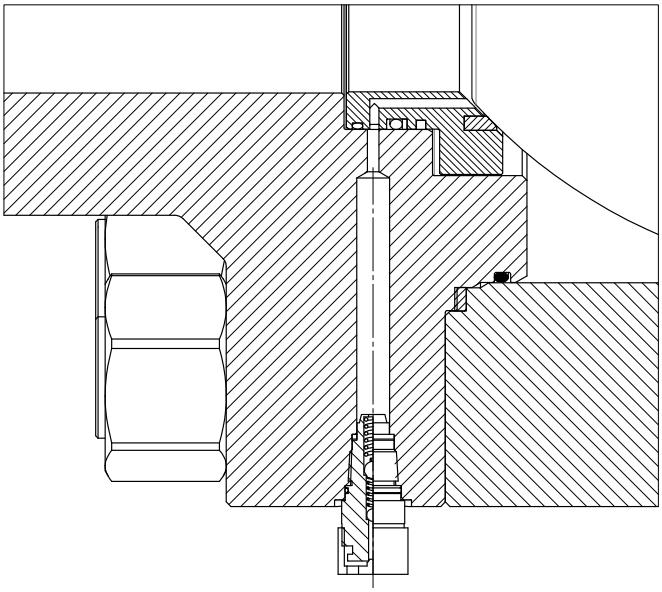
**B** Tappo corpo / Coperchio inferiore
*Vent and Drain Plug*



**C** Valvola di drenaggio corpo / coperchio inferiore
*Vent and Drain valves*

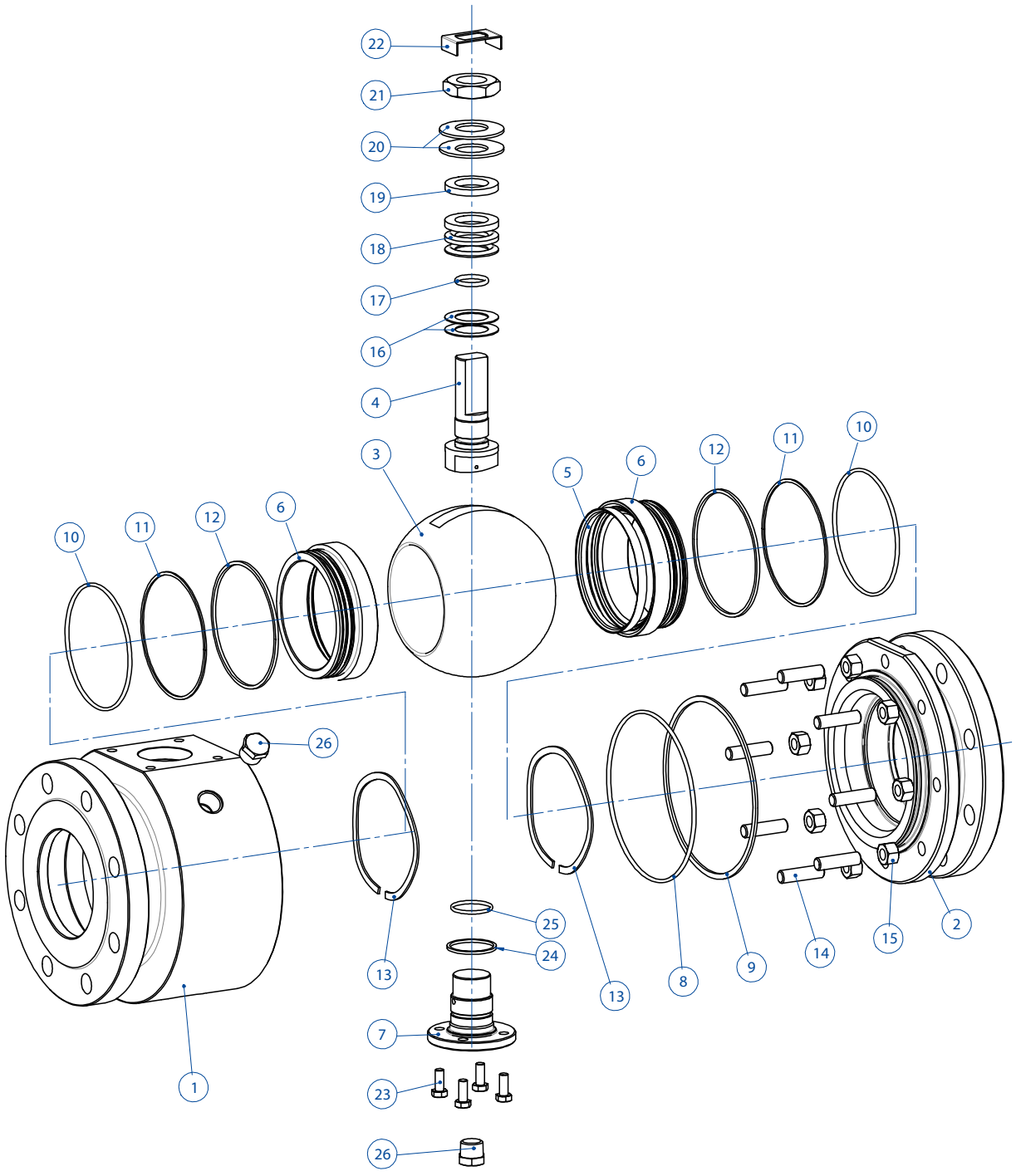


**D** Ingrassatore Seggio
*Seat Stem Injection / Sealant system*



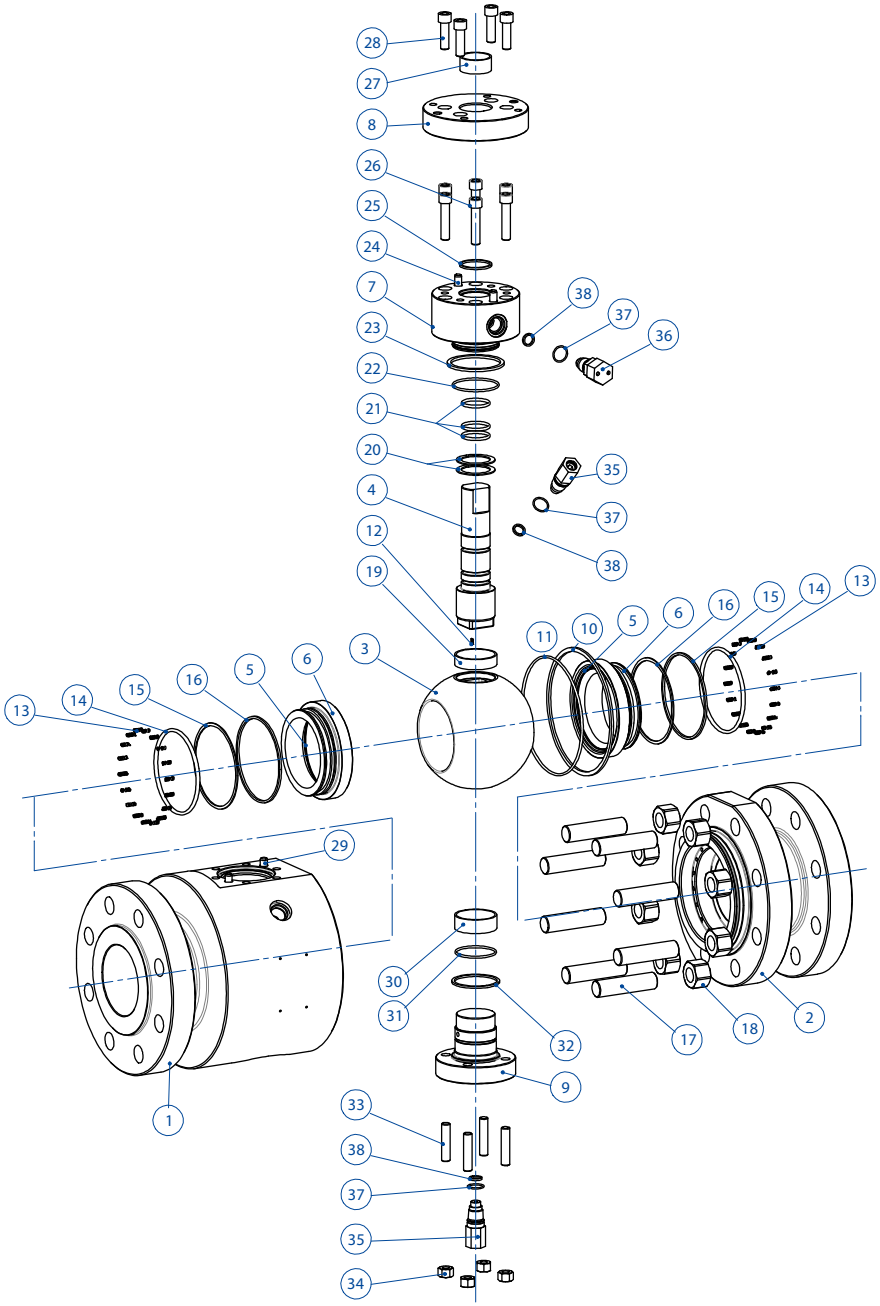
# COMPONENTI *COMPONENTS*

## DN≤100 SIZE ≤4" – ANSI 150-300



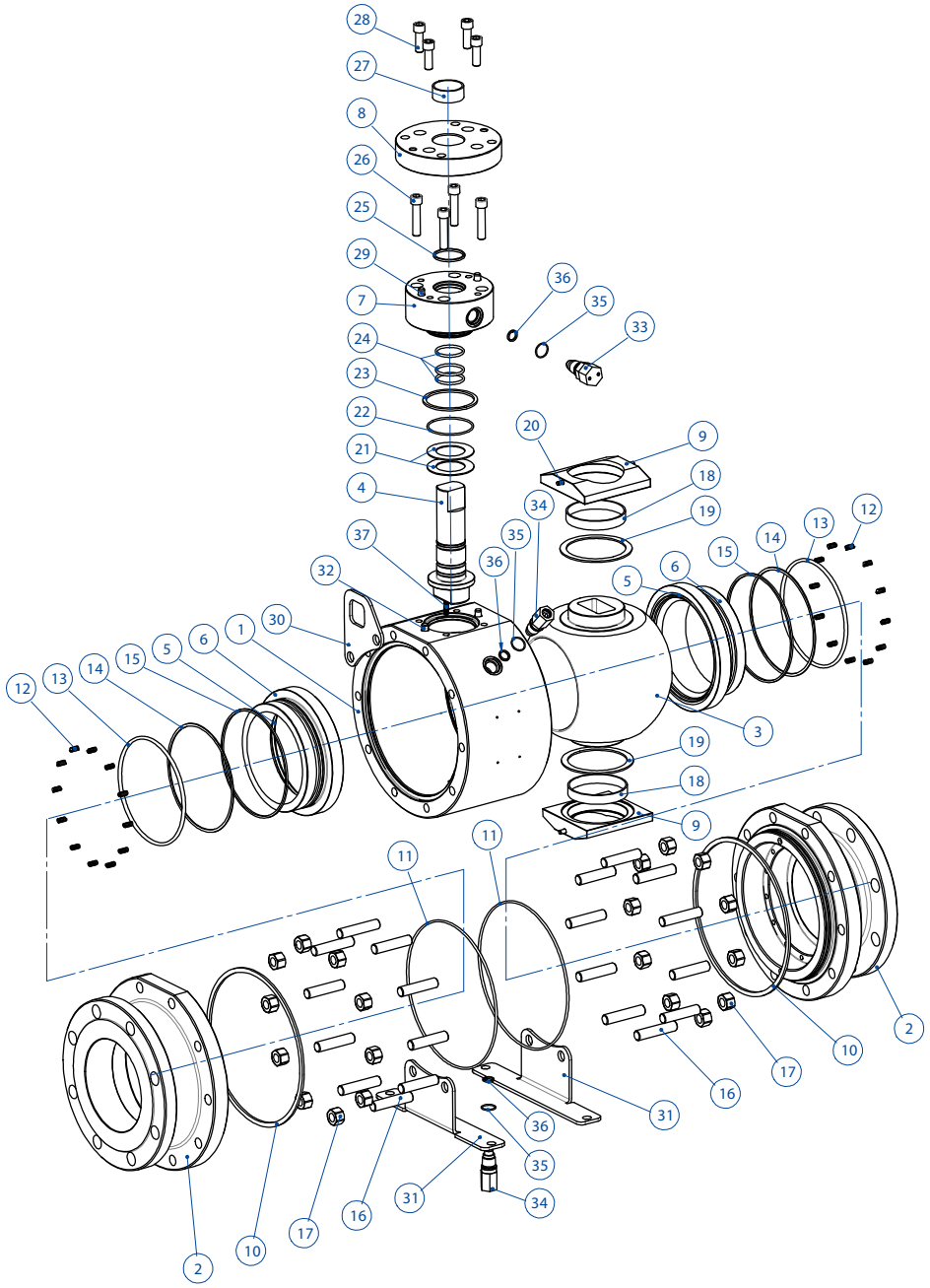

| TABELLA DEI COMPONENTI *COMPONENTS TABLE* | | | | | |
|---|---|---|---|---|---|
| **1** | Corpo *Body* | **10** | O-ring porta seggio *Seat O-ring* | **19** | Anello premi guarnizioni *Gland nut ring* |
| **2** | Terminale *Closure* | **11** | Anello antiestrusione *Back-up ring* | **20** | Molle a tazza *Spring washer* |
| **3** | Sfera *Ball* | **12** | Guarnizione seggio *Seat gasket* | **21** | Dado stelo *Stem nut* |
| **4** | Stelo *Stem* | **13** | Molle precarico seggio *Springs* | **22** | Ferma dado *Stem nut locker* |
| **5** | Seggio *Seat insert* | **14** | Tiranti *Stud bolt* | **23** | Viti coperchio inferiore *Lower cover screws* |
| **6** | Porta seggio *Seat holder* | **15** | Dadi *Nut* | **24** | Guarnizione coperchio inferiore *Lower cover gasket* |
| **7** | Coperchio inferiore *Lower cover* | **16** | Anelli antifrizione *Bottom sealing* | **25** | O-ring cop inferiore *Lower cover O-ring* |
| **8** | O-ring corpo *Body O-ring* | **17** | O-ring stelo *Stem O-ring* | **26** | Tappo *Drain cap* |
| **9** | Guarnizione corpo *Body gasket* | **18** | Pacco guarnizioni v *Chevron pack* | | |

## DN≤100 SIZE ≤4" – ANSI ≥600




| TABELLA COMPONENTI *COMPONENTS TABLE* | | | | | |
|---|---|---|---|---|---|
| **1** | Corpo *Body* | **14** | Anello antiestrusione *Back-up ring* | **27** | Boccola stelo *Stem bush* |
| **2** | Terminale *Closure* | **15** | O-ring seggio *Seat O-ring* | **28** | Viti flangia *Flange screw* |
| **3** | Sfera *Ball* | **16** | Guarnizione seggio *Seat gasket* | **29** | Spine centraggio *Body pin* |
| **4** | Stelo *Stem* | **17** | Tiranti *Stud bolt* | **30** | Boccola sfera *Ball bush* |
| **5** | Seggio *Seat insert* | **18** | Dadi *Nut* | **31** | O-ring coperchio inferiore *Lower cover O-ring* |
| **6** | Porta seggio *Seat holder* | **19** | Boccola sfera *Ball bush* | **32** | Guarnizione coperchio inferiore *Lower cover gasket* |
| **7** | Coperchio superiore *Upper cover* | **20** | Anello antifrizione *Bottom sealing* | **33** | Tiranti/viti coperchio inferiore *Lower cover stud* |
| **8** | Flangia *Flange* | **21** | O-ring stelo *Stem O-ring* | **34** | Dadi *Nut* |
| **9** | Coperchio inferiore *Lower cover* | **22** | O-ring coperchio superiore *Upper cover O-ring* | **35** | Valvola drenaggio *Vent valve* |
| **10** | Guarnizione corpo *Body gasket* | **23** | Guarnizione coperchio superiore *Upper cover Gasket* | **36** | Ingrassatore stelo *Stem grease injector* |
| **11** | O-ring corpo *Body O-ring* | **24** | Spina centraggio *Upper cover pin* | **37** | O-ring ingrassatore/valvola drenaggio *Vent/ Greaser O-ring* |
| **12** | Molla dispositivo antistatico *Antistatic device Spring* | **25** | Guarnizione fire safe/dispositivo antistatico *Fire safe stem Gasket/antistatic device* | **38** | Guarnizione ingrassatore/valvola drenaggio *Vent/Greaser Gasket* |
| **13** | Molle precarico seggio *Springs* | **26** | Viti coperchio superiore *Upper cover screw* | | |

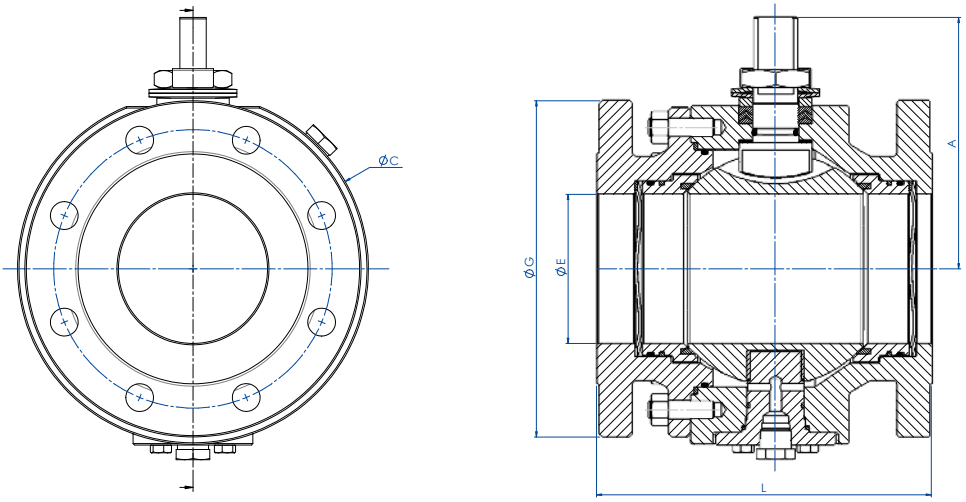
## DN ≥150 SIZE ≥6”



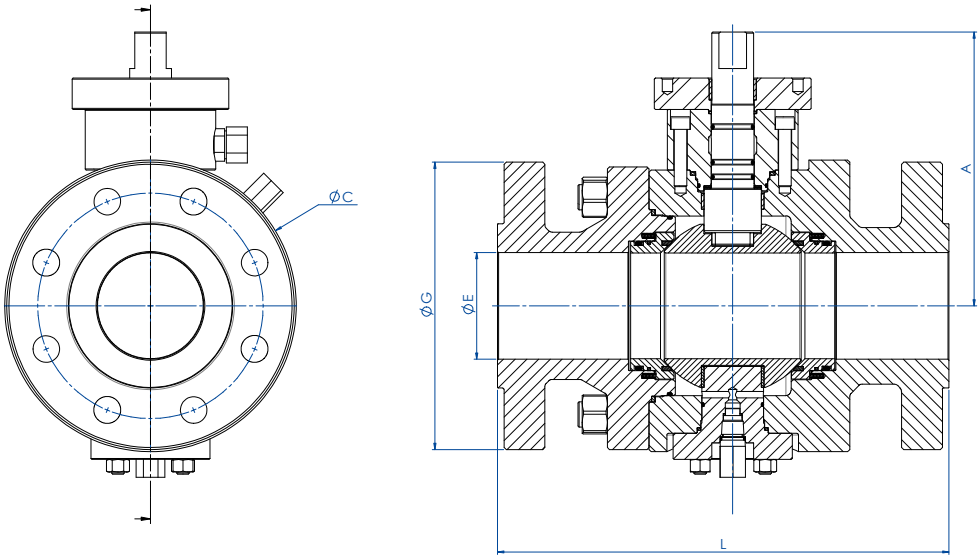

| TABELLA DEI COMPONENTI COMPONENTS TABLE | | | | | |
|---|---|---|---|---|---|
| **1** | Corpo *Body* | **14** | Anello antiestrusione *Back-up ring* | **27** | Boccola stelo *Stem bush* |
| **2** | Terminale *Closure* | **15** | Guarnizione porta seggio *Seat gasket* | **28** | Viti flangia *Flange screw* |
| **3** | Sfera *Ball* | **16** | Tiranti *Stud bolt* | **29** | Spine centraggio *Upper cover pin* |
| **4** | Stelo *Stem* | **17** | Dadi *Nut* | **30** | Asole sollevamento *Lifting Lug* |
| **5** | Seggio *Seat insert* | **18** | Boccola sfera *Ball bush* | **31** | Piedi di supporto *Support feet* |
| **6** | Porta seggio *Seat holder* | **19** | Ralla sfera *Thrust bearig* | **32** | Spine centraggio *Body pin* |
| **7** | Coperchio superiore *Upper cover* | **20** | Spine centraggio *Support plate pin* | **33** | Ingrassatore stelo *Stem grease injector* |
| **8** | Flangia *Flange* | **21** | Anelli antifrizione *Bottom sealing* | **34** | Valvola di drenaggio *Vent valve* |
| **9** | Piastre supporto *Support plate* | **22** | O-ring coperchio superiore *Upper cover O-ring* | **35** | O-ring valvola drenaggio/ingrassatore *Vent/Greaser O-ring* |
| **10** | Guarnizione corpo *Body gasket* | **23** | Guarnizione coperchio superiore *Upper cover Gasket* | **36** | Guarnizione valvola drenaggio/ingrassatore *Vent/Greaser Gasket* |
| **11** | O-ring corpo *Body O-ring* | **24** | O-ring stelo *Stem O-ring* | **37** | Dispositivo antistatico *Antistatic device spring* |
| **12** | Molle precarico seggio *Springs* | **25** | Guarnizione fire safe/dispositivo antistatico *Fire safe stem Gasket/antistatic device* | | |
| **13** | O-ring porta seggio *Seat O-ring* | **26** | Viti coperchio superiore *Upper cover screw* | | |

# DIMENSIONI VALVOLE PASSAGGIO TOTALE
## *FULL BORE VALVES - DIMENSIONS*

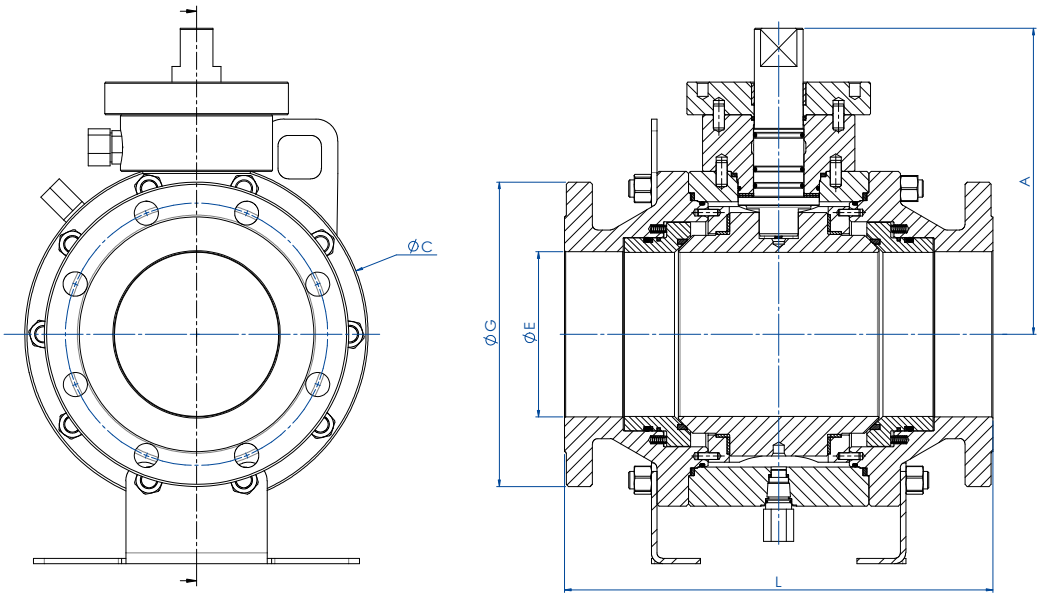
**DN≤100 SIZE ≤4”**
**ANSI 150-300**




**DN≤100 SIZE ≤4”**
**ANSI ≥600**




**DN ≥150 SIZE ≥6”**



**ANSI 150**

| DN | SIZE | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 178 | 51 | 150 | 67* | 146* |
| 80 | 3" | 203 | 76 | 190 | 90 | 190 |
| 100 | 4" | 229 | 102 | 230 | 111 | 240 |
| 150 | 6" | 394 | 152 | 280 | 232 | 316 |
| 200 | 8" | 457 | 203 | 345 | 286 | 400 |
| 250 | 10" | 533 | 253 | 405 | 324 | 475 |
| 300 | 12" | 610 | 304 | 485 | 355* | 580* |
| 350 | 14" | 686 | 335 | 535 | 402* | 626* |
| 400 | 16" | 762 | 386 | 595 | 441* | 700* |
| 450 | 18" | 864 | 436 | 635 | 484* | 779* |
| 500 | 20" | 914 | 487* | 700 | 560* | 900* |
| 600 | 24" | 1067 | 589* | 815 | 620* | 1020* |

**ANSI 300**

| DN | Size | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 216 | 51 | 165 | 67* | 156* |
| 80 | 3" | 282 | 76 | 210 | 90 | 200 |
| 100 | 4" | 305 | 102 | 255 | 111 | 240 |
| 150 | 6" | 403 | 152 | 320 | 236 | 324 |
| 200 | 8" | 502 | 203 | 380 | 286 | 408 |
| 250 | 10" | 568 | 253 | 445 | 324 | 475 |
| 300 | 12" | 648 | 304 | 520 | 355* | 580* |
| 350 | 14" | 762 | 335 | 585 | 402* | 626* |
| 400 | 16" | 838 | 386 | 650 | 504* | 770* |
| 450 | 18" | 914 | 436 | 710 | 484* | 779* |
| 500 | 20" | 991 | 487* | 775 | 560* | 900* |
| 600 | 24" | 1143 | 589* | 915 | 620* | 1020* |

**ANSI 600**

| DN | Size | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 292 | 51 | 165 | 160* | 189* |
| 80 | 3" | 356 | 76 | 210 | 191 | 210 |
| 100 | 4" | 432 | 102 | 275 | 218 | 279 |
| 150 | 6" | 559 | 152 | 355 | 263 | 355 |
| 200 | 8" | 660 | 203 | 420 | 304 | 430 |
| 250 | 10" | 787 | 253 | 510 | 352 | 520 |
| 300 | 12" | 838 | 304 | 560 | 402* | 620* |
| 350 | 14" | 889 | 335 | 605 | 416* | 655* |
| 400 | 16" | 991 | 386 | 685 | 450* | 730* |
| 450 | 18" | 1092 | 436 | 745 | 515* | 810* |
| 500 | 20" | 1194 | 487* | 815 | 588* | 955* |
| 600 | 24" | 1397 | 589* | 940 | 645* | 1070* |

**ANSI 900**

| DN | Size | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 368 | 51 | 215 | 120* | 189* |
| 80 | 3" | 381 | 76 | 240 | 204 | 240 |
| 100 | 4" | 457 | 102 | 290 | 218 | 279 |
| 150 | 6" | 610 | 152 | 380 | 263 | 355 |
| 200 | 8" | 737 | 203 | 470 | 304 | 430 |
| 250 | 10" | 838 | 253 | 545 | 352 | 520 |
| 300 | 12" | 965 | 304 | 610 | 452 | 660 |
| 350 | 14" | 1029 | 322 | 640 | 460* | 700* |
| 400 | 16" | 1130 | 373 | 705 | 485* | 760* |

**ANSI 1500**

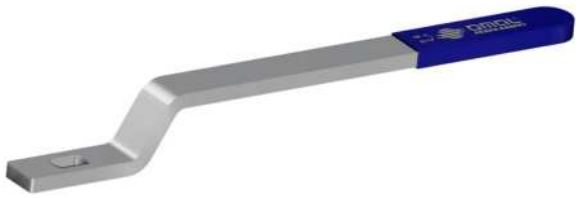
| DN | Size | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 368 | 51 | 215 | 140* | 189* |
| 80 | 3" | 470 | 76 | 265 | 225 | 270 |
| 100 | 4" | 546 | 102 | 310 | 240* | 300* |
| 150 | 6" | 705 | 146 | 395 | 285* | 390* |
| 200 | 8" | 832 | 192 | 485 | 340* | 460* |
| 250 | 10" | 991 | 239 | 585 | 390* | 555* |

**ANSI 2500**

| DN | Size | L | ØE | ØG | A | ØC |
|---|---|---|---|---|---|---|
| 50 | 2" | 451 | 42 | 235 | 160 | 219 |
| 80 | 3" | 508 | 63 | 305 | 241 | 318 |
| 100 | 4" | 673 | 87 | 355 | 253 | 335 |
| 150 | 6" | 914 | 131 | 485 | 340 | 500 |

*Quote indicative *Indicative dimensions*

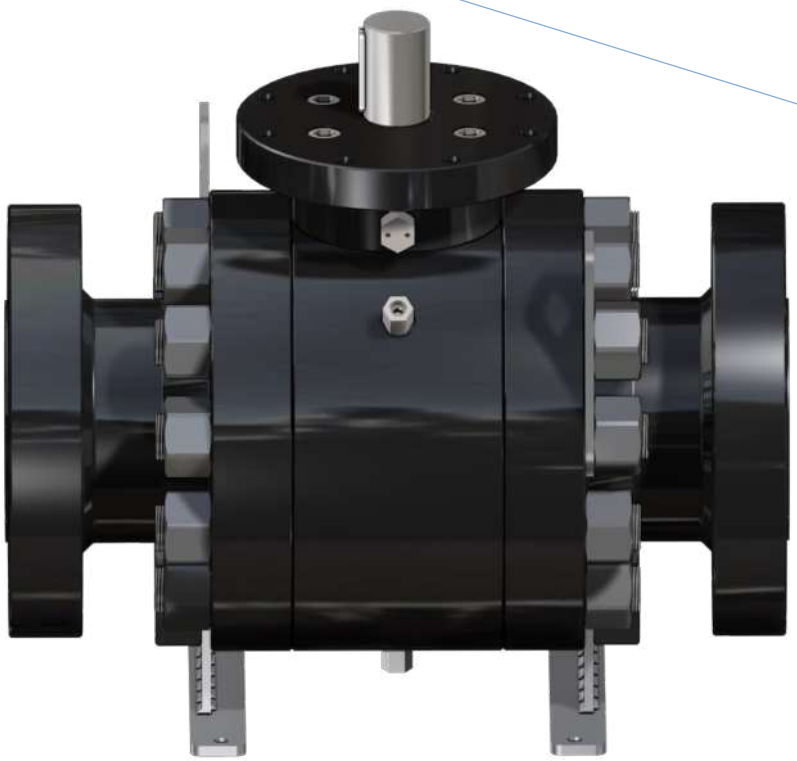
# AZIONAMENTI DISPONIBILI *AVAILABLE DRIVERS*



**LEVA MANUALE**
***MANUAL LEVER***



**RIDUTTORE MANUALE**
***GEAR BOX***



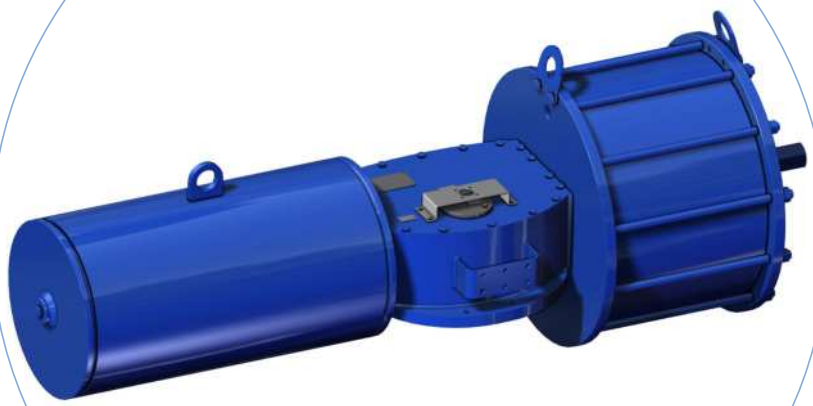
Le immagini sono indicative e non sono vincolanti ai fini della fornitura *The images are only representative and they are not binding for supply purpose*



**ATTUATORE PNEUMATICO**
***PNEUMATIC ACTUATOR***



**ATTUATORE PNEUMATICO CON COMANDO MANUALE DI EMERGENZA INTEGRATO**
***PNEUMATIC ACTUATOR WITH INTEGRATED EMERGENCY HANDWHEEL***



**ATTUATORE PNEUMATICO HEAVY DUTY**
***HEAVY DUTY PNEUMATIC ACTUATOR***



Le immagini sono indicative e non sono vincolanti ai fini della fornitura *The images are only representative and they are not binding for supply purpose*



Certificate of Authority to use the Official API Monogram

License Number: 6D-1007 ORIGINAL

The American Petroleum Institute hereby grants to

OMAL SPA
Via Ponte Nuovo, 11
Rodengo Saiano, Brescia
Italy

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and API-6D and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram shall be used in conjunction with this certificate number: 6D-1007

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following: Ball Valves

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: AUGUST 13, 2019
Expiration Date: AUGUST 13, 2022

To verify the authenticity of this license, go to www.api.org/compositelist.

Vice President of Global Industry Services

American Petroleum Institute

CORPORATE SEAL

**▲ API 6D**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole a sfera per impianti del settore del petrolio e dal gas naturale in accordo allo standard API6D ed autorizzazione all'applicazione del Monogramma API da parte dell'American Petroleum Institute.

*Certification of the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of ball valves for installations in the sector of oil and natural gas according to the API6D Spec. and license by American Petroleum Institute to the API monogram application.*



TÜV NORD

CERTIFICATE

This certifies, that the company

Omal S.p.A.
Via Ponte Nuovo, 11
25050 Rodengo Saiano (BS)
Italy

Is authorized to provide the product mentioned below

Description of product: 2-ways split body trunnion mounted ball valve series Supreme

In accordance with: EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7

Registration No 20 20534 01
Test Report No PS-20534-20-L-01
File reference 20534-01

Validity
from 2020-07-29
until 2023-07-29

TÜV NORD Italia S.r.l. (TÜV NORD Group)
Via Turati, 70 20023 Cerro Maggiore (MI)
www.tuev-nord.it

Cerro Maggiore, 2020-07-29
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

**▲ SIL**

Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification of compliance to the IEC 61508 requirements, of the functional safety level provided by the product intended to be integrated in systems with required safety integrity level up to SIL 3.*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
Non electrical equipment intended for use in potentially explosive atmospheres
Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva

Directive 2014/34/UE
Directive 2014/34/EU / Direttiva 2014/34/UE

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION
AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO

Appareil / Equipment / Apparecchiatura : BALL VALVES

Type(s)/ Type(s) / Tipo(i) : Wafer type, Split body type, Split Wafer type steel ball valves / Two-piece, Three-piece steel ball valve High-pressure - threaded ends / Two-piece brass ball valves threaded ends

Marquage/ Marking / Marcatura : Ex II 2 GD

Déposant / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 february 2014, acknowledges receipt of file according to the procedure described chapter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VS-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement :
n° INERIS-EQEN 035241/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.
Date de fin de validité : 2029.11.07

The technical documentation referenced : VS-19 dated 10/10/2019 is consigned under the reference :
no INERIS-EQEN 035241/19.
Within the scope of the recording, INERIS did not examine the contain of the technical documentation.
Validity completion date : 2029.11.07

La documentazione tecnica di riferimento : VS-19 dated 10/10/2019 è depositata con il numero di registrazione :
n° INERIS-EQEN 035241/19.
Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.
Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,
The Chief Executive Officer of INERIS, By delegation,
Il Direttore generale dell' INERIS, Per Delega,

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



EAC

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ЕАЭС RU C-IT.AA87.B.00308/20

Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Органи по сертификация взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЖКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЖКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11AA87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: eceve@ecve.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» НЛ Ex ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025

ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации Преловский Николай Николаевич

М.П.

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



FUGITIVE EMISSION CERTIFICATE

CERTIFICATE NUMBER: FE-063579-727

CLIENT: OMAL
ADDRESS: Via Ponte Nuovo, 11 25050 Rodengo Saiano (BS) - Italy

REPORT NUMBER: 46

SCOPE OF REPORT: Fugitive Emission test carried out according to: ISO 15848-1 Edition 2015

max BAR: 150 Bar

max °C: +150°C

QUALIFIED VALVE: Size: 6" (Stem Dia. 53mm)
Rating Class: 900
Drawing N°: Y_5126
Type: SPLIT BODY TRUNNION BALL VALVE

RANGE AND TYPE OF VALVES COVERED: ISO FE BH-C01-SSA 0-t(-28°C, 150°C) ANSI900 - ISO 15848-1 in accordance with ISO 15848, we also extend the certification to valve with same stem and body seals material, design (shape) and construction, with stem size 50% lower and 200% higher than stem tested Paragraph 8 e): Stem tested Ø53 mm => Ø26.5 mm ≤ Stem certified ≤ Ø106 mm Paragraph 8 f): Pressure ≤ANSI 900 & PN ≤100

TÜV INSPECTOR Mastrogiacomo Simone

Review Witness

CERTIFICATION DATE 19/02/2016

MANAGEMENT OF INSPECTION SERVICE

TÜV Italia s.r.l. - TÜV SÜD Group

**▲ FUGITIVE EMISSION**

Certificazione di conformità ai requisiti di non emissione verso l'esterno di sostanze nocive, in accordo con la norma UNI EN ISO 15848-1, per applicazione con fluidi volatili inquinanti e pericolosi.

*Certification in compliance with UNI EN ISO 15848-1 requirements of non-emission of harmful substances to the outside, referring to volatile air pollutants and hazardous fluids applications.*



FIRE SAFE CERTIFICATE

CERTIFICATE NUMBER: FS-063579-320

CLIENT: OMAL
ADDRESS: Via Ponte Nuovo, 11
25050 Rodengo Saiano (BS)- Italy

REPORT NUMBER: 04

SCOPE OF REPORT: Fire Safe test carried out according to: API 607 Sixth Edition September 2010, ISO 10497 Third Edition February 2010

max BAR: 14,7 Bar

max °C: +927,5°C

QUALIFIED VALVE: Size: 8"
Rating Class: 150
Drawing N°: Y_2503
Model: SUPREME
Type: TRUNNION BALL VALVE SPLIT BODY

RANGE AND TYPE OF VALVES COVERED: NPS 6" and larger (DN 200 and larger) Class 150; 300 (PN 10, 16, 25, 40)

TÜV INSPECTOR Mastrogiacomo Simone

Review Witness

CERTIFICATION DATE 28/08/13

MANAGEMENT OF INSPECTION SERVICE

TÜV Italia s.r.l. - TÜV SÜD Group

**▲ FIRE SAFE**

Certificazione della capacità di tenuta di una valvola in pressione, durante e dopo la prova di resistenza al fuoco in accordo con le norme API607/ISO 10497

*Certification of compliance of the sealing capability of a valve in pressure during and after the fire type-testing according to API607/ISO 10497 standards*



PASCAL

CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04001HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
*Consorzio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115*

ATTESTA
*ATTESTS*
che il sistema qualità adottato da
*that the quality system operated by*

FABBRICANTE *MANUFACTURER*: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa *Operational Office Address*: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, **modulo H**, della **Direttiva 2014/68/UE**.
*for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.*

AUTORIZZA
*AUTHORIZES*
ad apporre, sui prodotti di seguito specificati, il marchio CE 1115
*to provide the above mentioned products, the mark*

ACCESSORI A PRESSIONE *PRESSURE ACCESSORIES*: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO
*BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES*

Modelli coperti *Covered models*: Vedere elenco riportato in Appendice A *See list in Appendix A*

Rapporti di valutazione *Evaluation Reports*: 004_ROG_2018_07_22, 004_RAO_2019_09_13

CONDIZIONI DI VALIDITA' *VALIDITY TERMS AND CONDITIONS*

ACCREDIA

| Prima Emissione *First Issue* | Emissione corrente *Current Issue* | Data di Scadenza *Expiring date* |
|---|---|---|
| 18/09/2007 | 18/09/2019 | 17/09/2022 |

Consorzio PASCAL srl

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*



1.6

# ALTRE VALVOLE A SFERA

# *OTHER BALL VALVES*

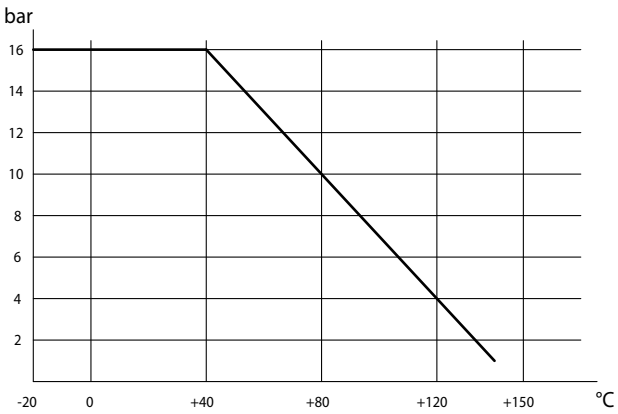
# ITEM 100

## VALVOLA A SFERA IN OTTONE 2 VIE FILETTATA PASSAGGIO INTEGRALE.
## *2-WAY FULL-BORE THREADED-ENDS BRASS BALL VALVE.*

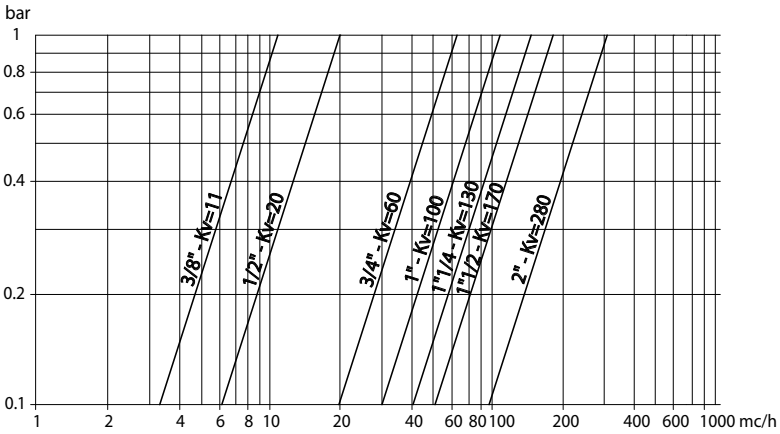



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• La valvola é costruita per impieghi a basse pressioni con fluidi non aggressivi.<br>• Temperatura di utilizzo: da -20°C a +150°C per fluidi.<br>• Pressione di utilizzo: vedi diagramma.<br>• Fluido intercettato: aria, acqua, olii, applicazioni leggere.<br>• Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).<br>• Testa della valvola a norma ISO 5211. | ***GENERAL FEATURES:***<br>• *The valve is suitable for low pressures on condition that non aggressive fluids are used.*<br>• *Working temperature: from -20°C to +150°C for fluids.*<br>• *Working pressure: see diagram.*<br>• *Fluid range: water, oil, gas and light applications.*<br>• *Threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*<br>• *Head of the valve as per ISO 5211 specifications.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni contattare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Conforme alla direttiva Europea 2014/68/UE "PED". | ***CERTIFICATIONS:***<br>• *According to 2014/68/EU "PED".* |

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

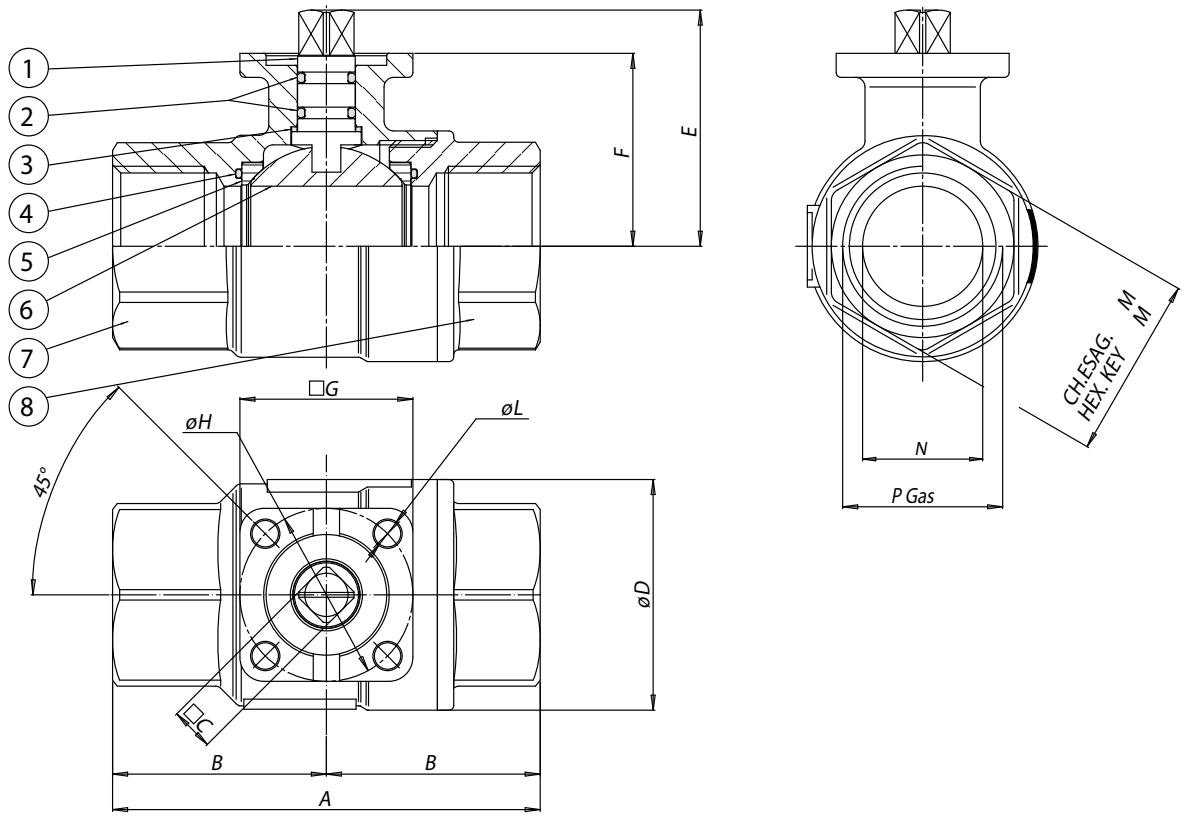
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** |
| PN 16 bar | 3 | 3 | 4 | 5 | 7 | 9 | 15 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 100
# OTTONE *BRASS*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | Kg | Con Leva *With lever* | Kg | Kit leva *Lever kit* |
| DN 10 | 3/8" | V100N203G | 0,18 | L100N203G | 0,23 | KLV10103 |
| DN 15 | 1/2" | V100N204G | 0,26 | L100N204G | 0,3 | KLV10103 |
| DN 20 | 3/4" | V100N205 | 0,44 | L100N205 | 0,51 | KLV10103 |
| DN 25 | 1" | V100N206 | 0,66 | L100N206 | 0,72 | KLV10103 |
| DN 32 | 1" 1/4 | V100N207G | 1,04 | L100N207G | 1,1 | KLV10105 |
| DN 40 | 1" 1/2 | V100N208G | 1,5 | L100N208G | 1,56 | KLV10105 |
| DN 50 | 2" | V100N209G | 2,56 | L100N209G | 2,6 | KLV10109 |




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo *Shaft* | Ottone *Brass* | EN 12164 CW614N |
| 2 | O-ring | FKM | |
| 3 | Anello antifrizione *Antifriction rings* | P.T.F.E. | |
| 4 | O-ring laterali *O-ring* | FKM | |
| 5 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | |
| 6 | Sfera *Ball* | Ottone cromatura dura *Brass chromium plated* | EN 12164 CW614N |
| 7 | Corpo* *Body** | Ottone *Brass* | EN 12165 CW617N |
| 8 | Manicotto femmina* *Threaded end** | Ottone *Brass* | EN 12165 CW617N |

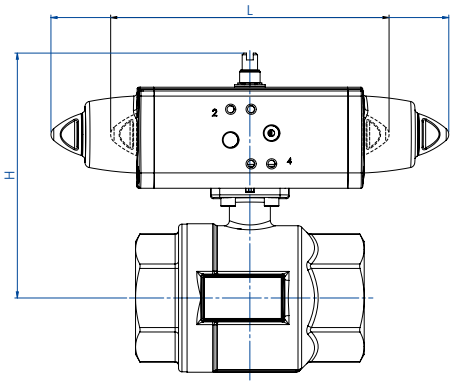
* Trattamento esterno: Nichelatura brillante ** Surface treatment: bright nickel plating*

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | øD | E | F | □G | øH | øL | ch.M | N |
| DN [mm] | [inch] | | | | | | | | | | | |
| DN 10 | 3/8" | 69 | 34,5 | 9 | 31,8 | 38,5 | 29,5 | 36 | 36 | 5,5 | 25 | 10 |
| DN 15 | 1/2" | 69 | 34,5 | 9 | 31,8 | 38,5 | 29,5 | 36 | 36 | 5,5 | 25 | 15 |
| DN 20 | 3/4" | 77 | 38,5 | 9 | 40 | 45,3 | 36,3 | 36 | 36 | 5,5 | 31 | 20 |
| DN 25 | 1" | 89 | 44,5 | 9 | 48 | 49,2 | 40,2 | 36 | 36 | 5,5 | 38 | 25 |
| DN 32 | 1" 1/4 | 103 | 51,5 | 11 | 62 | 59,6 | 50,5 | 42 | 36 | 5,5 | 47 | 32 |
| DN 40 | 1" 1/2 | 114 | 57 | 11 | 72,6 | 66,2 | 57 | 42 | 36 | 5,5 | 54 | 40 |
| DN 50 | 2" | 134 | 67 | 11 | 88,5 | 75,5 | 64,3 | 46 | 36/42 | 5,5 | 66 | 50 |

# ITEM 100
## OTTONE *BRASS*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

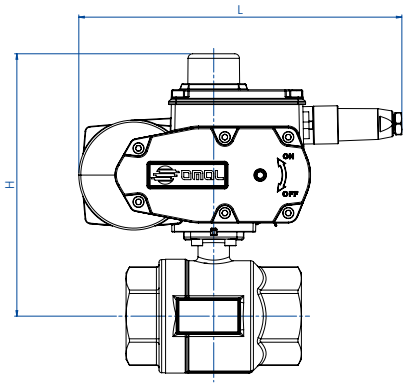
| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | DG100H003 | DA008401S | KCF032558 | 70,0 | 85,0 | 0,5 |
| DN 15 | 1/2" | DG100H004 | DA008401S | KCF032558 | 70,0 | 88,0 | 0,6 |
| DN 20 | 3/4" | D100H005 | DA008401S | KCF032558 | 70,0 | 94,0 | 0,7 |
| DN 25 | 1" | D100H006 | DA008401S | KCF032558 | 70,0 | 98,0 | 1,0 |
| DN 32 | 1" 1/4 | DG100H007 | DAN0015411S | KCF032558 | 159,0 | 122,8 | 1,9 |
| DN 40 | 1" 1/2 | DG100H008 | DAN0015411S | KCF032558 | 159,0 | 129,8 | 2,7 |
| DN 50 | 2" | DG100H009 | DAN0030411S | KCF032558 | 174,2 | 143,8 | 4,2 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | SG100H003 | SRN0015401S | KCF042565 | 233,2 | 105,8 | 1,5 |
| DN 15 | 1/2" | SG100H004 | SRN0015401S | KCF042565 | 233,2 | 108,8 | 1,6 |
| DN 20 | 3/4" | SG100H005 | SRN0015401S | KCF042565 | 233,2 | 115,8 | 1,7 |
| DN 25 | 1" | SG100H006 | SRN0015401S | KCF042565 | 233,2 | 119,8 | 2,0 |
| DN 32 | 1" 1/4 | SG100H007 | SRN0015401S | KCF032558 | 233,2 | 129,8 | 2,5 |
| DN 40 | 1" 1/2 | SG100H008 | SRN0015401S | KCF032558 | 233,2 | 136,8 | 3,3 |
| DN 50 | 2" | SG100H009 | SRN0030401S | KCF055309 | 258,8 | 155,0 | 5,2 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*






### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | CG100A5E03 | EA0035A5C000 | KCF052003 | 250,0 | 176,0 | 3,7 |
| DN 15 | 1/2" | CG100A5E04 | EA0035A5C000 | KCF052003 | 250,0 | 176,0 | 3,8 |
| DN 20 | 3/4" | C100A5E05 | EA0035A5C000 | KCF052003 | 250,0 | 178,0 | 4,2 |
| DN 25 | 1" | C100A5E06 | EA0035A5C000 | KCF052003 | 250,0 | 186,0 | 4,4 |
| DN 32 | 1" 1/4 | CG100A5E07 | EA0035A5C000 | KCF055309 | 250,0 | 187,5 | 4,6 |
| DN 40 | 1" 1/2 | CG100A5E08 | EA0035A5C000 | KCF055309 | 250,0 | 194,0 | 5,1 |
| DN 50 | 2" | CG100A5E09 | EA0035A5C000 | KCF055309 | 250,0 | 201,3 | 6,1 |

### CON ATTUATORE ELETTRICO MODULANTE (230 Vac) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | MG10016C03 | AM160002 | KCF052003 | 165,8 | 146,0 | 2,9 |
| DN 15 | 1/2" | MG10016C04 | AM160002 | KCF052003 | 165,8 | 143,0 | 3,0 |
| DN 20 | 3/4" | M10016C05 | AM160002 | KCF052003 | 165,8 | 155,8 | 3,2 |
| DN 25 | 1" | M10016C06 | AM160002 | KCF052003 | 165,8 | 159,6 | 3,4 |
| DN 32 | 1" 1/4 | MG10016C07 | AM160002 | KCF055309 | 250,0 | 187,5 | 4,6 |
| DN 40 | 1" 1/2 | MG10016C08 | AM160002 | KCF055309 | 250,0 | 194,0 | 5,1 |
| DN 50 | 2" | MG10016F09 | AM160005 | KCNACDV5421 | 250,0 | 221,3 | 6,1 |

Codici con attuatore elettrico 230Vac. *Items with electric actuator 230 Vac.*
Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

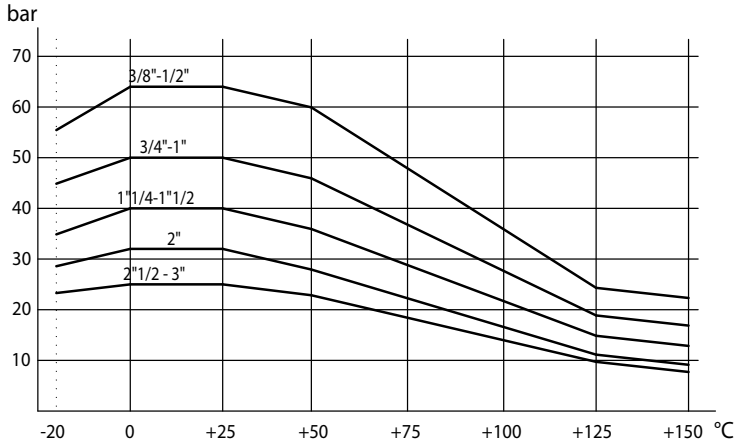
# ITEM 101

## VALVOLA A SFERA IN OTTONE 2 VIE FILETTATA PASSAGGIO INTEGRALE.
## *2-WAY FULL-BORE THREADED-ENDS BRASS BALL VALVE.*

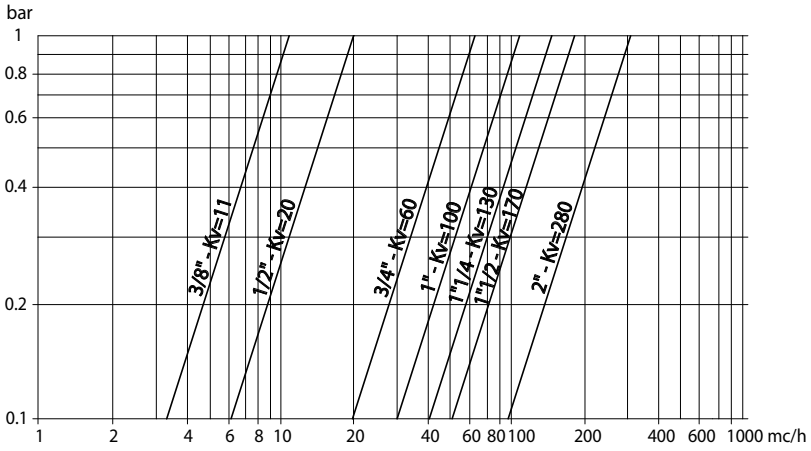



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• La valvola é costruita per impieghi a medie pressioni con fluidi non aggressivi.<br>• Temperatura di utilizzo: da -20°C a +150°C per fluidi.<br>• Pressione di utilizzo: vedi diagramma.<br>• Fluido intercettato: aria, acqua, gas, oli, prodotti petroliferi e petrolchimici, vuoto.<br>• Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).<br>• Testa della valvola a norma ISO 5211.<br>• **Disponibile anche una versione con profilo guarnizione sfera autoraschiante idonea all'impiego con fluidi sporchi o contenenti particolato solido.** | ***GENERAL FEATURES:***<br>• *The valve is suitable for medium pressures on condition that non aggressive fluids are used.*<br>• *Working temperature: from -20°C to +150°C for fluids.*<br>• *Working pressure: see diagram.*<br>• *Fluid range: air, water, oil, gas, petroliferous and petrochemical products, vacuum.*<br>• *Threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*<br>• *Head of the valve as per ISO 5211 specifications.*<br>• ***Available version with self-scraping ball profile seal, suitable to be used with dirty fluids or with solid particles inside.*** |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Filettature NPT.<br>• Per altre applicazioni contattare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *NPT threaded ends.*<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Conforme alla direttiva Europea 2014/68/UE "PED".<br>• Versione ATEX in conformità alla direttiva 2014/34/UE a richiesta. | ***CERTIFICATIONS:***<br>• *According to 2014/68/EU "PED".*<br>• *ATEX version in conformity with directive 2014/34/EU on request.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

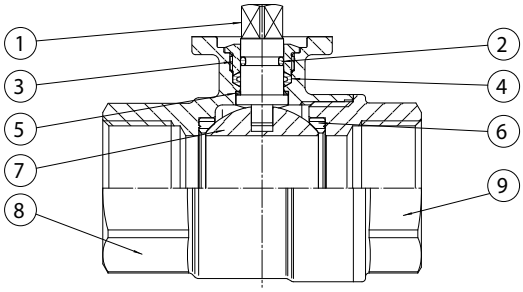
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** |
| PN 25 bar | | | | | | | | 48 | 79 |
| PN 32 bar | | | | | | | 27 | | |
| PN 40 bar | | | | | 14 | 19 | | | |
| PN 50 bar | | | 7 | 10 | | | | | |
| PN 64 bar | 4 | 5 | | | | | | | |

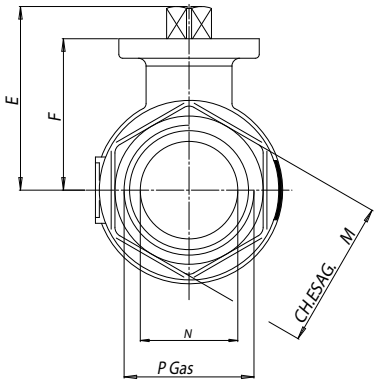
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

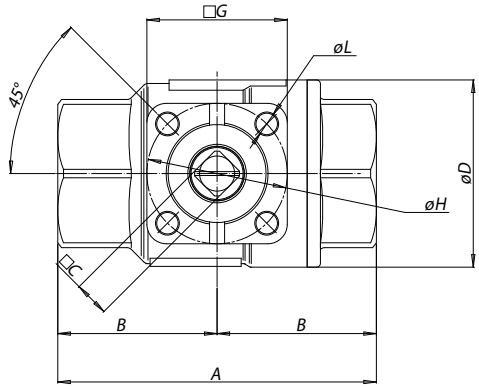
*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

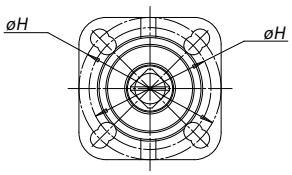
# ITEM 101
# OTTONE *BRASS*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | ATEX | Con guarnizione autoraschiante *With self-scraping seal* | Kg | Con Leva *With lever* | ATEX | Con guarnizione autoraschiante *With self-scraping seal* | Kg | Kit leva *Lever kit* |
| DN 10 | 3/8" | V101N203 | V101N203YX | - | 0,33 | L101N203 | L101N203YX | - | 0,4 | KLV10103 |
| DN 15 | 1/2" | V101N204 | V101N204YX | - | 0,29 | L101N204 | L101N204YX | - | 0,35 | KLV10103 |
| DN 20 | 3/4" | V101N205G | V101N205GYX | - | 0,43 | L101N205G | L101N205GYX | - | 0,5 | KLV10105 |
| DN 25 | 1" | V101N206G | V101N206GYX | - | 0,66 | L101N206G | L101N206GYX | - | 0,72 | KLV10105 |
| DN 32 | 1" 1/4 | V101N207G | V101N207GYX | V101Z207G | 1,07 | L101N207G | L101N207GYX | L101Z207G | 1,14 | KLV10109 |
| DN 40 | 1" 1/2 | V101N208G | V101N208GYX | V101Z208G | 1,52 | L101N208G | L101N208GYX | L101Z208G | 1,59 | KLV10109 |
| DN 50 | 2" | V101N209 | V101N209YX | V101Z209 | 2,62 | L101N209 | L101N209YX | L101Z209 | 2,69 | KLV10109 |
| DN 65 | 2" 1/2 | V101N210 | V101N210YX | V101Z210 | 3,98 | L101N210 | L101N210YX | L101Z210 | 4,28 | KLV10110 |
| DN 80 | 3" | V101N211 | V101N211YX | V101Z211 | 6,68 | L101N211 | L101N211YX | L101Z211 | 6,98 | KLV10110 |




dal 1¼" al 3" doppia foratura
*from 1¼" to 3" double drilling*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo *Shaft* | Ottone *Brass* | EN 12164 CW614N |
| 2 | O-ring | FKM | |
| 3 | Premiguarnizione* *Gland nut** | Ottone *Brass* | EN 12164 CW614N |
| 4 | Guarnizione tenuta stelo *Shaft seal* | P.T.F.E. | |
| 5 | Anelli antifrizione *Antifriction rings* | P.T.F.E. | |
| 6 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | |
| 7 | Sfera *Ball* | Ottone cromata dura *Brass chromium plated* | EN 12164 CW614N |
| 8 | Corpo* *Body** | Ottone *Brass* | EN 12165 CW617N |
| 9 | Manicotto femmina* *Threaded ends** | Ottone *Brass* | EN 12165 CW617N |

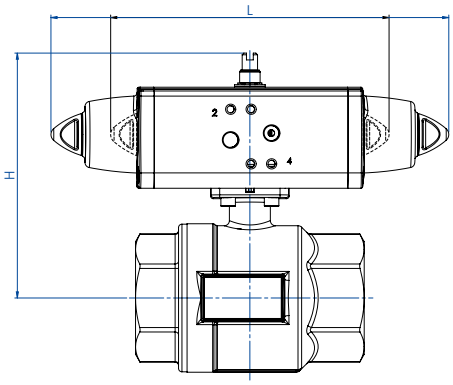
* Trattamento esterno: Nichelatura brillante * *Surface treatment: bright nickel plating*

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | øD | E | F | □G | øH | øL | ch.M | N |
| DN [mm] | [inch] | | | | | | | | | | | |
| DN 10 | 3/8" | 69 | 34,5 | 9 | 31,8 | 38,5 | 30,5 | 36 | 36 | 5,5 | 25 | 10 |
| DN 15 | 1/2" | 69 | 34,5 | 9 | 31,8 | 38,5 | 30,5 | 36 | 36 | 5,5 | 25 | 15 |
| DN 20 | 3/4" | 77 | 38,5 | 11 | 40 | 47,1 | 36,3 | 36 | 36 | 5,5 | 31 | 20 |
| DN 25 | 1" | 89 | 44,5 | 11 | 48 | 50,9 | 40,2 | 36 | 36 | 5,5 | 38 | 25 |
| DN 32 | 1" 1/4 | 103 | 51,5 | 11 | 60 | 62,5 | 51,5 | 42 | 36/42 | 5,5 | 47 | 32 |
| DN 40 | 1" 1/2 | 114 | 57 | 11 | 70,6 | 69 | 58 | 42 | 36/42 | 5,5 | 54 | 40 |
| DN 50 | 2" | 134 | 67 | 11 | 88,5 | 76,3 | 65,3 | 46 | 42/50 | 5,5/6,5 | 66 | 50 |
| DN 65 | 2" 1/2 | 161 | 80,5 | 14 | 112 | 97 | 83 | 65 | 50/70 | 6,5/8,5 | 84 | 65 |
| DN 80 | 3" | 185 | 92,5 | 14 | 138,4 | 108,5 | 94,5 | 65 | 50/70 | 6,5/8,5 | 98 | 80 |

# ITEM 101
## OTTONE *BRASS*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* DN [mm] | [inch] | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN 10 | 3/8" | D101H003 | DA008401S | KCF032558 | 70,0 | 88,0 | 0,6 |
| DN 15 | 1/2" | D101H004 | DA008401S | KCF032558 | 70,0 | 88,0 | 0,6 |
| DN 20 | 3/4" | DG101H005 | DAN0015411S | KCF032558 | 159,0 | 103,3 | 1,1 |
| DN 25 | 1" | DG101H006 | DAN0015411S | KCF032558 | 159,0 | 107,3 | 1,3 |
| DN 32 | 1" 1/4 | DG101H*07 | DAN0030411S | KCF032558 | 174,2 | 129,8 | 2,0 |
| DN 40 | 1" 1/2 | DG101H*08 | DAN0030411S | KCF032558 | 174,2 | 136,8 | 2,5 |
| DN 50 | 2" | DG101H*09 | DAN0045412S | KCF042559 | 188,5 | 149,4 | 4,6 |
| DN 65 | 2" 1/2 | DG101H*10 | DAN0106411S | KCF072567 | 237,0 | 186,3 | 7,2 |
| DN 80 | 3" | DG101H*11 | DAN0120411S | KCF072567 | 244,1 | 201,6 | 10,1 |

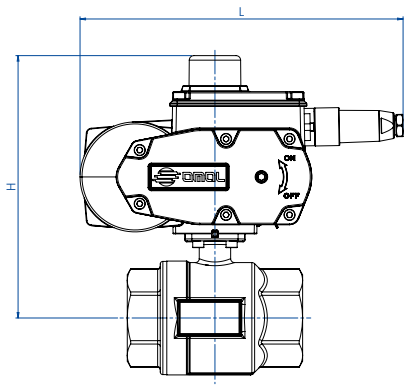
### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* DN [mm] | [inch] | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN 10 | 3/8" | SG101H003 | SRN0015401S | KCF042565 | 233,2 | 108,8 | 1,5 |
| DN 15 | 1/2" | SG101H004 | SRN0015401S | KCF042565 | 233,2 | 108,8 | 1,5 |
| DN 20 | 3/4" | SG101H005 | SRN0015401S | KCF032558 | 233,2 | 115,8 | 1,6 |
| DN 25 | 1" | SG101H006 | SRN0015401S | KCF032558 | 233,2 | 119,8 | 1,9 |
| DN 32 | 1" 1/4 | SG101H*07 | SRN0030401S | KCF055309 | 258,8 | 141,0 | 3,0 |
| DN 40 | 1" 1/2 | SG101H*08 | SRN0030401S | KCF055309 | 258,8 | 148,0 | 3,4 |
| DN 50 | 2" | SG101H*09 | SRN0053401S | KCF075310 | 304,2 | 168,3 | 6,0 |
| DN 65 | 2" 1/2 | SG101H*10 | SRN0090401S | KCF102730 | 393,7 | 220,5 | 10,5 |
| DN 80 | 3" | SG101H*11 | SRN0120401S | KCF102730 | 409,6 | 235,5 | 14,5 |

* 0 = versione standard *standard version* * Z = versione con guarnizione autoraschiante *version with self-scraping seat*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*
**VERSIONE ATEX: Aggiungere "YX" alla fine del codice articolo.** ***ATEX VERSION: Add 'YX' at the end of the item code.***






### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* DN [mm] | [inch] | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN 10 | 3/8" | C101A5E03 | EA0035A5C000 | KCF052003 | 250,0 | 170,0 | 3,8 |
| DN 15 | 1/2" | C101A5E04 | EA0035A5C000 | KCF052003 | 250,0 | 170,0 | 3,8 |
| DN 20 | 3/4" | CG101A5E05 | EA0035A5C000 | KCF055309 | 250,0 | 173,3 | 4,0 |
| DN 25 | 1" | CG101A5E06 | EA0035A5C000 | KCF055309 | 250,0 | 177,2 | 4,3 |
| DN 32 | 1" 1/4 | CG101A5E07 | EA0035A5C000 | KCF055309 | 250,0 | 188,5 | 4,7 |
| DN 40 | 1" 1/2 | CG101A5E08 | EA0035A5C000 | KCF055309 | 250,0 | 195,0 | 5,1 |
| DN 50 | 2" | C101A5G09 | EA0070A5C000 | KCF052004 | 250,0 | 202,3 | 6,2 |
| DN 65 | 2" 1/2 | C101A5I10 | EA0130A5C000 | KCF072567 | 279,6 | 240,6 | 11,5 |
| DN 80 | 3" | C101A5I11 | EA0130A5C000 | KCF072567 | 279,6 | 252,1 | 14,1 |

### CON ATTUATORE ELETTRICO MODULANTE (230 Vac) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

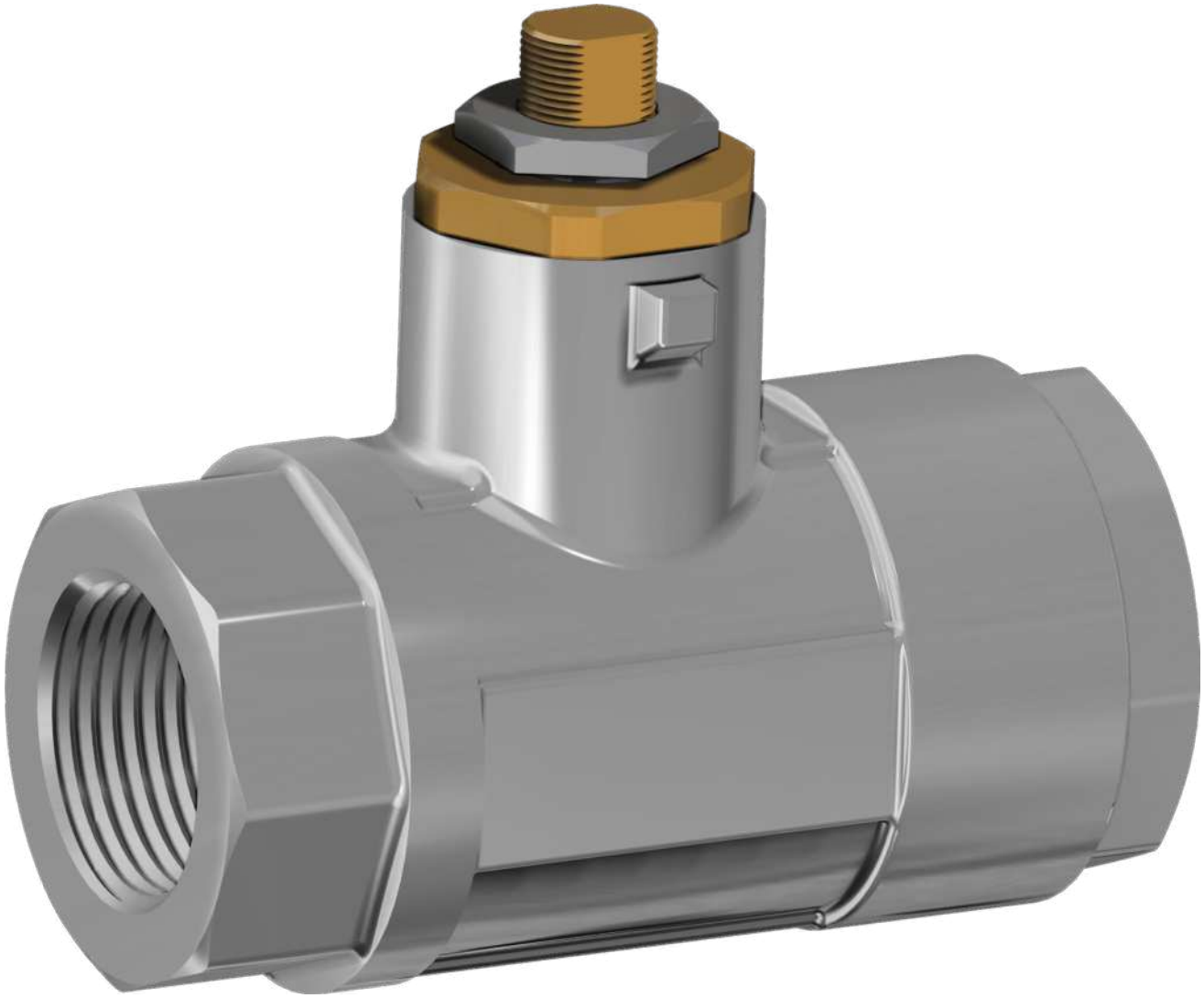
| MISURA *SIZE* DN [mm] | [inch] | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN 10 | 3/8" | M10116C03 | AM160002 | KCF052003 | 165,8 | 149,0 | 3,0 |
| DN 15 | 1/2" | M10116C04 | AM160002 | KCF052003 | 165,8 | 149,0 | 3,0 |
| DN 20 | 3/4" | MG10116C05 | AM160002 | KCF055309 | 165,8 | 155,8 | 3,2 |
| DN 25 | 1" | MG10116C06 | AM160002 | KCF055309 | 165,8 | 159,6 | 3,4 |
| DN 32 | 1" 1/4 | MG10116F07 | AM160005 | KCNACDV5421 | 250,0 | 272,5 | 5,5 |
| DN 40 | 1" 1/2 | MG10116F08 | AM160005 | KCNACDV5421 | 250,0 | 279,0 | 5,9 |
| DN 50 | 2" | M10116F09 | AM160005 | KCE281943 | 250,0 | 266,3 | 7,0 |
| DN 65 | 2" 1/2 | M10116L10 | AM160020 | KCE362068 | 279,6 | 304,6 | 12,3 |
| DN 80 | 3" | M10116L11 | AM160020 | KCE362068 | 279,6 | 316,1 | 14,9 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*
Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

# ITEM 113

## VALVOLA A SFERA IN OTTONE 2 VIE FILETTATA PASSAGGIO RIDOTTO PER ALTE PRESSIONI.

## *2-WAY HIGH-PRESSURE THREADED-ENDS BRASS BALL VALVE, REDUCED BORE.*



**CARATTERISTICHE GENERALI:**

- La valvola é costruita per impieghi ad alte pressioni in impianti oleodinamici, pneumatici e industriali in genere.
- Temperatura di utilizzo: da -20°C a + 80°C.
- Pressione di utilizzo: 210 bar, vedere diagramma.
- Fluido intercettato: oli, prodotti petroliferi e petrolchimici, fluidi non aggressivi.
- Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).

***GENERAL FEATURES:***

- *High pressure ball valve suitable for hydraulic and pneumatic applications, in general.*
- *Working temperature: from -20°C to + 80°C.*
- *Working pressure: 210 bar, see diagram.*
- *Fluid range: oils, petroleum and petrochemical products.*
- *Threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*

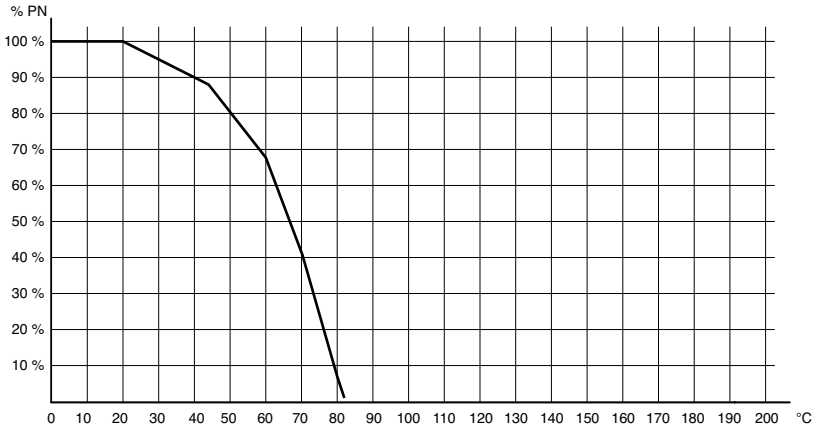
**ESECUZIONI SPECIALI A RICHIESTA:**

- Per altre applicazioni contattare il nostro ufficio commerciale.

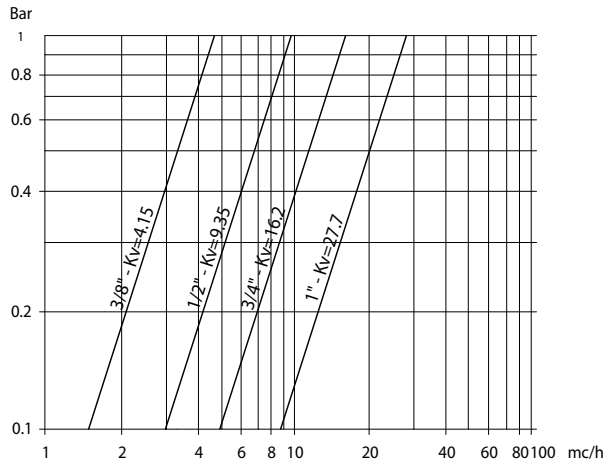
***ON REQUEST:***

- *For other applications, please contact our sales department.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

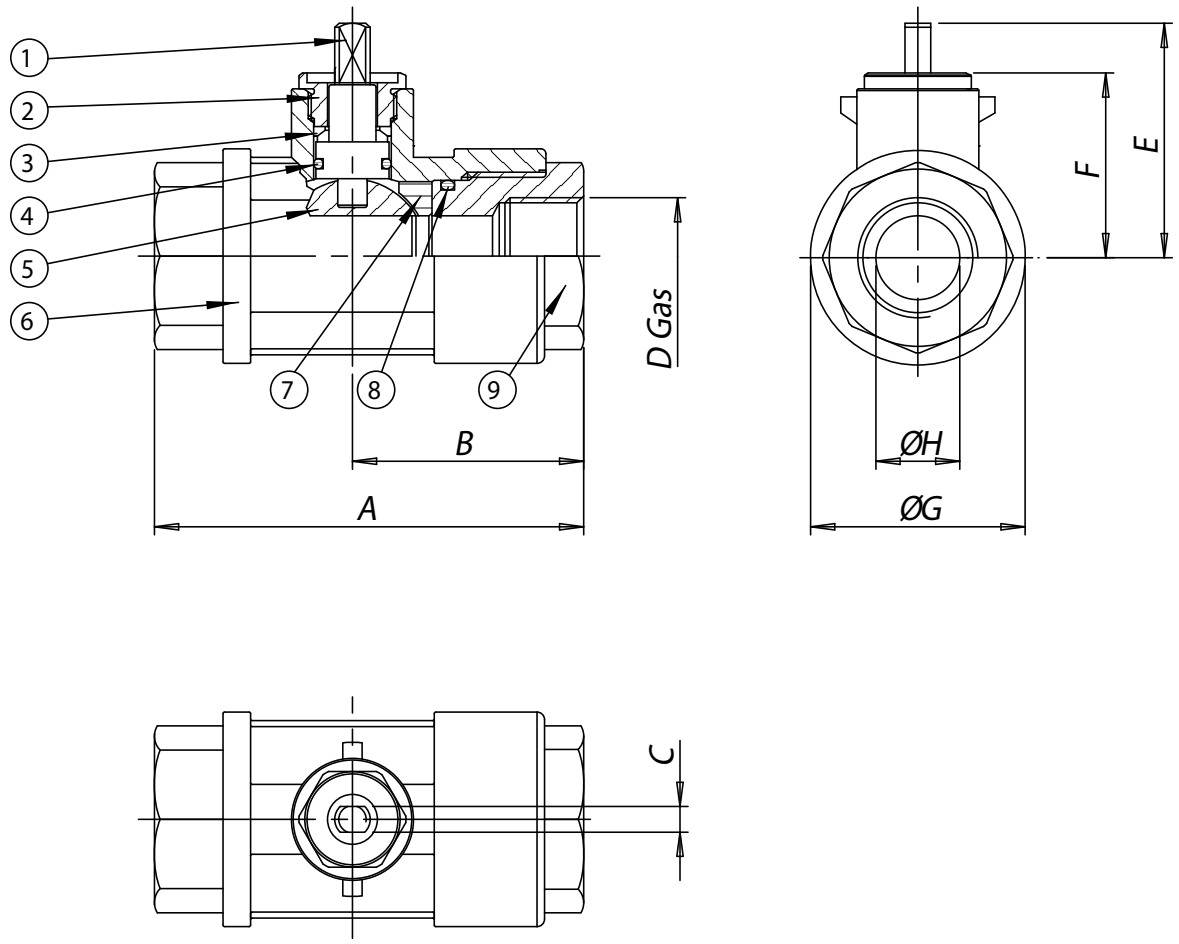
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | |
|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** |
| PN 210 bar | 7 | 11 | 15 | 20 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 113
## OTTONE *BRASS*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | Kg | Con Leva *With lever* | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V113N203 | 0,42 | L113N203 | 0,47 | KGBV8303 |
| DN 15 | 1/2" | V113N204 | 0,57 | L113N204 | 0,62 | KGBV8304 |
| DN 20 | 3/4" | V113N205 | 1,06 | L113N205 | 1,13 | KGBV8305 |
| DN 25 | 1" | V113N206 | 1,43 | L113N206 | 1,5 | KGBV8306 |



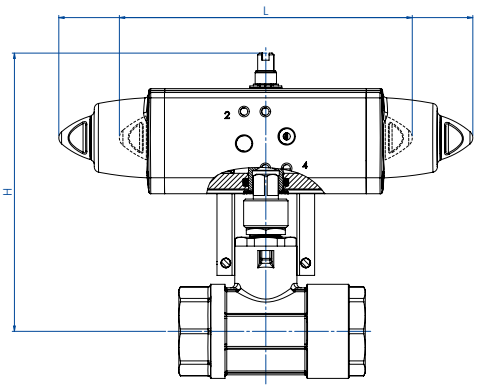

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo* *Shaft** | Ottone *Brass* | EN 12164 CW614N |
| 2 | Premiguarnizione* *Gland nut** | Ottone *Brass* | EN 12164 CW614N |
| 3 | Coppia di tenuta superiore *Seals* | P.T.F.E. | |
| 4 | O-ring tenuta stelo *Shaft o-ring* | FKM | |
| 5 | Sfera *Ball* | Ottone cromata lucida *Brass chromium plated* | EN 12164 CW614N |
| 6 | Corpo* *Body** | Ottone *Brass* | EN 12165 CW617N |
| 7 | Guarnizioni di tenuta laterale *Seals* | Resina acetalica *Acetalic resin* | |
| 8 | O-ring tenuta manicotto *End o-ring* | FKM | |
| 9 | Manicotto femmina* *Threaded end** | Ottone *Brass* | EN 12165 CW617N |
| * Trattamento esterno: Nichelatura brillante * *Surface treatment: bright nickel plating* | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | C | øD | E | F | øG | øH |
| DN [mm] | [inch] | | | | | | | | |
| DN 10 | 3/8" | 75 | 44 | 7 | 3/8" | 45 | 35 | 30 | 8 |
| DN 15 | 1/2" | 85 | 47 | 7 | 1/2" | 47 | 36,5 | 36 | 12 |
| DN 20 | 3/4" | 95 | 54 | 10 | 3/4" | 64,5 | 50,5 | 45 | 16 |
| DN 25 | 1" | 105 | 56 | 10 | 1" | 66,8 | 53 | 53 | 20 |

# ITEM 113
## OTTONE *BRASS*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | DG113H003 | DAN0015411S | KCF045244 | 159 | 131,7 | 1,1 |
| DN 15 | 1/2" | DG113H004 | DAN0015411S | KCF045244 | 159 | 133,2 | 1,3 |
| DN 20 | 3/4" | DG113H005 | DAN0030411S | KCF042444 | 174,2 | 153,7 | 2,3 |
| DN 25 | 1" | DG113H006 | DAN0030411S | KCF042444 | 174,2 | 156,7 | 2,8 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | SG113H003 | SRN0015401S | KCF045244 | 233,2 | 138,7 | 1,8 |
| DN 15 | 1/2" | SG113H004 | SRN0015401S | KCF045244 | 233,2 | 140,2 | 2,0 |
| DN 20 | 3/4" | SG113H005 | SRN0030402S | KCF053015 | 258,8 | 164,9 | 3,5 |
| DN 25 | 1" | SG113H006 | SRN0030402S | KCF053015 | 258,8 | 167,9 | 4,0 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*



A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 115

## VALVOLA A SFERA IN OTTONE 2 VIE FLANGIATA A CORPO PIATTO - PASSAGGIO INTEGRALE.

*2-WAY FULL-BORE FLAT BODY FLANGED BRASS BALL VALVE.*



**CARATTERISTICHE GENERALI:**

- Norme per flange d'attacco: EN1092-1 PN16.
- Temperatura di utilizzo: da -20°C a +150°C per liquidi; da -20°C a +60°C per gas.
- Pressione di utilizzo: PN 16 vedere diagramma.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi non aggressivi.
- Attacco ISO 5211 per attuatori.

***GENERAL FEATURES:***

- *Flanges according to:* EN1092-1 PN16.
- *Working temperature: from -20°C to +150°C for liquids; from -20°C to +60°C for gas.*
- *Working pressure: 16 bar see diagram.*
- *Fluid range: water, air, gas, petroleum and petrochemical products. Not suitable for aggressive media.*
- *ISO 5211 connection to actuators.*

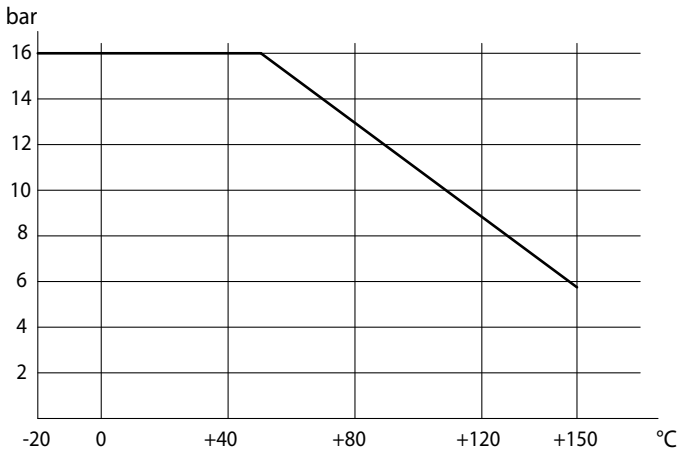
**ESECUZIONI SPECIALI A RICHIESTA:**

- Per altre applicazioni contattare il nostro ufficio commerciale.

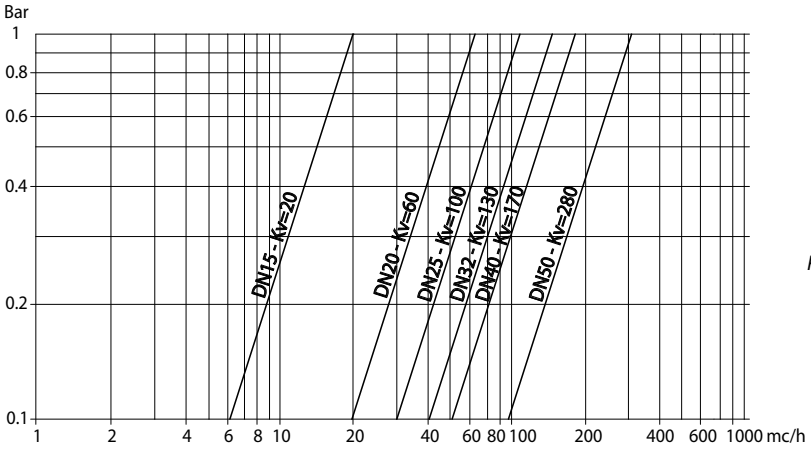
***ON REQUEST:***

- *For other applications, please contact our sales department.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

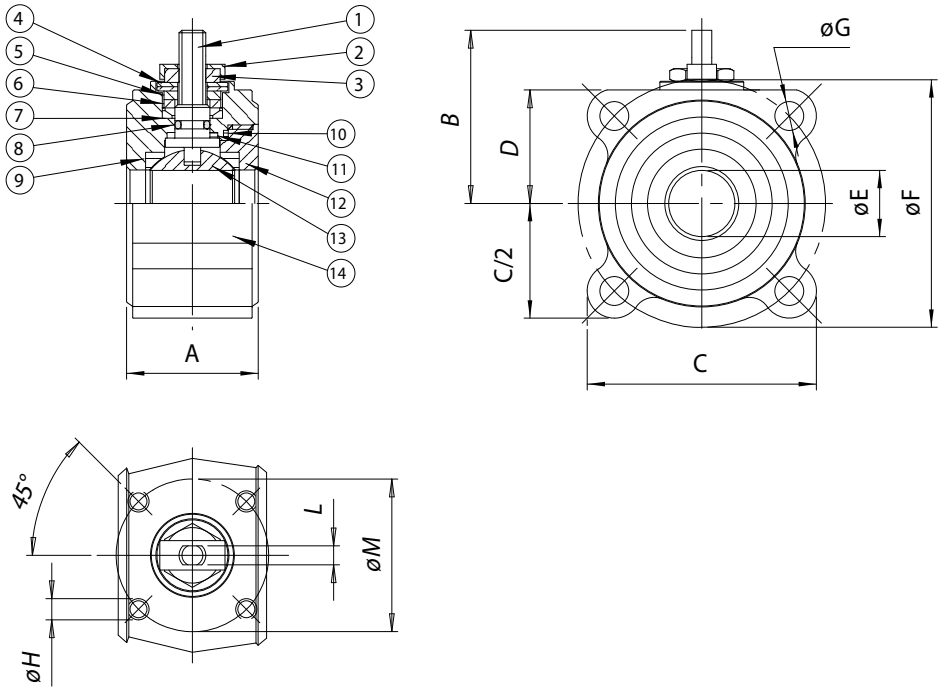
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | |
|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1/2"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** |
| PN 16 bar | 7 | 9 | 16 | 26 | 39 | 58 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 115
# OTTONE *BRASS*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | Kg | Con Leva *With lever* | Kg | Kit guarnizioni *Seals kit* |
| DN 15 | 1/2" | V115X604 | 0,85 | L115X604 | 0,9 | KGBV8404 |
| DN 20 | 3/4" | V115X605 | 1,2 | L115X605 | 1,25 | KGBV8405 |
| DN 25 | 1" | V115X606 | 1,7 | L115X606 | 1,8 | KGBV8406 |
| DN 32 | 1" 1/4 | V115X607 | 2,8 | L115X607 | 2,9 | KGBV8407 |
| DN 40 | 1" 1/2 | V115X608 | 3,6 | L115X608 | 3,75 | KGBV8408 |
| DN 50 | 2" | V115X609 | 5 | L115X609 | 5,15 | KGBV8409 |




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 2 | Piastra bloccadado *Nut holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Dado di bloccaggio *Lock nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 4 | Molle a tazza *Belleville washer* | 50 CrV4 | | |
| 5 | Distanziale *Standstill* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 6 | Anello premiguarnizione *Gland nut ring* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 7 | Coppia di tenuta superiore *Top sealing* | P.T.F.E. | | |
| 8 | O-ring di tenuta intermedia *O-ring* | FKM | | |
| 9 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10 | Guarnizioni di tenuta ghiera *O-ring* | P.T.F.E. | | |
| 11 | Tenuta inferiore *Bottom sealing* | P.T.F.E. | | |
| 12 | Ghiera* *Ring nut** | Ottone *Brass* | | EN 12164 CW614N |
| 13 | Sfera *cromata lucida Ball chromium plated* | Ottone *Brass* | | EN 12164 CW614N |
| 14 | Corpo* *Body** | Ottone *Brass* | | EN 12165 CW617N |

* Trattamento esterno: Nichelatura brillante *Surface treatment: bright nickel plating*

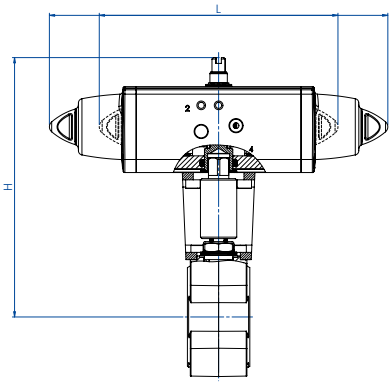
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | øE | øF | øG | øH | L | øM |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | |
| DN 15 | 1/2" | 35 | 48 | 66 | 31 | 15 | 65 | M12 | M5 | 6 | 36 |
| DN 20 | 3/4" | 38 | 51 | 73 | 34 | 20 | 75 | M12 | M5 | 6 | 36 |
| DN 25 | 1" | 43 | 63,5 | 83 | 39,5 | 25 | 85 | M12 | M5 | 8 | 42 |
| DN 32 | 1" 1/4 | 54 | 68 | 100 | 46 | 32 | 100 | M16 | M5 | 8 | 42 |
| DN 40 | 1" 1/2 | 60 | 80 | 105 | 50 | 40 | 110 | M16 | M6 | 10 | 50 |
| DN 50 | 2" | 70 | 87 | 115 | 57 | 50 | 125 | M16 | M6 | 10 | 50 |

# ITEM 115
## OTTONE *BRASS*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | DG115H064 | DAN0015411S | KCNAAHD5247 | 159,0 | 153,2 | 2,0 |
| DN 20 | 3/4" | DG115H065 | DAN0030411S | KCNAAHD5247 | 174,2 | 163,2 | 2,5 |
| DN 25 | 1" | DG115H066 | DAN0030411S | KCNBCHD5249 | 174,2 | 178,7 | 3,2 |
| DN 32 | 1" 1/4 | DG115H067 | DAN0045412S | KCNBCHD5249 | 188,5 | 190,5 | 4,5 |
| DN 40 | 1" 1/2 | DG115H068 | DAN0060412S | KCNCCHD5251 | 198,0 | 200,4 | 5,8 |
| DN 50 | 2" | DG115H069 | DAN0106411S | KCNCCHD5252 | 237,0 | 220,3 | 8,1 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | SG115H064 | SRN0015401S | KCNAAHD5247 | 233,2 | 160,2 | 2,3 |
| DN 20 | 3/4" | SG115H065 | SRN0030402S | KCNACHD5248 | 258,8 | 184,4 | 3,5 |
| DN 25 | 1" | SG115H066 | SRN0030402S | KCNBCHD5250 | 258,8 | 190,0 | 4,0 |
| DN 32 | 1" 1/4 | SG115H067 | SRN0053401S | KCNBCHD5288 | 304,2 | 209,3 | 6,3 |
| DN 40 | 1" 1/2 | SG115H068 | SRN0060401S | KCNCCHD5252 | 338,5 | 217,0 | 7,5 |
| DN 50 | 2" | SG115H069 | SRN0090401S | KCNCDHD5253 | 393,7 | 254,5 | 11,6 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*



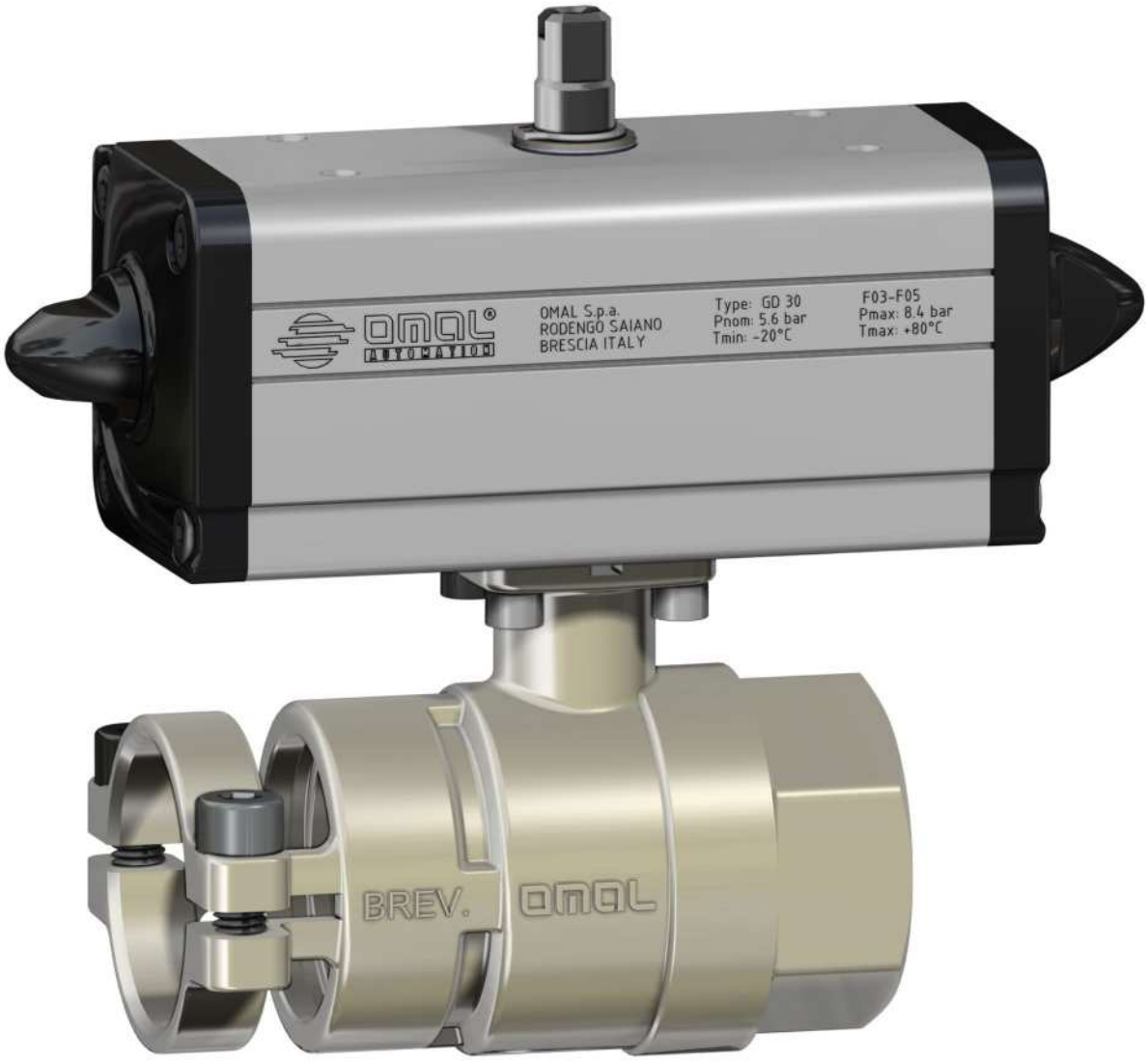
A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



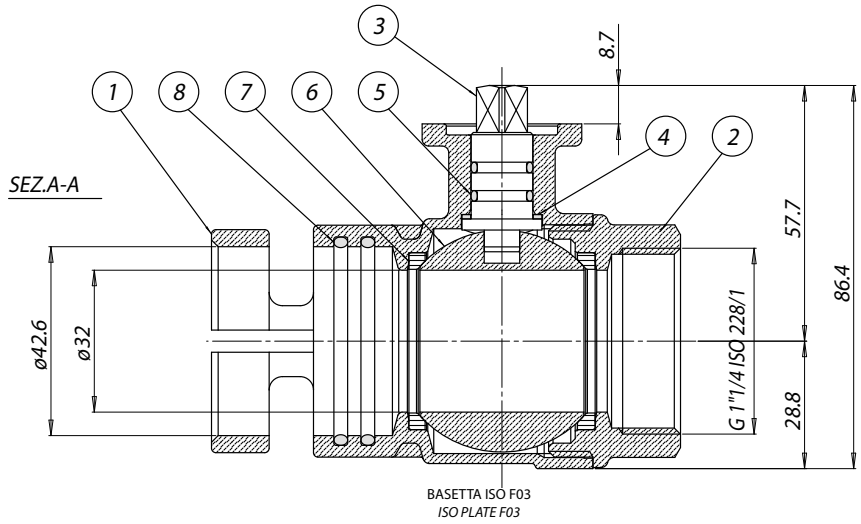
# ITEM D122

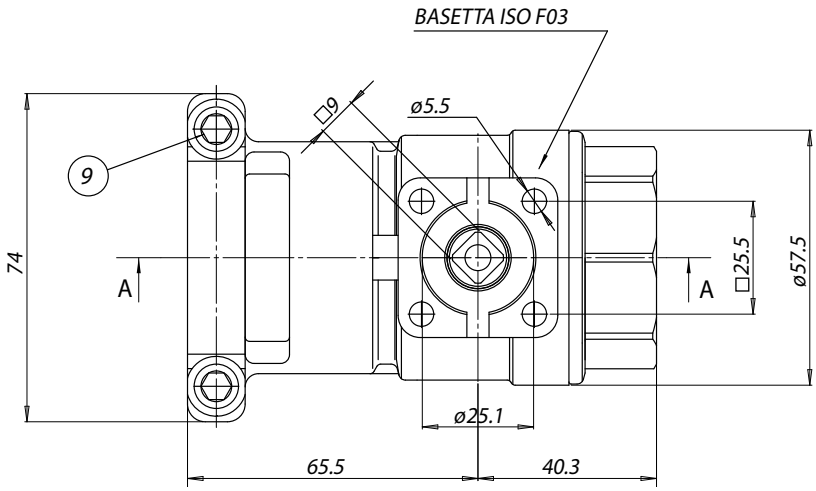
## VALVOLA A SFERA AD ATTACCO RAPIDO PER USO ZOOTECNICO, PASSAGGIO INTEGRALE.

*BALL VALVE WITH QUICK COUPLING FOR ZOOTECHNICAL USE, FULL BORE.*




| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Temperatura di utilizzo: da -15°C a +100°C.<br>• Pressione di utilizzo: 10 bar max a temperatura ambiente.<br>• Fluido intercettato: aria, acqua, fluidi per alimentazione suina.<br>• Utilizzi: per impianti zootecnici.<br>• Estremità filettate: femmina UNI/ISO 228/1; rapido con bloccaggio tramite viti (sistema brevettato). | ***GENERAL FEATURES:***<br>• Operating Temperature: from -15°C to +100°C.<br>• Operating Pressure: 10 bar max at ambient temperature.<br>• Media: air, water, fluids for pigs feeding.<br>• Application: Zootechnical equipments.<br>• Threaded ends: female UNI/ISO 228/1; quick coupling with locking by screws (patented system). |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni contattare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *For other applications, please contact our sales department.* |




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Corpo con manicotto rapido *Body with quick coupling* * | Ottone *Brass* | Nickelato *Nickel plated* | EN 12164 CW617N |
| 2 | Manicotto filettato femmina *Female threaded sleeve* * | Ottone *Brass* | Nickelato *Nickel plated* | EN 12164 CW617N |
| 3 | Albero *Shaft* | Ottone *Brass* | | EN 12164 CW614N |
| 4 | Dischetto antifrizione *Antifriction disc* | P.T.F.E. | | |
| 5 | O-ring stelo 1,78x11,11 (OR114) *Stem o-ring 1,78x11,11 (OR114)* | NBR | | |
| 6 | Sfera *Ball* | Ottone cromatura dura *Brass chromium plated* | | EN 12164 CW614N |
| 7 | Guarnizione di tenuta laterale *Seats* | P.T.F.E. | | |
| 8 | O-ring tenuta tubo 2,62x42,52 (OR3168) *O-ring 2,62x42,52 (OR3168)* | NBR | | |
| 9 | Viti M8x20 *Screws M8x20* | 304 S.S. | | |

* Trattamento esterno: Nichelatura brillante * *Surface treatment: bright nickel plating*

## DIMENSIONI *DIMENSIONS*

| | | |
|---|---|---|
| Valvola *Valve* | Attacco femmina Fil./Rapido (F/R) *Female threaded ends - quick coupling (F/R)* | V122N997 |
| Diametro nominale *Nominal Diameter* | mm. | 32 |
| Filettatura manicotto femmina *Female threaded sleeve* | Gas | 1"1/4 |
| Passaggio nominale ØP *Nominal bore ØP* | mm. | 32 |
| Peso *Weight* | Kg | 1,7 |

## VALVOLA ATTUATA CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *ACTUATED VALVE WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT di montaggio *Mounting KIT* | Kg |
|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | |
| DN 32 | 1" 1/4 | DG122H907 | DAN0030411S | KCF045853 | 3,0 |

# ITEM 153

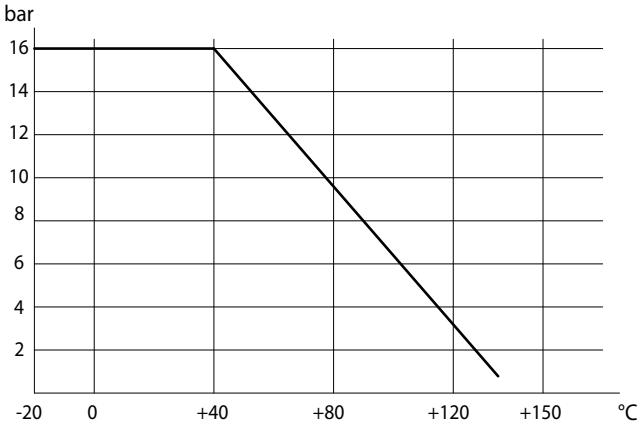
## VALVOLA A SFERA IN OTTONE 3 VIE FILETTATA PASSAGGIO INTEGRALE CON SFERA A "L".

## *3-WAY FULL-BORE THREADED-ENDS BRASS BALL VALVE, "L" PORT.*



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Costruita per utilizzi in media pressione con fluidi non aggressivi, la valvola funziona solo come deviatore. Non permette alcuna chiusura della mandata che é obbligatoriamente collegata al manicotto centrale, vedere schema.<br>• Temperatura di utilizzo: da -20°C a + 120°C.<br>• Pressione di utilizzo: 16 bar max, vedere diagramma.<br>• Fluido intercettato: aria, acqua, gas, olii, prodotti petroliferi e petrolchimici.<br>• Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).<br>• Testa della valvola a norma ISO 5211. | ***GENERAL FEATURES:***<br>• *The valve is suitable for medium pressures with non aggressive fluids. The valve can be used as diverter only the in let can be from central way only, see plane.*<br>• *Working temperature: from -20°C to + 120°C.*<br>• *Working pressure: 16 bar max, see diagram.*<br>• *Fluid range: air, water, oil, gas, petroliferous and petrochemical products.*<br>• *Threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*<br>• *Head of the valve as per ISO 5211 specifications.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni contattare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Conforme alla direttiva Europea 2014/68/UE "PED" .<br>• Versione ATEX in conformità alla direttiva 2014/34/UE a richiesta. | ***CERTIFICATIONS:***<br>• *According to 2014/68/EU "PED" .*<br>• *ATEX version in conformity with directive 2014/34/EU on request.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*



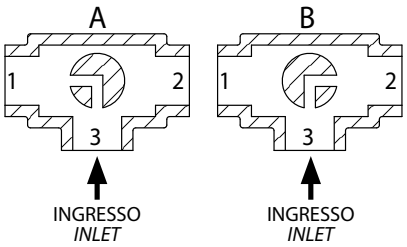



## SCHEMA SFERA A "L" *PLAN FOR "L"*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*

Vista da sopra *View from above*



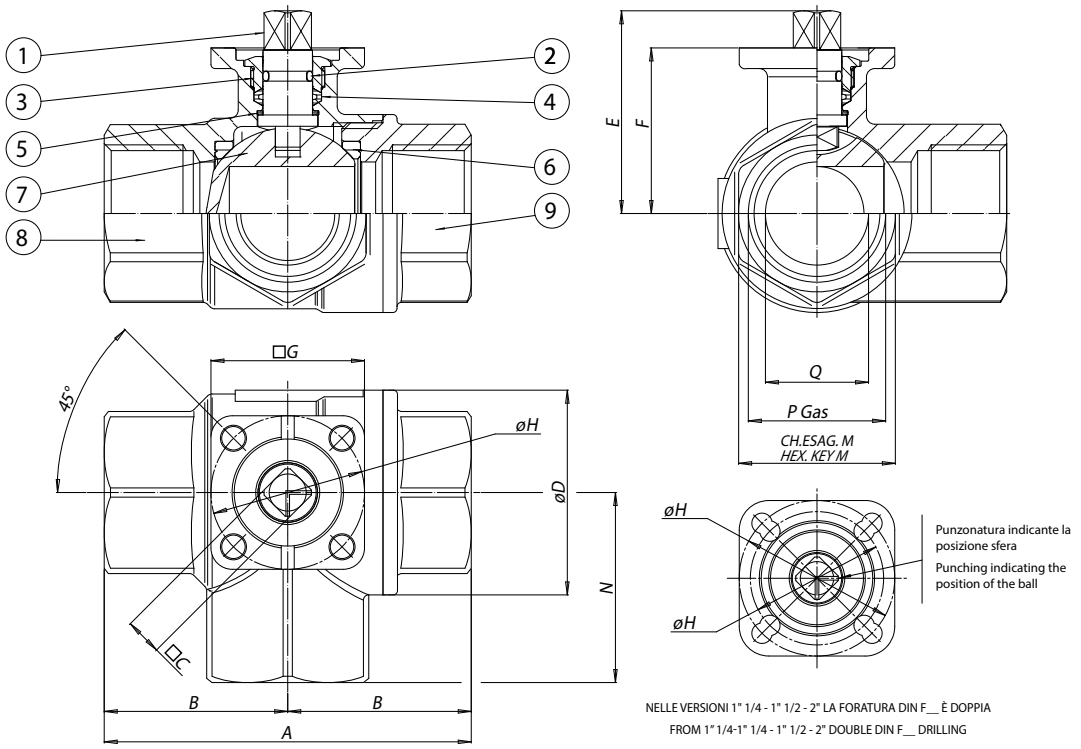

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** |
| PN 16 bar | 4 | 5 | 7 | 10 | 14 | 19 | 27 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 153
# OTTONE *BRASS*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | ATEX | Kg | Con Leva *With lever* | ATEX | Kg | Kit leva *Lever kit* |
| DN 10 | 3/8" | V153N203 | V153N203YX | 0,38 | L153N203 | L153N203YX | 0,45 | KLV10103 |
| DN 15 | 1/2" | V153N204 | V153N204YX | 0,37 | L153N204 | L153N204YX | 0,44 | KLV10103 |
| DN 20 | 3/4" | V153N205G | V153N205GYX | 0,44 | L153N205G | L153N205GYX | 0,51 | KLV10105 |
| DN 25 | 1" | V153N206G | V153N206GYX | 0,77 | L153N206G | L153N206GYX | 0,84 | KLV10105 |
| DN 32 | 1" 1/4 | V153N207G | V153N207GYX | 1,2 | L153N207G | L153N207GYX | 1,27 | KLV10109 |
| DN 40 | 1" 1/2 | V153N208G | V153N208GYX | 1,75 | L153N208G | L153N208GYX | 1,82 | KLV10109 |
| DN 50 | 2" | V153N209 | V153N209YX | 3,85 | L153N209 | L153N209YX | 3,92 | KLV10109 |



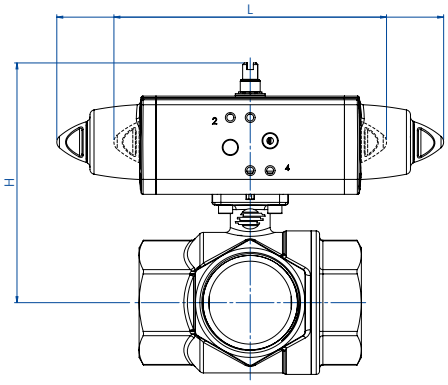

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo *Shaft* | Ottone *Brass* | EN 12164 CW614N |
| 2 | O-ring | FKM | |
| 3 | Premiguarnizione* *Gland nut** | Ottone *Brass* | EN 12164 CW614N |
| 4 | Guarnizione tenuta stelo *Shaft seal* | P.T.F.E. | |
| 5 | Anelli antifrizione *Antifriction rings* | P.T.F.E. | |
| 6 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | |
| 7 | Sfera *Ball* | Ottone cromata dura *Brass chromium plated* | EN 12164 CW614N |
| 8 | Corpo* *Body** | Ottone *Brass* | EN 12165 CW617N |
| 9 | Manicotto femmina* *Threaded ends** | Ottone *Brass* | EN 12165 CW617N |
| * Trattamento esterno: Nichelatura brillante * *Surface treatment: bright nickel plating* | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | øD | E | F | □G | øH | øL | ch.M | N | P | Q |
| DN [mm] | [inch] | | | | | | | | | | | | | |
| DN 10 | 3/8" | 69 | 34,5 | 9 | 31,8 | 38,4 | 30,5 | 36 | 36 | 5,5 | 25 | 33 | 3/8" | 10 |
| DN 15 | 1/2" | 69 | 34,5 | 9 | 31,8 | 38,4 | 30,5 | 36 | 36 | 5,5 | 25 | 33 | 1/2" | 15 |
| DN 20 | 3/4" | 77 | 38,5 | 11 | 40 | 47,1 | 36,3 | 36 | 36 | 5,5 | 31 | 38 | 3/4" | 20 |
| DN 25 | 1" | 89 | 44,5 | 11 | 48 | 50,9 | 40,2 | 36 | 36 | 5,5 | 38 | 46 | 1" | 25 |
| DN 32 | 1" 1/4 | 103 | 51,5 | 11 | 60 | 62,5 | 51,5 | 42 | 36/42 | 5,5 | 47 | 54 | 1" 1/4 | 32 |
| DN 40 | 1" 1/2 | 114 | 57 | 11 | 70,6 | 69 | 58 | 42 | 36/42 | 5,5 | 54 | 61 | 1" 1/2 | 40 |
| DN 50 | 2" | 134 | 67 | 11 | 86,5 | 76,3 | 65,3 | 46 | 42/50 | 5,5/6,5 | 66 | 73 | 2" | 50 |

# ITEM 153
## OTTONE *BRASS*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

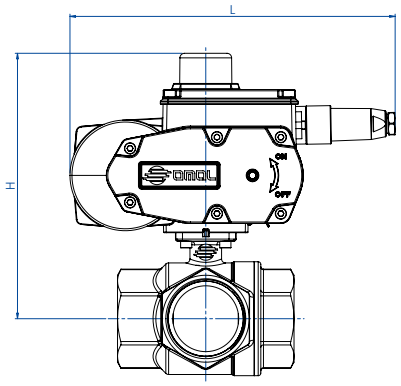
| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | D153H003 | DA008401S | KCF032558 | 70,0 | 88,0 | 0,7 |
| DN 15 | 1/2" | D153H004 | DA008401S | KCF032558 | 70,0 | 88,0 | 0,7 |
| DN 20 | 3/4" | DG153H005 | DAN0015411S | KCF032558 | 159,0 | 103,3 | 1,2 |
| DN 25 | 1" | DG153H006 | DAN0015411S | KCF032558 | 159,0 | 107,3 | 1,5 |
| DN 32 | 1" 1/4 | DG153H007 | DAN0030411S | KCF032558 | 174,2 | 129,8 | 2,2 |
| DN 40 | 1" 1/2 | DG153H008 | DAN0030411S | KCF032558 | 174,2 | 136,8 | 2,8 |
| DN 50 | 2" | DG153H009 | DAN0045412S | KCF042559 | 188,5 | 149,4 | 5,1 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | SG153H003 | SRN0015401S | KCF042565 | 233,2 | 108,8 | 1,6 |
| DN 15 | 1/2" | SG153H004 | SRN0015401S | KCF042565 | 233,2 | 108,8 | 1,6 |
| DN 20 | 3/4" | SG153H005 | SRN0015401S | KCF032558 | 233,2 | 115,8 | 1,7 |
| DN 25 | 1" | SG153H006 | SRN0015401S | KCF032558 | 233,2 | 119,8 | 2,0 |
| DN 32 | 1" 1/4 | SG153H007 | SRN0030401S | KCF055309 | 258,8 | 141,0 | 3,1 |
| DN 40 | 1" 1/2 | SG153H008 | SRN0030401S | KCF055309 | 258,8 | 148,0 | 3,7 |
| DN 50 | 2" | SG153H009 | SRN0053401S | KCF075310 | 304,2 | 168,3 | 5,9 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*
**VERSIONE ATEX: Aggiungere "YX" alla fine del codice articolo.** ***ATEX VERSION: Add 'YX' at the end of the item code.***






### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | C153A5E03 | EA0035A5C000 | KCF052003 | 250,0 | 149,0 | 3,9 |
| DN 15 | 1/2" | C153A5E04 | EA0035A5C000 | KCF052003 | 250,0 | 149,0 | 3,9 |
| DN 20 | 3/4" | CG153A5E05 | EA0035A5C000 | KCF055309 | 250,0 | 173,3 | 4,0 |
| DN 25 | 1" | CG153A5E06 | EA0035A5C000 | KCF055309 | 250,0 | 177,2 | 4,4 |
| DN 32 | 1" 1/4 | CG153A5E07 | EA0035A5C000 | KCF055309 | 250,0 | 188,5 | 4,8 |
| DN 40 | 1" 1/2 | CG153A5E08 | EA0035A5C000 | KCF055309 | 250,0 | 195,0 | 5,4 |
| DN 50 | 2" | C153A5G09 | EA0070A5C000 | KCF052004 | 250,0 | 202,3 | 7,5 |

### CON ATTUATORE ELETTRICO MODULANTE (230 VAC) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 10 | 3/8" | M15316C03 | AM160002 | KCF052003 | 165,8 | 149,0 | 3,1 |
| DN 15 | 1/2" | M15316C04 | AM160002 | KCF052003 | 165,8 | 149,0 | 3,1 |
| DN 20 | 3/4" | MG15316F05 | AM160005 | KCNACDV5421 | 207,5 | 260,0 | 6,0 |
| DN 25 | 1" | MG15316F06 | AM160005 | KCNACDV5421 | 207,5 | 263,5 | 6,2 |
| DN 32 | 1" 1/4 | MG15316F07 | AM160005 | KCNACDV5421 | 207,5 | 274,0 | 6,7 |
| DN 40 | 1" 1/2 | MG15316F08 | AM160005 | KCNACDV5421 | 207,5 | 280,5 | 7,2 |
| DN 50 | 2" | M15316F09 | AM160005 | KCE281943 | 207,5 | 228,0 | 8,3 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*
Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

# ITEM 160-161

## VALVOLA A SFERA IN OTTONE 3 VIE 4 GUARNIZIONI - FILETTATA CON SFERA A “T” O “L”.

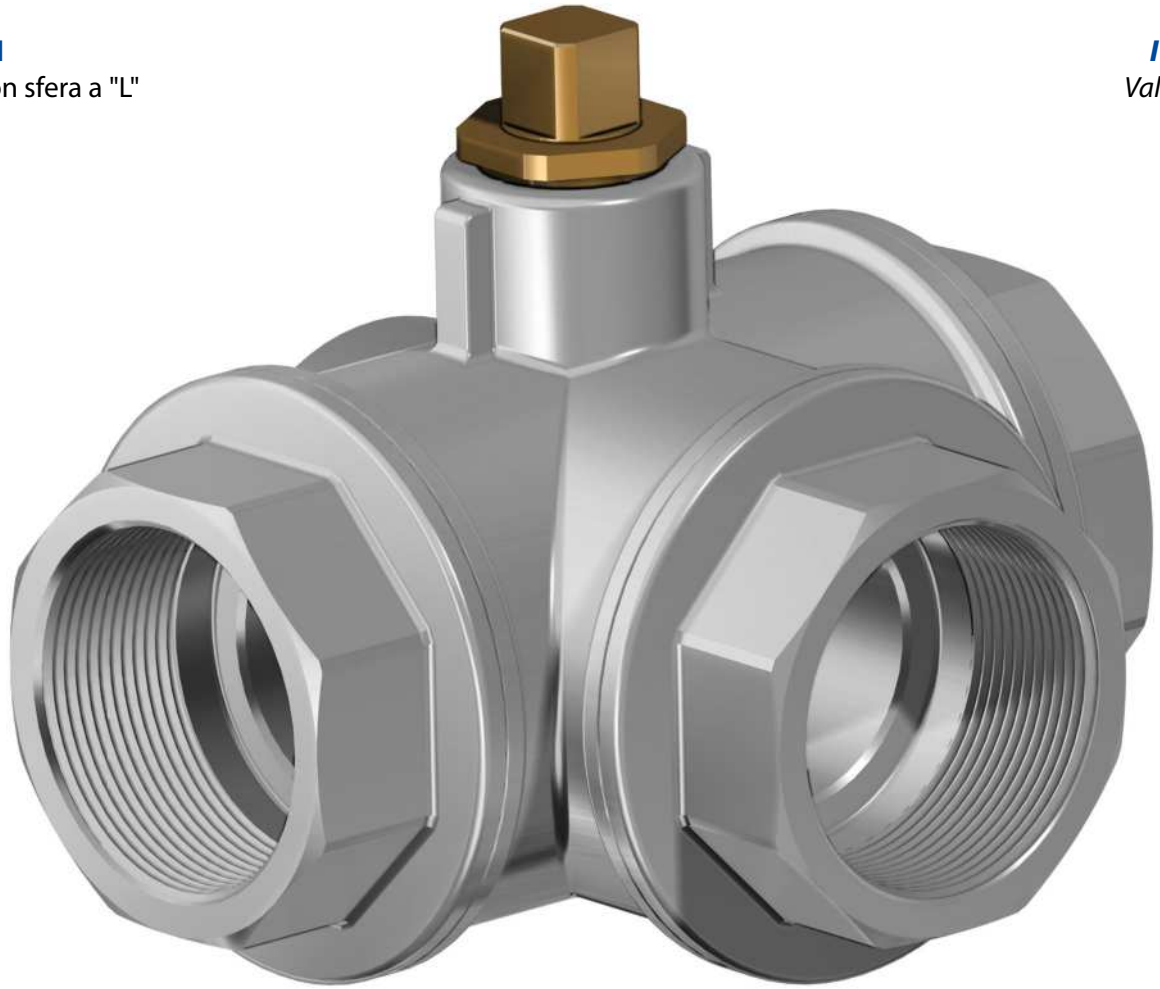
*3 WAY 4 SEALS BRASS BALL VALVE - THREADED-ENDS “T” OR “L” PORT.*

**ITEM 160**
Valvola con sfera a "T"

***ITEM 160***
*Valve "T" port*

**ITEM 161**
Valvola con sfera a "L"

***ITEM 161***
*Valve "L" port*



**CARATTERISTICHE GENERALI:**

- **La valvola con 4 guarnizioni sulla sfera, permette la deviazione del flusso in tutte le direzioni,** vedere schema.
- Temperatura di utilizzo: da -15°C a + 120°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: aria, acqua, gas, olii, prodotti petroliferi e petrolchimici, vuoto, fluidi non aggressivi.
- Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).

***GENERAL FEATURES:***

- ***Valve with 4 ball seats. Inlet from any of the 3 ends,*** *see plane.*
- *Working temperature: from -15°C to + 120°C.*
- *Working pressure: see table.*
- *Fluid range: water, air, gas, vacuum, petroleum and petrochemical products. Not suitable for aggressive media.*
- *Threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*

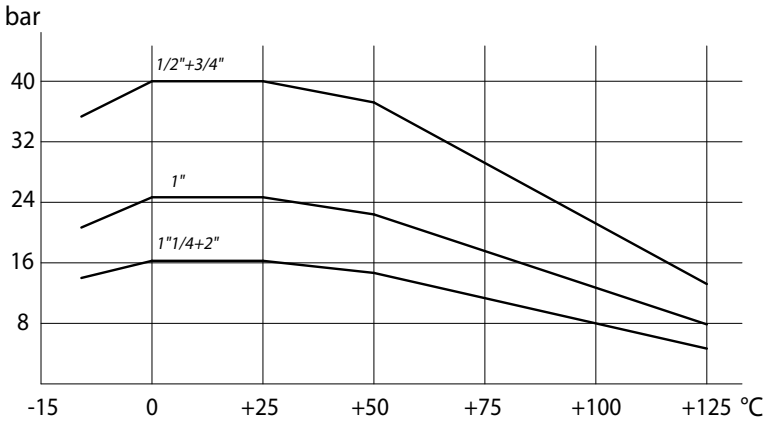
**ESECUZIONI SPECIALI A RICHIESTA:**

- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***

- *For other applications, please contact our sales department.*

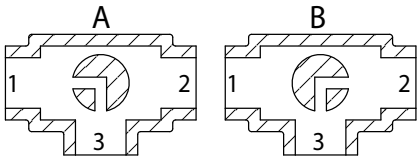
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

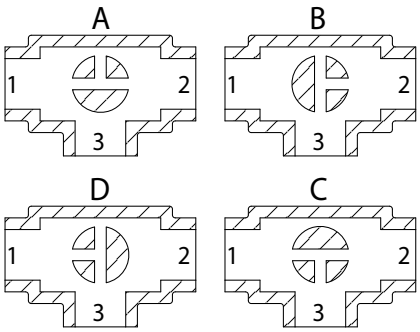
## SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*




Vista da sopra *View from above*

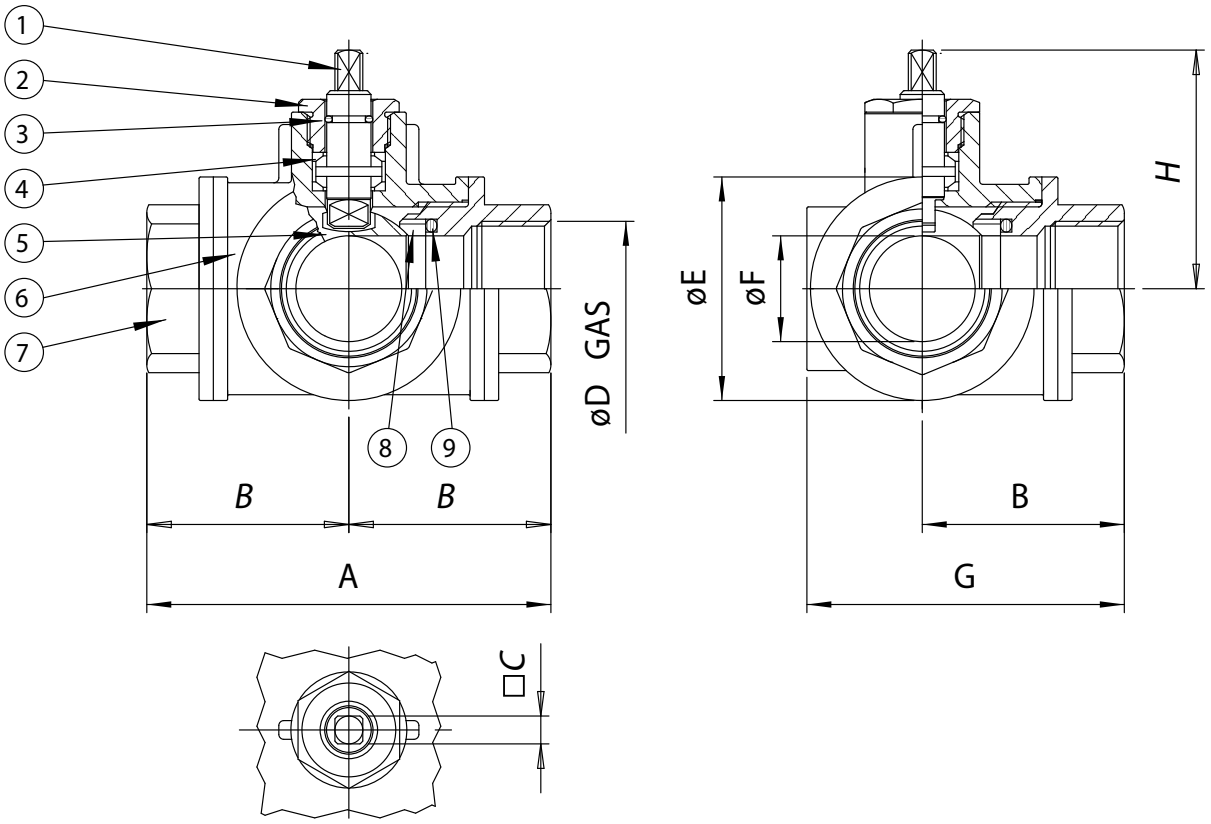
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | |
|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** |
| PN 16 bar | | | | 31 | 43 | 74 |
| PN 25 bar | | | 20 | | | |
| PN 40 bar | 8 | 14 | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 160-161
# OTTONE *BRASS*
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero "T" port *Free shaft "T" port* | Asse libero "L" port *Free shaft "L" port* | Kg | Con Leva "T" port *With lever "T" port* | Con Leva "L" port *With lever "L" port* | Kg | Kit guarnizioni *Seals kit* |
| DN 15 | 1/2" | V160N204 | V161N204 | 0,6 | L160N204 | L161N204 | 0,67 | KGBV6704 |
| DN 20 | 3/4" | V160N205 | V161N205 | 1,1 | L160N205 | L161N205 | 1,18 | KGBV6705 |
| DN 25 | 1" | V160N206 | V161N206 | 1,6 | L160N206 | L161N206 | 1,67 | KGBV6706 |
| DN 32 | 1" 1/4 | V160N207 | V161N207 | 2,4 | L160N207 | L161N207 | 2,47 | KGBV6707 |
| DN 40 | 1" 1/2 | V160N208 | V161N208 | 3,4 | L160N208 | L161N208 | 3,47 | KGBV6708 |
| DN 50 | 2" | V160N209 | V161N209 | 5,5 | L160N209 | L161N209 | 5,57 | KGBV6709 |




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo* *Shaft** | Ottone *Brass* | EN 12164 CW614N |
| 2 | Premiguarnizione* *Gland nut** | Ottone *Brass* | EN 12164 CW614N |
| 3 | O-ring | FKM | |
| 4 | Coppia di tenuta superiore *Seals* | P.T.F.E. | |
| 5 | Sfera *Ball* | Ottone cromata lucida *Brass chromium plated* | EN 12164 CW614N |
| 6 | Corpo* *Body** | Ottone *Brass* | EN 12165 CW617N |
| 7 | Manicotto femmina* *Threaded end** | Ottone *Brass* | EN 12165 CW617N |
| 8 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | |
| 9 | O-ring di tenuta laterale *O-ring* | FKM | |

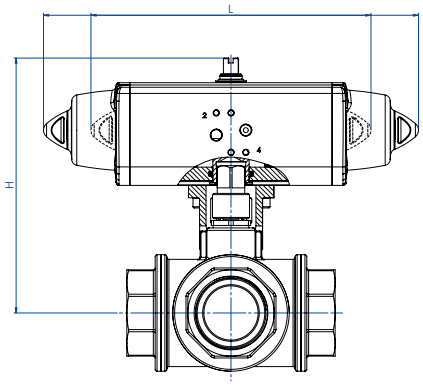
* Trattamento esterno: Nichelatura brillante * *Surface treatment: bright nickel plating*

| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | øD | øE | øF | G | H |
| DN [mm] | [inch] | | | | | | | | |
| DN 15 | 1/2" | 80 | 40 | 7 | 1/2" | 38 | 13 | 61 | 43,2 |
| DN 20 | 3/4" | 96 | 48 | 10 | 3/4" | 48 | 18 | 74 | 52,9 |
| DN 25 | 1" | 113 | 56,5 | 10 | 1" | 58 | 23 | 88 | 57,3 |
| DN 32 | 1" 1/4 | 130 | 65 | 14 | 1" 1/4 | 67 | 29 | 99 | 74,5 |
| DN 40 | 1" 1/2 | 147 | 73,5 | 14 | 1" 1/2 | 78 | 35 | 114 | 79 |
| DN 50 | 2" | 169 | 84,5 | 17 | 2" | 95 | 44 | 132 | 94,2 |

# ITEM 160-161
# OTTONE *BRASS*
# CON ATTUATORE *WITH ACTUATOR*








## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | DG16*H004 | DAN0015411S | KCF042970 | 159,0 | 124,0 | 1,4 |
| DN 20 | 3/4" | DG16*H005 | DAN0030411S | KCF042372 | 174,2 | 143,3 | 2,1 |
| DN 25 | 1" | DG16*H006 | DAN0030411S | KCF042372 | 174,2 | 149,3 | 2,7 |
| DN 32 | 1" 1/4 | DG16*H007 | DAN0045412S | KCF042434 | 188,5 | 167,1 | 3,8 |
| DN 40 | 1" 1/2 | DG16*H008 | DAN0060412S | KCF052013 | 198,0 | 176,0 | 5,0 |
| DN 50 | 2" | DG16*H009 | DAN0120411S | KCF071714 | 244,1 | 208,6 | 8,2 |

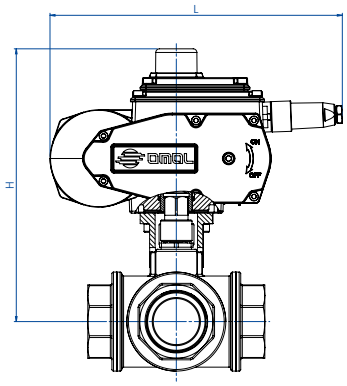
## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | SG16*H004 | SRN0015401S | KCF042970 | 233,2 | 132,8 | 2,0 |
| DN 20 | 3/4" | SG16*H005 | SRN0030402S | KCF052010 | 258,8 | 154,5 | 3,3 |
| DN 25 | 1" | SG16*H006 | SRN0030402S | KCF052010 | 258,8 | 160,5 | 3,9 |
| DN 32 | 1" 1/4 | SG16*H007 | SRN0053401S | KCF075677 | 30,2 | 185,9 | 6,3 |
| DN 40 | 1" 1/2 | SG16*H008 | SRN0060401S | KCF075677 | 338,5 | 192,6 | 7,7 |
| DN 50 | 2" | SG16*H009 | SRN0120401S | KCF103401 | 409,6 | 249,5 | 14,3 |

* = 0 valvola con sfera a "T" (articolo 160) - *"T" port (item 160);* * = 1 valvola con sfera a "L" (articolo 161) - *"L" port (item 161)*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*






## CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | C16*A5E04 | EA0035A5C000 | KCF052011 | 250,0 | 106,0 | 4,2 |
| DN 20 | 3/4" | C16*A5E05 | EA0035A5C000 | KCF052010 | 250,0 | 203,0 | 4,7 |
| DN 25 | 1" | C16*A5E06 | EA0035A5C000 | KCF052010 | 250,0 | 209,0 | 5,2 |
| DN 32 | 1" 1/4 | C16*A5G07 | EA0070A5C000 | KCF052013 | 250,0 | 223,0 | 6,0 |
| DN 40 | 1" 1/2 | C16*A5G08 | EA0070A5C000 | KCF052013 | 250,0 | 236,0 | 7,0 |
| DN 50 | 2" | C16*A5I09 | EA0130A5C000 | KCF071714 | 280,0 | 262,5 | 13,0 |

## CON ATTUATORE ELETTRICO MODULANTE (230 VAC) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

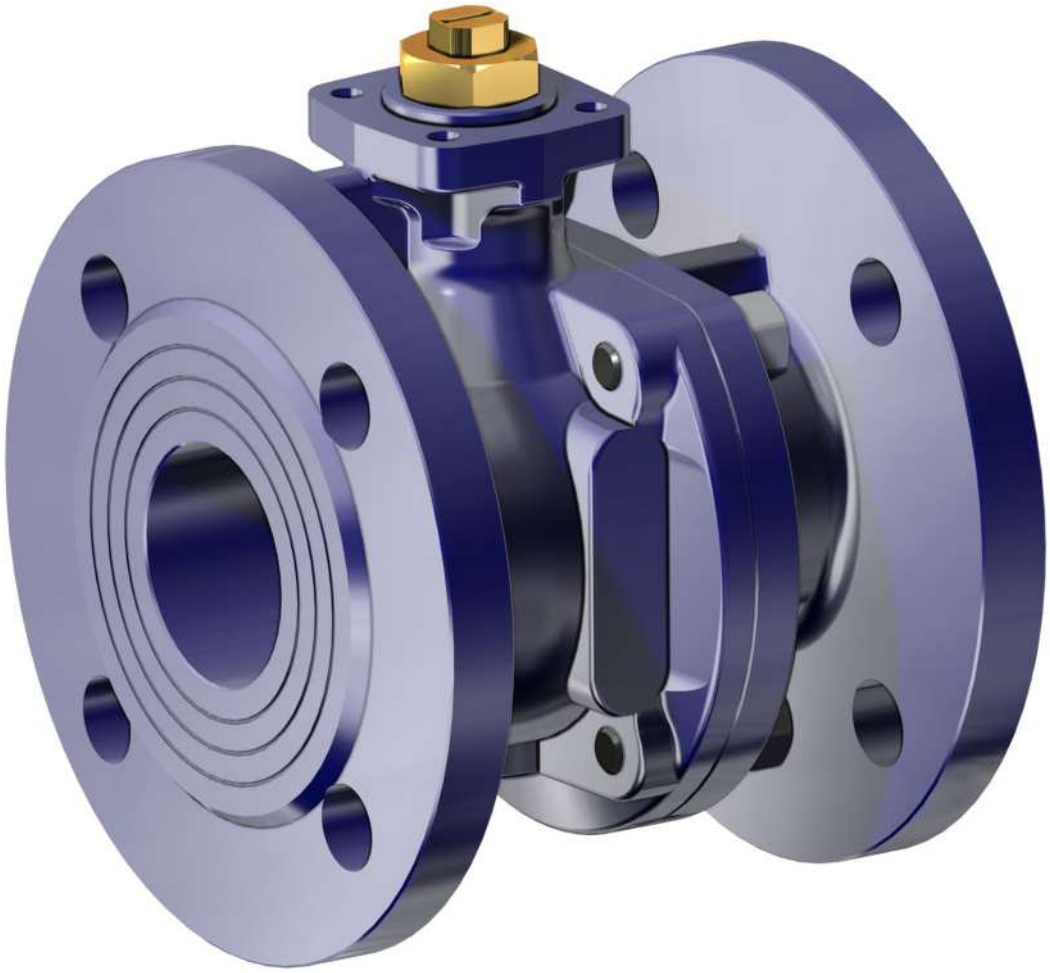
| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 15 | 1/2" | M16*16C04 | AM160002 | KCF052011 | 165,8 | 175,5 | 3,5 |
| DN 20 | 3/4" | M16*16F05 | AM160005 | KCE282016 | 207,5 | 229,5 | 6,6 |
| DN 25 | 1" | M16*16F06 | AM160005 | KCE282016 | 207,5 | 235,5 | 7,1 |
| DN 32 | 1" 1/4 | M16*16F07 | AM160005 | KCE282017 | 207,5 | 249,5 | 7,9 |
| DN 40 | 1" 1/2 | M16*16L08 | AM160020 | KCE362078 | 256,5 | 284,0 | 13,6 |
| DN 50 | 2" | M16*16L09 | AM160020 | KCE362018 | 256,5 | 290,0 | 15,8 |

* = 0 valvola con sfera a "T" (articolo 160) - *"T" port (item 160);* * = 1 valvola con sfera a "L" (articolo 161) - *"L" port (item 161)*

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*
Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

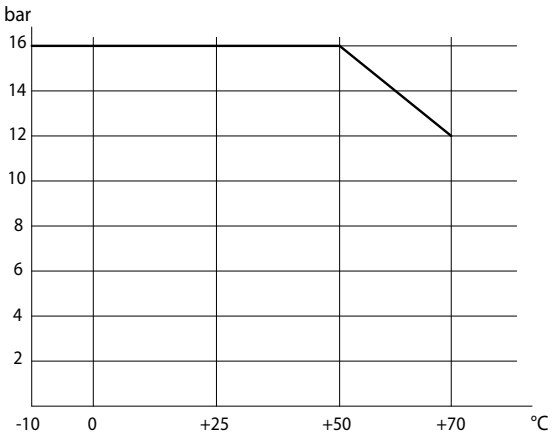
# ITEM 216

## VALVOLA A SFERA IN GHISA 2 VIE FLANGIATA PASSAGGIO INTEGRALE.
## *2-WAY FULL-BORE FLANGED CAST IRON BALL VALVE.*

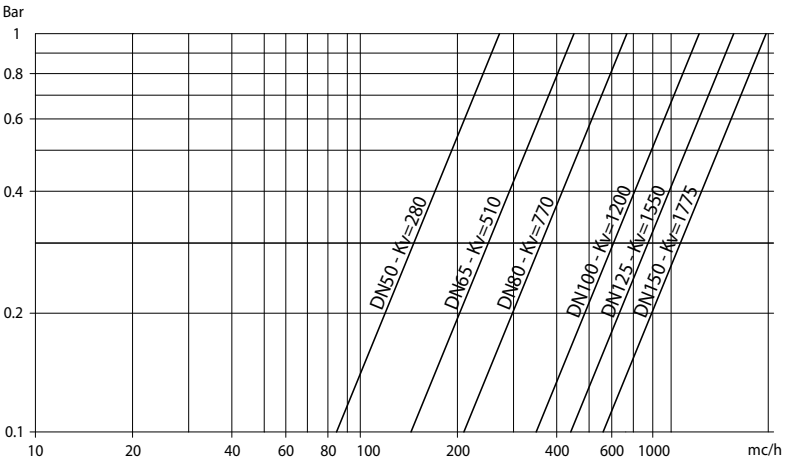


| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Flange: EN 1092/2 PN16.<br>• Scartamento EN558/1 (ISO 5752).<br>• Temperatura di esercizio: da -10°C a +70°C.<br>• Pressione di esercizio: max. 16 Bar (10 Bar come fine linea) VEDI DIAGRAMMA.<br>• Fluido intercettato: gas di città, gas liquidi, combustibili gassosi secondo le norme UNI-CIG 7129 e DIN-DVGW tabella G 260/I per gas. | ***GENERAL FEATURES:***<br>• *Flanges: EN 1092/2 PN16.*<br>• *Gauge as per EN558/1 (ISO 5752).*<br>• *Working temperature: from -10°C to +70°C.*<br>• *Working pressure: 16 Bar max (10 Bar for end of line application) SEE DIAGRAM.*<br>• *Fluid range: gas, liquid gases and gaseous fuels as per UNI-CIG 7129 and DIN-DVGW G 260/I table for gas.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• PN 6 - PN 10.<br>• Per altre applicazioni contattare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *PN 6 - PN 10.*<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Omologazione DIN-DVGW per intercettazione gas combustibili tab. G260. | ***CERTIFICATIONS:***<br>• *DIN-DVGW approval for combustible gas tab. G260.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

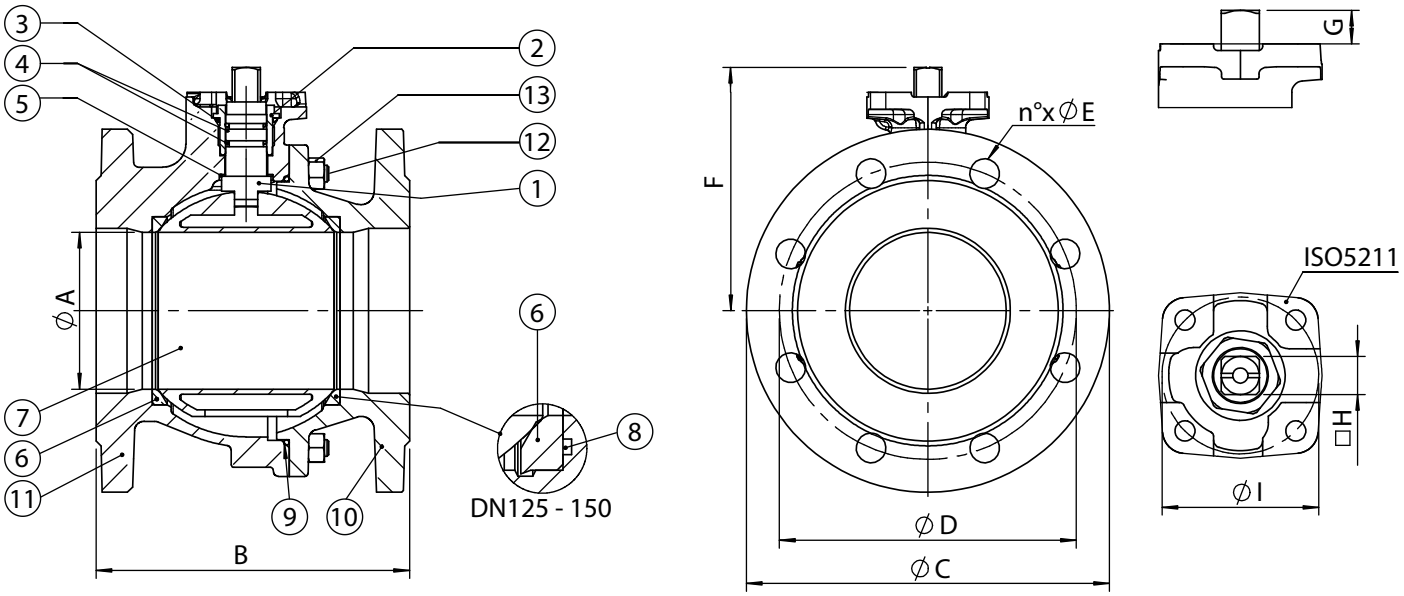
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | |
|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** | **DN 125 5"** | **DN 150 6"** |
| PN 16 bar | 38 | 68 | 112 | 171 | 298 | 445 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 216
## GHISA *CAST IRON*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | |
|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | Kg | Con Leva *With lever* | Kg |
| DN 50 | 2" | V216G069 | 9 | L216G069 | 9,1 |
| DN 65 | 2" 1/2 | V216G070 | 10,5 | L216G070 | 10,6 |
| DN 80 | 3" | V216G071 | 15,5 | L216G071 | 15,7 |
| DN 100 | 4" | V216G072 | 18,5 | L216G072 | 18,7 |
| DN 125 | 5" | V216G073 | 28 | L216G073 | 28,4 |
| DN 150 | 6" | V216G074 | 38,5 | L216G074 | 38,9 |



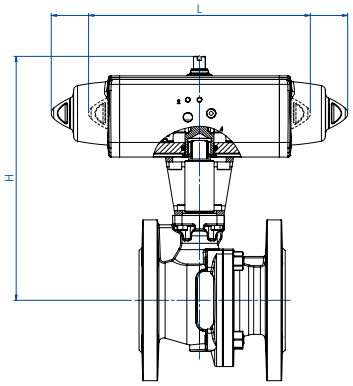

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo *Shaft* | Ottone cromato *Brass chrome plated* | CuZn40Pb2 |
| 2 | Ghiera *Ring nut* | Ottone cromato *Brass chrome plated* | CuZn40Pb2 |
| 3 | O-Ring di tenuta superiore *Top O-ring* | NBR | |
| 4 | O-Ring di tenuta stelo *Shaft O-ring* | NBR | |
| 5 | Anello antifrizione *Sliding ring* | P.T.F.E. | |
| 6 | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | |
| 7 | Sfera *Ball* | Ottone *Brass* | CuZn40Pb2 |
| 8 | O-ring *O-ring* | NBR | |
| 9 | O-ring di tenuta corpo *Body o-ring* | NBR | |
| 10 | Flangia *Flange* | Ghisa sferoidale *Ductile iron* | EN GJS 400-15 |
| 11 | Corpo *Body* | Ghisa sferoidale *Ductile iron* | EN GJS 400-15 |
| 12 | Tirante *Tie-rod* | Acciaio al carbonio zincato *Carbon steel galvanized* | |
| 13 | Dado di bloccaggio *Lock nut* | Acciaio al carbonio zincato *Carbon steel galvanized* | |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | øA | B | øC | øD | øE | F | G | □H | øI |
| DN [mm] | [inch] | | | | | | | | | |
| DN 50 | 2" | 50 | 150 | 165 | 125 | 4x18 | 100,5 | 13,5 | 14 | 50 |
| DN 65 | 2" 12 | 63 | 170 | 185 | 145 | 4x18 | 108,5 | 13,5 | 14 | 50 |
| DN 80 | 3" | 76 | 180 | 200 | 160 | 8x18 | 133 | 15 | 17 | 70 |
| DN 100 | 4" | 95 | 190 | 220 | 180 | 8x18 | 147,5 | 15 | 17 | 70 |
| DN 125 | 5" | 120 | 200 | 250 | 210 | 8x18 | 186 | 21 | 22 | 102 |
| DN 150 | 6" | 145 | 210 | 285 | 240 | 8x22 | 203,5 | 21 | 22 | 102 |

# ITEM 216
## GHISA *CAST IRON*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 50 | 2" | DG216H069 | DAN0060412S | KCNCCLD5254 | 198,0 | 212,4 | 11,4 |
| DN 65 | 2" 1/2 | DG216H070 | DAN0120411S | KCNCCLD5255 | 244,1 | 229,0 | 14,0 |
| DN 80 | 3" | DG216H071 | DAN0180411S | KCNDDLD5257 | 289,9 | 275,5 | 21,5 |
| DN 100 | 4" | DG216H072 | DAN0240411S | KCNDDLD5257 | 313,6 | 281,1 | 25,3 |
| DN 125 | 5" | DG216H073 | DAN0480411S | KCNEELD5259 | 387,6 | 350,0 | 39,8 |
| DN 150 | 6" | DG216H074 | DAN0720411S | KCNEELD5259 | 433,1 | 363,0 | 52,7 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 50 | 2" | SG216H069 | SRN0060401S | KCNCCLD5255 | 338,5 | 212,4 | 13,2 |
| DN 65 | 2" 1/2 | SG216H070 | SRN0120401S | KCNCDLD5256 | 409,6 | 263,1 | 18,3 |
| DN 80 | 3" | SG216H071 | SRN0180401S | KCNDDLD5257 | 474,0 | 288,0 | 25,8 |
| DN 100 | 4" | SG216H072 | SRN0240401S | KCNDELD5258 | 520,5 | 330,0 | 32,0 |
| DN 125 | 5" | SG216H073 | SRN0480401S | KCNEFLD5260 | 648,2 | 383,0 | 54,4 |
| DN 150 | 6" | SG216H074 | SRN0720402S | KCNEFLD5260 | 798,0 | 401,3 | 75,2 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 400-401

## VALVOLA A SFERA IN ACCIAIO INOX MICROFUSA 2 VIE FILETTATA PASSAGGIO INTEGRALE.

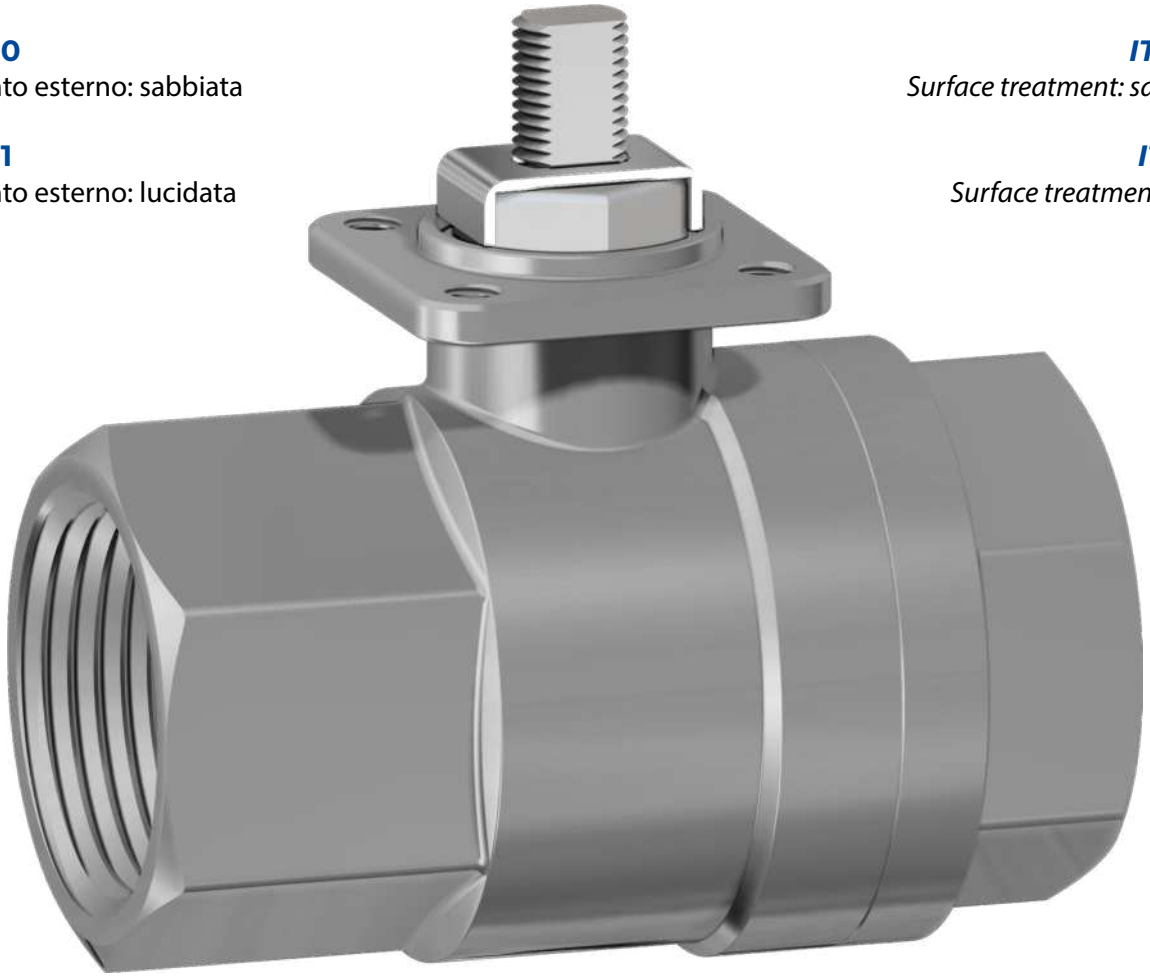
## *2-WAY FULL-BORE THREADED-ENDS STAINLESS STEEL BALL VALVE.*

**ITEM 400**
Trattamento esterno: sabbiata

**ITEM 401**
Trattamento esterno: lucidata

***ITEM 400***
*Surface treatment: sandblasted*

***ITEM 401***
*Surface treatment: polished*



**CARATTERISTICHE GENERALI:**
- Costruita per l'utilizzo a medie pressioni.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi diagramma.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Trattamento esterno: articolo 400 sabbiata; articolo 401 lucidata.
- Estremità filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1).
- Testa della valvola a norma ISO 5211.

***GENERAL FEATURES:***
- *Suitable for middle pressure applications.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see diagram.*
- *Fluid range: air, water, gas, petroleum and petrochemical products, aggressive media.*
- *Surface treatment: article 400 sandblasted; article 401 polished.*
- *Female threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) specifications.*
- *Head of the valve as per ISO 5211 specifications.*

**ESECUZIONI SPECIALI A RICHIESTA:**
- Attacchi femmina NPT ANSI B1.20.1.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite.
- Per altre applicazioni contattare il nostro ufficio commerciale.

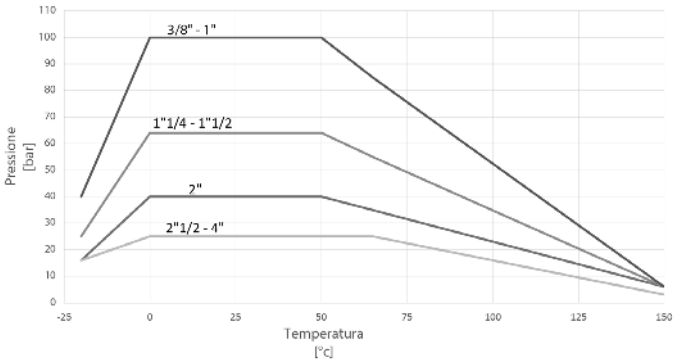
***ON REQUEST:***
- *Female threaded ends as per NPT B1.20.1 specifications.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Conforme alla direttiva Europea 2014/68/UE "PED".
- Versione ATEX a richiesta in conformità alla direttiva 2014/34/UE, non disponibile per le misure DN10 3/8" e DN15 1/2".

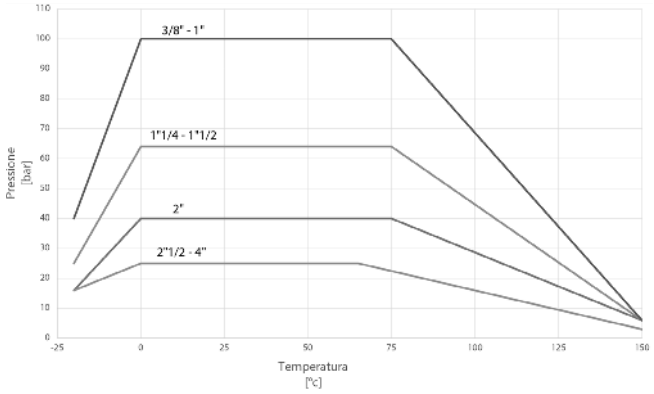
***CERTIFICATIONS:***
- *According to 2014/68/EU "PED" .*
- *ATEX version on request in conformity with directive 2014/34/EU, not available for sizes DN10 3/8" e DN15 1/2".*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*

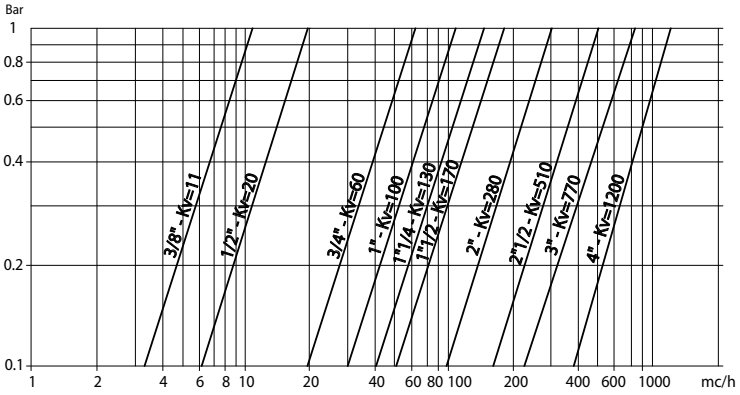
**TFM - TFM+vetro** *TFM - TFM glass filled*




**TFM+carbografite** *TFM + carbon graphite*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

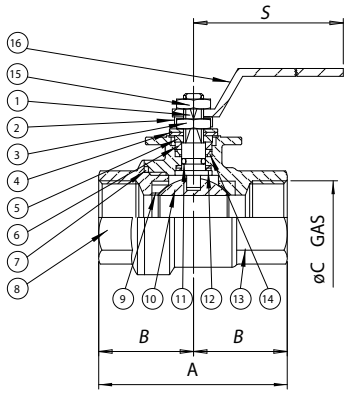
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 25 bar | | | | | | | | 76 | 106 | 146 |
| PN 40 bar | | | | | | | 56 | | | |
| PN 64 bar | | | | | 28 | 40 | | | | |
| PN 100 bar | 8 | 10 | 14 | 20 | | | | | | |

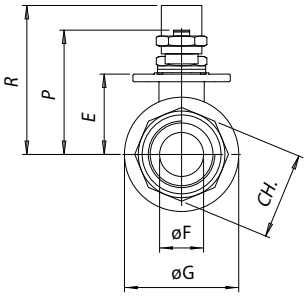
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

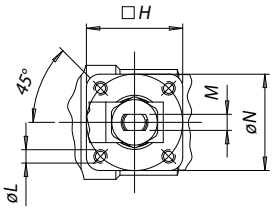
*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 400-401
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

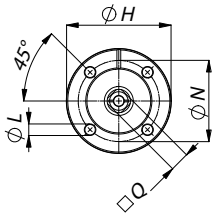
| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero -sabbiata *Free shaft -sand blasted* | → ATEX | Asse libero -lucidata *Free shaft -polished* | → ATEX | Kg | Con leva -sabbiata *With lever -sand blasted* | → ATEX | Con leva -lucidata *With lever -polished* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V400H203 | - | V401H203 | - | 0,24 | L400H203 | - | L401H203 | - | 0,31 | KGBV5003 |
| DN 15 | 1/2" | V400H204 | - | V401H204 | - | 0,32 | L400H204 | - | L401H204 | - | 0,39 | KGBV5004 |
| DN 20 | 3/4" | V400H205 | V400H205YX | V401H205 | V401H205YX | 0,51 | L400H205 | L400H205YX | L401H205 | L401H205YX | 0,58 | KGBV5005 |
| DN 25 | 1" | V400H206 | V400H206YX | V401H206 | V401H206YX | 0,77 | L400H206 | L400H206YX | L401H206 | L401H206YX | 0,87 | KGBV5006 |
| DN 32 | 1" 1/4 | V400H207 | V400H207YX | V401H207 | V401H207YX | 1,27 | L400H207 | L400H207YX | L401H207 | L401H207YX | 1,37 | KGBV5007 |
| DN 40 | 1" 1/2 | V400H208 | V400H208YX | V401H208 | V401H208YX | 1,81 | L400H208 | L400H208YX | L401H208 | L401H208YX | 2,01 | KGBV5008 |
| DN 50 | 2" | V400H209 | V400H209YX | V401H209 | V401H209YX | 3,2 | L400H209 | L400H209YX | L401H209 | L401H209YX | 3,4 | KGBV5009 |
| DN 65 | 2" 1/2 | - | - | V419H410 | V419H410YX | 5,47 | - | - | L419H410 | L419H410YX | 5,67 | KGBV5010 |
| DN 80 | 3" | - | - | V419H411 | V419H411YX | 8,92 | - | - | L419H411 | L419H411YX | 9,22 | KGBV5011 |
| DN 100 | 4" | - | - | V419H412G | V419H412GYX | 15,9 | - | - | L419H412 | L419H412YX | 16,4 | KGBV5012 |




Per le versioni 2"1/2 ÷ 4":
*2"1/2 ÷ 4" only:*




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 2 | Piastra bloccadado *Nut holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Dado di bloccaggio *Lock nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 4 | Molla a tazza *Belleville washer* | 301 S.S. | 1.4310 | UNI X12CrNi 17 07 |
| 5 | Distanziale *Washer* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 6 | Anello premiguarnizione *Gland nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 7* | Guarnizione statica *Static ring* | P.T.F.E. | | |
| 8 | Manicotto femmina *End* | 316 S.S. | 1.4408 | |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10 | Sfera *Ball* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 11* | O-ring di tenuta intermedia *O-ring* | FKM | | |
| 12* | Anello di tenuta inferiore *Bottom tight ring* | P.T.F.E. | | |
| 13 | Corpo con manicotto femmina *Body with female end* | 316 S.S. | 1.4408 | |
| 14* | Coppia di tenuta superiore *Top sealing* | P.T.F.E. | | |
| 15 | Dado blocca leva *Lever nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 16 | Leva di manovra *Lever* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV50...

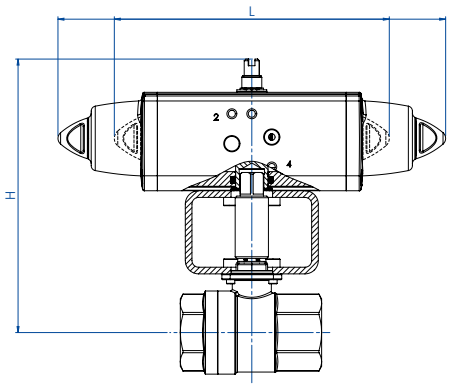
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | øC | E | øF | øG | H | øL | M | □Q | øN | CH | P | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 55 | 25 | 3/8" | 22 | 10 | 29 | 36 | M5 | 4 | - | 36 | 21,5 | 37,5 | 52 | 110 |
| DN 15 | 1/2" | 65 | 30 | 1/2" | 24,8 | 15 | 34 | 36 | M5 | 4 | - | 36 | 26,5 | 40,3 | 55 | 110 |
| DN 20 | 3/4" | 70 | 35 | 3/4 | 31,3 | 20 | 42,5 | 36 | M5 | 6 | - | 36 | 31,5 | 50,8 | 66 | 140 |
| DN 25 | 1" | 85 | 42,5 | 1" | 35,3 | 25 | 50,5 | 36 | M5 | 6 | - | 36 | 40,5 | 54,8 | 70 | 140 |
| DN 32 | 1" 1/4 | 95 | 47,5 | 1"1/4 | 44 | 32 | 63 | 42 | M5 | 8 | - | 42 | 49,5 | 68 | 85 | 180 |
| DN 40 | 1" 1/2 | 105 | 52,5 | 1"1/2 | 50,3 | 40 | 75,5 | 42 | M5 | 8 | - | 42 | 54,5 | 74,3 | 91 | 180 |
| DN 50 | 2" | 125 | 62,5 | 2" | 57,9 | 50 | 91 | 50 | M6 | 10 | - | 50 | 69,5 | 87 | 105 | 230 |
| DN 65 | 2" 1/2 | 128 | 64 | 2"1/2 | 94,5 | 65 | 110 | 90 | 9 | - | 17 | 70 | - | 109,5 | 110 | 235 |
| DN 80 | 3" | 150 | 75 | 3" | 106 | 80 | 141 | 90 | 9 | - | 17 | 70 | - | 121 | 130 | 285 |
| DN 100 | 4" | 178 | 89 | 4" | 120 | 100 | 160 | 120 | 11 | - | 17 | 102 | - | 135 | 150 | 310 |

# ITEM 400-401
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | DG40*H003 | DAN0015411S | KCNAAHD5261 | 159,0 | 144,2 | 1,5 | - |
| DN 15 | 1/2" | DG40*H004 | DAN0015411S | KCNAAHD5261 | 159,0 | 147,0 | 1,5 | - |
| DN 20 | 3/4" | DG40*H005 | DAN0030411S | KCNAAHD5262 | 174,2 | 160,5 | 2,0 | DG40*H005YX |
| DN 25 | 1" | DG40*H006 | DAN0030411S | KCNAAHD5262 | 174,2 | 160,5 | 2,3 | DG40*H006YX |
| DN 32 | 1" 1/4 | DG40*H007 | DAN0045412S | KCNBCHD5264 | 188,5 | 188,5 | 3,3 | DG40*H007YX |
| DN 40 | 1" 1/2 | DG40*H008 | DAN0060412S | KCNBCHD5266 | 198,0 | 200,7 | 4,3 | DG40*H008YX |
| DN 50 | 2" | DG40*H009 | DAN0106411S | KCNCCHD5605 | 237,0 | 221,2 | 6,7 | DG40*H009YX |
| DN 65 | 2" 1/2 | DG419H010 | DAN0120411S | KCF075269 | 244,1 | 197,8 | 8,3 | DG419H010YX |
| DN 80 | 3" | DG419H011 | DAN0180411S | KCF102624 | 289,9 | 243,5 | 13,8 | DG419H011YX |
| DN 100 | 4" | DG419H012 | DAN0240411S | KCF105271 | 313,6 | 261,1 | 21,8 | DG419H012YX |

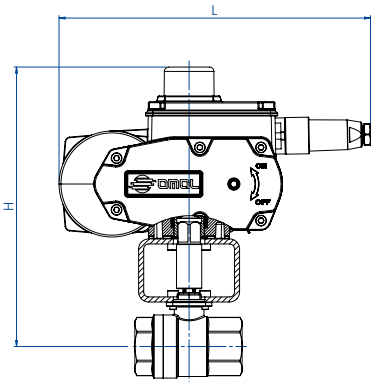
### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | SG40*H003 | SRN0015401S | KCNAAHD5261 | 233,2 | 151,2 | 1,9 | --- |
| DN 15 | 1/2" | SG40*H004 | SRN0015401S | KCNAAHD5261 | 233,2 | 154,0 | 2,0 | --- |
| DN 20 | 3/4" | SG40*H005 | SRN0030402S | KCNACHD5263 | 258,8 | 181,7 | 3,2 | SG40*H005YX |
| DN 25 | 1" | SG40*H006 | SRN0030402S | KCNACHD5263 | 258,8 | 185,7 | 3,4 | SG40*H006YX |
| DN 32 | 1" 1/4 | SG40*H007 | SRN0053401S | KCNBCHD5265 | 304,2 | 207,3 | 5,2 | SG40*H007YX |
| DN 40 | 1" 1/2 | SG40*H008 | SRN0060401S | KCNBCHD5265 | 338,5 | 217,3 | 6,2 | SG40*H008YX |
| DN 50 | 2" | SG40*H009 | SRN0090401S | KCNCDHD5606 | 393,7 | 255,4 | 10,4 | SG40*H009YX |
| DN 65 | 2" 1/2 | SG419H010 | SRN0120401S | KCF102624 | 409,6 | 235,6 | 12,5 | SG419H010YX |
| DN 80 | 3" | SG419H011 | SRN0180401S | KCF102624 | 474,0 | 254,0 | 18,1 | SG419H011YX |
| DN 100 | 4" | SG419H012 | SRN0240401S | KCF125272 | 520,5 | 285,0 | 28,2 | SG419H012YX |

* = 0 valvola esterno sabbiato (articolo 400); *sand blasted valve (item 400)* * = 1 valvola esterno lucidato (articolo 401); *polished valve (item 401)*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*






### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | C40*A5E03 | EA0035A5C000 | KCNACHD5422 | 250,0 | 219,0 | 4,5 |
| DN 15 | 1/2" | C40*A5E04 | EA0035A5C000 | KCNACHD5422 | 250,0 | 221,8 | 4,6 |
| DN 20 | 3/4" | C40*A5E05 | EA0035A5C000 | KCNACHD5263 | 250,0 | 228,3 | 4,8 |
| DN 25 | 1" | C40*A5E06 | EA0035A5C000 | KCNACHD5263 | 250,0 | 232,3 | 5,1 |
| DN 32 | 1" 1/4 | C40*A5E07 | EA0035A5C000 | KCNBCHD5266 | 250,0 | 241,0 | 5,7 |
| DN 40 | 1" 1/2 | C40*A5G08 | EA0070A5C000 | KCNBCHD5266 | 250,0 | 247,3 | 6,5 |
| DN 50 | 2" | C40*A5I09 | EA0130A5C000 | KCNCCHD5605 | 280,0 | 254,9 | 11,4 |
| DN 65 | 2" 1/2 | C419A5I10 | EA0130A5C000 | KCF075269 | 280,0 | 252,0 | 12,9 |
| DN 80 | 3" | C419A5K11 | EA0240A5C000 | KCF102624 | 280,0 | 263,5 | 16,7 |
| DN 100 | 4" | CG419A5K12 | EA0240A5C000 | KCF105271 | 280,0 | 277,5 | 23,9 |

### CON ATTUATORE ELETTRICO MODULANTE (230 VAC) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | M40*16C03 | AM160002 | KCNACHD5422 | 165,8 | 201,5 | 4,0 |
| DN 15 | 1/2" | M40*16C04 | AM160002 | KCNACHD5422 | 165,8 | 204,5 | 4,1 |
| DN 20 | 3/4" | M40*16F05 | AM160005 | KCNACHV5423 | 207,5 | 254,8 | 6,0 |
| DN 25 | 1" | M40*16F06 | AM160005 | KCNACHV5423 | 207,5 | 258,8 | 6,3 |
| DN 32 | 1" 1/4 | M40*16F07 | AM160005 | KCNBCHV5424 | 207,5 | 267,5 | 6,8 |
| DN 40 | 1" 1/2 | M40*16L08 | AM160020 | KCNBDHV5425 | 256,5 | 295,3 | 12,1 |
| DN 50 | 2" | M40*16L09 | AM160020 | KCNCDHV5426 | 256,5 | 322,9 | 13,5 |
| DN 65 | 2" 1/2 | M41916L10 | AM160020 | KCE362092 | 256,5 | 279,5 | 14,4 |
| DN 80 | 3" | M41916L11 | AM160020 | KCE362092 | 256,5 | 291,0 | 17,9 |
| DN 100 | 4" | MG41916L12 | AM160020 | KCE365427 | 256,5 | 305,0 | 25,1 |

* = 0 valvola esterno sabbiato (articolo 400); *sand blasted valve (item 400)* * = 1 valvola esterno lucidato (articolo 401); *polished valve (item 401)*

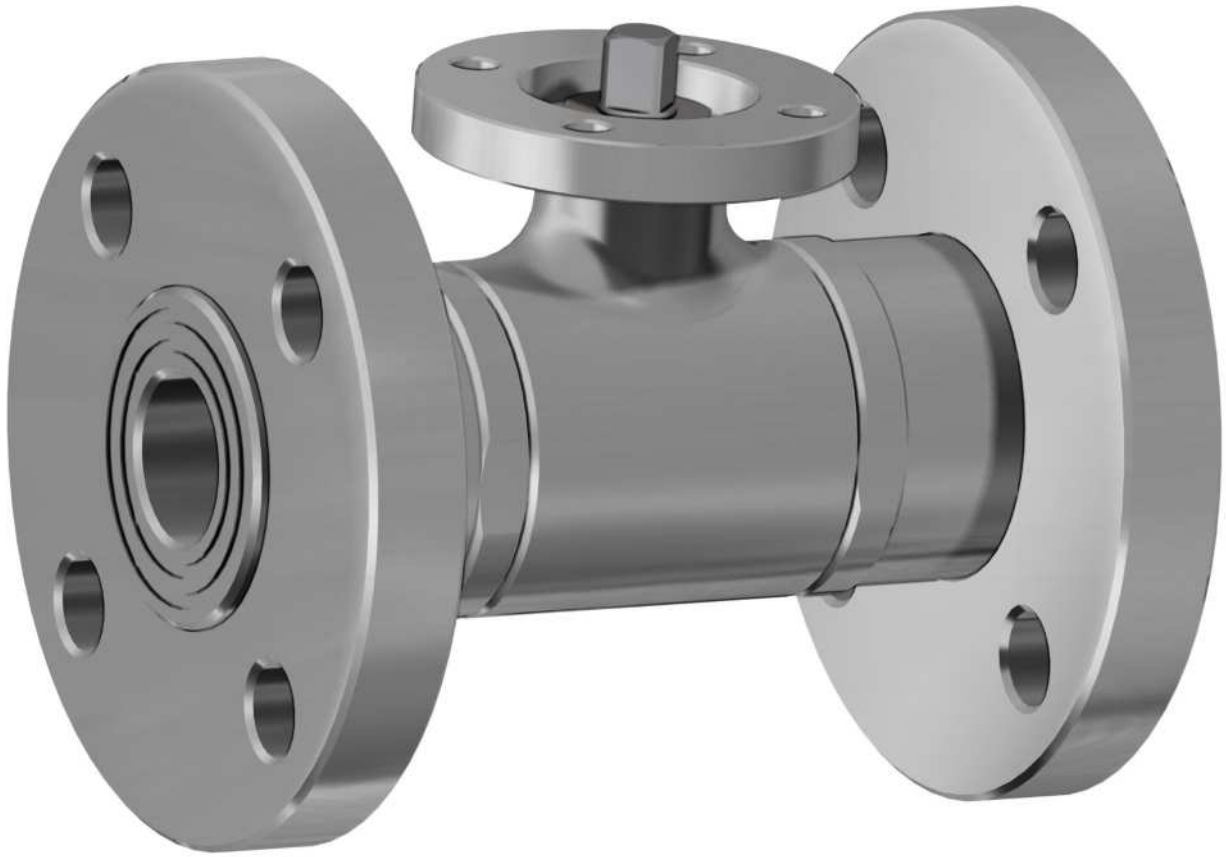
Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

# ITEM 406

## VALVOLA A SFERA IN ACCIAIO INOX DUE VIE FLANGIATA PASSAGGIO INTEGRALE.

## *2-WAY FULL-BORE FLANGED STAINLESS STEEL BALL VALVE.*



**CARATTERISTICHE GENERALI:**
- La valvola é costruita in 316L acciaio inox.
- Norme per flange d'attacco: EN 1092-1; dimensione faccia-faccia DIN 3202-F4; flange filettate girevoli UNI PN 16.
- Temperatura di utilizzo: da -20°C a +150°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: per usi alimentari.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

***GENERAL FEATURES:***
- *The valve is manufactured in 316L stainless steel.*
- *Flanges as per:* EN 1092-1*; dimensions as per DIN 3202-F4; turning threaded flanges as per UNI PN 16.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see table.*
- *Fluid range: food industry.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

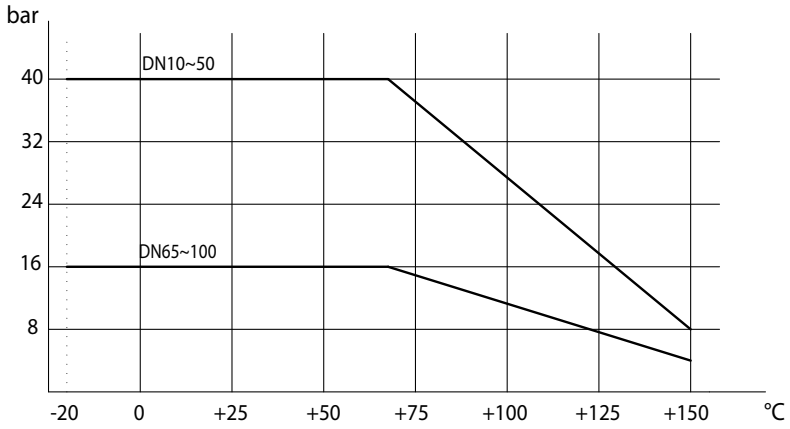
**ESECUZIONI SPECIALI A RICHIESTA:**
- Flange in acciaio zincato.
- Flange ASME B16.5 classe 150,300.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene ad alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Zinc plated flanges.*
- *Flanges* ASME B16.5 class 150,300.
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

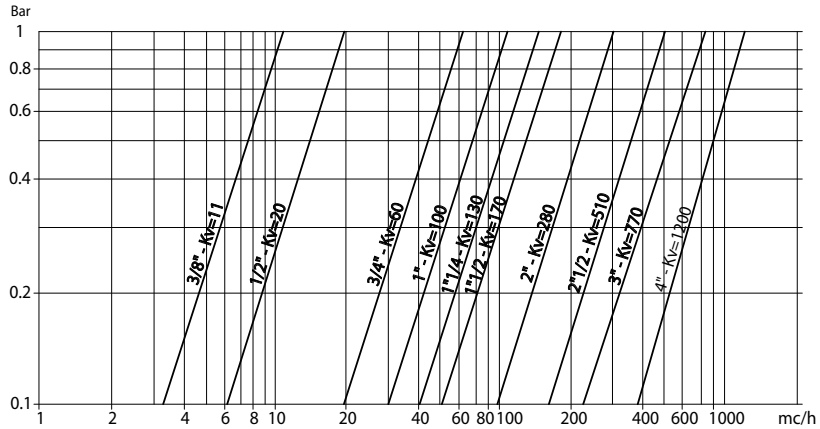
**CERTIFICAZIONI:**
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

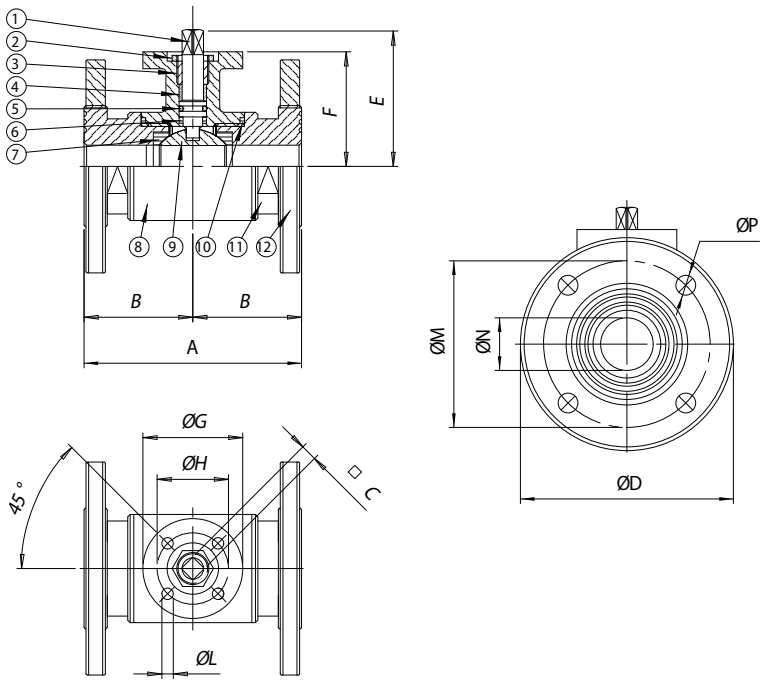
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | | 70 | 112 | 166 |
| PN 40 bar | 6 | 8 | 11 | 16 | 22 | 30 | 42 | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 406
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V406H603 | V406H603YX | 1,6 | L406H603 | L406H603YX | 1,6 | KGBV7503 |
| DN 15 | 1/2" | V406H604 | V406H604YX | 1,8 | L406H604 | L406H604YX | 1,8 | KGBV7504 |
| DN 20 | 3/4" | V406H605 | V406H605YX | 2,5 | L406H605 | L406H605YX | 2,6 | KGBV7505 |
| DN 25 | 1" | V406H606 | V406H606YX | 3,5 | L406H606 | L406H606YX | 3,5 | KGBV7506 |
| DN 32 | 1" 1/4 | V406H607 | V406H607YX | 5,0 | L406H607 | L406H607YX | 5,1 | KGBV7507 |
| DN 40 | 1" 1/2 | V406H608 | V406H608YX | 6,4 | L406H608 | L406H608YX | 6,5 | KGBV7508 |
| DN 50 | 2" | V406H609 | V406H609YX | 8,9 | L406H609 | L406H609YX | 8,9 | KGBV7509 |
| DN 65 | 2" 1/2 | V406H610 | V406H610YX | 14,0 | L406H610 | L406H610YX | 13,0 | KGBV7510 |
| DN 80 | 3" | V406H611 | V406H611YX | 16,1 | L406H611 | L406H611YX | 16,1 | KGBV7511 |
| DN 100 | 4" | V406H612G | V406H612GYX | 22,5 | L406H612 | L406H612YX | 22,7 | KGBV7512 |




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado di bloccaggio *Lock nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304L S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 10* | Guarnizioni di tenuta manicotti *Threaded sealing* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 12 | Flangia *Flange* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

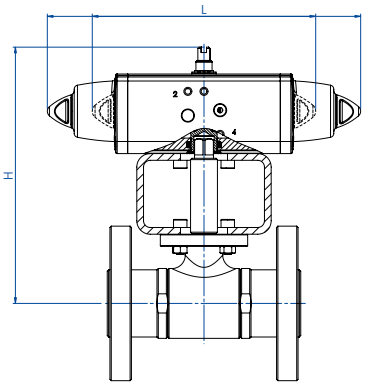
* Particolari del kit di ricambio *Components of spare part kit* KGBV75...

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | øD | E | F | øG | øH | øL | øM | øN | n°xøP |
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 10 | 3/8" | 110 | 55 | 6 | 90 | 47 | 39 | 46 | 36 | 6 | 60 | 10 | 4x14 |
| DN 15 | 1/2" | 115 | 57,5 | 6 | 95 | 49,5 | 41,5 | 46 | 36 | 6 | 65 | 15 | 4x14 |
| DN 20 | 3/4" | 120 | 60 | 6 | 105 | 53 | 45 | 46 | 36 | 6 | 75 | 20 | 4x14 |
| DN 25 | 1" | 125 | 62,5 | 9 | 115 | 64,5 | 51,5 | 65 | 50 | 7 | 85 | 25 | 4x14 |
| DN 32 | 1" 1/4 | 130 | 65 | 9 | 140 | 69,5 | 56,5 | 65 | 50 | 7 | 100 | 32 | 4x18 |
| DN 40 | 1" 1/2 | 140 | 70 | 14 | 150 | 89 | 76 | 65 | 50 | 7 | 110 | 40 | 4x18 |
| DN 50 | 2" | 150 | 75 | 14 | 165 | 97 | 84 | 65 | 50 | 7 | 125 | 50 | 4x18 |
| DN 65 | 2" 1/2 | 170 | 85 | 17 | 185 | 109,5 | 94,5 | 90 | 70 | 9 | 145 | 65 | 4x18 |
| DN 80 | 3" | 180 | 90 | 17 | 200 | 121 | 106 | 90 | 70 | 9 | 160 | 80 | 8x18 |
| DN 100 | 4" | 190 | 95 | 17 | 220 | 138 | 120 | 125 | 102 | 11 | 180 | 100 | 8x18 |

# ITEM 406
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | DG406H063 | DAN0015411S | KCNAADD5274 | 159,0 | 161,2 | 2,9 | DG406H063YX |
| DN 15 | 1/2" | DG406H064 | DAN0015411S | KCNAADD5274 | 159,0 | 163,7 | 3,0 | DG406H064YX |
| DN 20 | 3/4" | DG406H065 | DAN0015411S | KCNAADD5274 | 159,0 | 167,2 | 3,9 | DG406H065YX |
| DN 25 | 1" | DG406H066 | DAN0030411S | KCNCCDD5275 | 174,2 | 190,7 | 5,2 | DG406H066YX |
| DN 32 | 1" 1/4 | DG406H067 | DAN0030411S | KCNCCDD5275 | 174,2 | 195,7 | 6,9 | DG406H067YX |
| DN 40 | 1" 1/2 | DG406H068 | DAN0045412S | KCNCCDD5277 | 188,5 | 220,5 | 9,1 | DG406H068YX |
| DN 50 | 2" | DG406H069 | DAN0060412S | KCNCCDD5279 | 198,0 | 234,4 | 12,1 | DG406H069YX |
| DN 65 | 2" 1/2 | DG406H070 | DAN0120411S | KCNDDDD5280 | 244,1 | 261,5 | 18,7 | DG406H070YX |
| DN 80 | 3" | DG406H071 | DAN0180411S | KCNDDDD5281 | 289,9 | 303,5 | 23,3 | DG406H071YX |
| DN 100 | 4" | DG406H072 | DAN0240411S | KCNEEDD5282 | 313,6 | 341,1 | 30,7 | DG406H072YX |

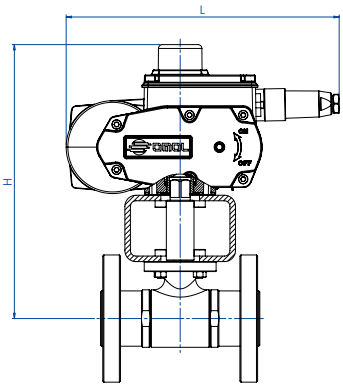
### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | SG406H063 | SRN0015401S | KCNAADD5274 | 233,2 | 168,2 | 3,4 | SG406H063YX |
| DN 15 | 1/2" | SG406H064 | SRN0015401S | KCNAADD5274 | 233,2 | 170,7 | 3,5 | SG406H064YX |
| DN 20 | 3/4" | SG406H065 | SRN0015401S | KCNAADD5274 | 233,2 | 174,2 | 4,4 | SG406H065YX |
| DN 25 | 1" | SG406H066 | SRN0030402S | KCNCCDD5276 | 258,8 | 201,9 | 6,2 | SG406H066YX |
| DN 32 | 1" 1/4 | SG406H067 | SRN0030402S | KCNCCDD5276 | 258,8 | 2062,9 | 7,9 | SG406H067YX |
| DN 40 | 1" 1/2 | SG406H068 | SRN0053401S | KCNCCDD5278 | 304,2 | 239,3 | 10,9 | SG406H068YX |
| DN 50 | 2" | SG406H069 | SRN0060401S | KCNCCDD5278 | 338,5 | 251,0 | 13,9 | SG406H069YX |
| DN 65 | 2" 1/2 | SG406H070 | SRN0120401S | KCNDDDD5281 | 409,6 | 295,6 | 22,9 | SG406H070YX |
| DN 80 | 3" | SG406H071 | SRN0180401S | KCNDDDD5281 | 474,0 | 314,0 | 27,6 | SG406H071YX |
| DN 100 | 4" | SG406H072 | SRN0240401S | KCNEEDD5283 | 520,5 | 365,0 | 37,1 | SG406H072YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*








### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | C406A5E63 | EA0035A5C000 | KCNACDD5428 | 250,0 | 236,0 | 5,9 |
| DN 15 | 1/2" | C406A5E64 | EA0035A5C000 | KCNACDD5428 | 250,0 | 238,5 | 6,1 |
| DN 20 | 3/4" | C406A5E65 | EA0035A5C000 | KCNACDD5428 | 250,0 | 242,0 | 7,0 |
| DN 25 | 1" | C406A5E66 | EA0035A5C000 | KCNCCDD5276 | 250,0 | 248,5 | 7,9 |
| DN 32 | 1" 1/4 | C406A5E67 | EA0035A5C000 | KCNCCDD5276 | 250,0 | 253,5 | 10,3 |
| DN 40 | 1" 1/2 | C406A5G68 | EA0070A5C000 | KCNCCDD5279 | 250,0 | 273,0 | 11,7 |
| DN 50 | 2" | C406A5G69 | EA0070A5C000 | KCNCCDD5279 | 250,0 | 281,0 | 14,3 |
| DN 65 | 2" 1/2 | C406A5I70 | EA0130A5C000 | KCNDDDD5280 | 280,0 | 312,0 | 23,3 |
| DN 80 | 3" | C406A5I71 | EA0130A5C000 | KCNDDDD5280 | 280,0 | 323,5 | 25,6 |
| DN 100 | 4" | CG406A5K72 | EA0240A5C000 | KCNEEDD5282 | 280,0 | 357,5 | 32,8 |

### CON ATTUATORE ELETTRICO MODULANTE (230 VAC) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | M40616C63 | AM160002 | KCNACDD5428 | 165,8 | 218,5 | 5,4 |
| DN 15 | 1/2" | M40616C64 | AM160002 | KCNACDD5428 | 165,8 | 221,0 | 5,6 |
| DN 20 | 3/4" | M40616C65 | AM160002 | KCNACDD5428 | 165,8 | 224,5 | 6,5 |
| DN 25 | 1" | M40616F66 | AM160005 | KCNCCDV5429 | 207,5 | 275,0 | 9,1 |
| DN 32 | 1" 1/4 | M40616F67 | AM160005 | KCNCCDV5429 | 207,5 | 279,5 | 11,5 |
| DN 40 | 1" 1/2 | M40616F68 | AM160005 | KCNCCDV5430 | 207,5 | 299,5 | 12,7 |
| DN 50 | 2" | M40616L69 | AM160020 | KCNCCDV5431 | 256,5 | 329,0 | 20,0 |
| DN 65 | 2" 1/2 | M40616L70 | AM160020 | KCNDDDV5432 | 256,5 | 339,5 | 25,5 |
| DN 80 | 3" | M40616L71 | AM160020 | KCNDDDV5432 | 256,5 | 351,0 | 27,7 |
| DN 100 | 4" | MG40616L72 | AM160020 | KCNEEDV5433 | 256,5 | 384,7 | 34,3 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*
Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

# ITEM 420

## VALVOLA A SFERA IN 3 PEZZI IN ACCIAIO INOX 2 VIE FILETTATA O DA SALDARE - PASSAGGIO INTEGRALE.

*2-WAY FULL-BORE THREE PIECE STAINLESS STEEL BALL VALVE, THREADED-ENDS OR BUTT WELD.*



**CARATTERISTICHE GENERALI:**

- La valvola é costruita in 316L acciaio inox.
- Costruita in 3 pezzi per facilitare l'intervento su impianti ad alta frequenza di manutenzione.
- Estremità: filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1); saldare di tasca; saldare di testa.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi diagramma.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

***GENERAL FEATURES:***

- *The valve is manufactured in 316L stainless steel.*
- *Manufactured in three pieces to facilitate replacement on plants which requires frequent maintenance.*
- *Ends: female threads as per EN 10226-1 Rp (Ex ISO 7/1); socket welding; butt welding.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see diagram.*
- *Fluid range: air, water, gas, petroleum and petrochemical products, aggressive media.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

**ESECUZIONI SPECIALI A RICHIESTA:**

- Filettatura: NPT.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***

- *Threaded: NPT.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite.*
- *For other applications, please contact our sales department.*

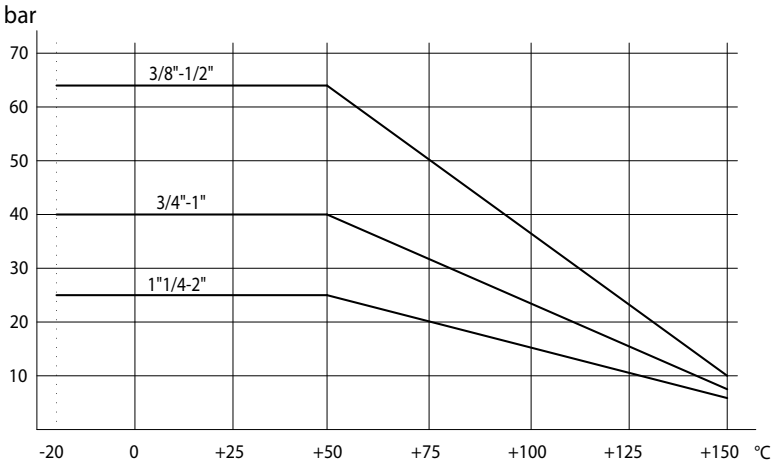
**CERTIFICAZIONI:**

- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

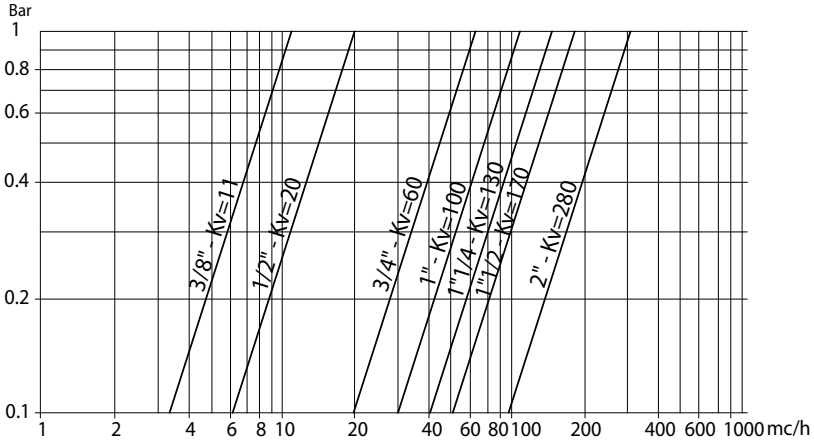
***CERTIFICATIONS:***

- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** |
| PN 25 bar | | | | | 20 | 29 | 40 |
| PN 40 bar | | | 10 | 14 | | | |
| PN 63 bar | 7 | 8 | | | | | |

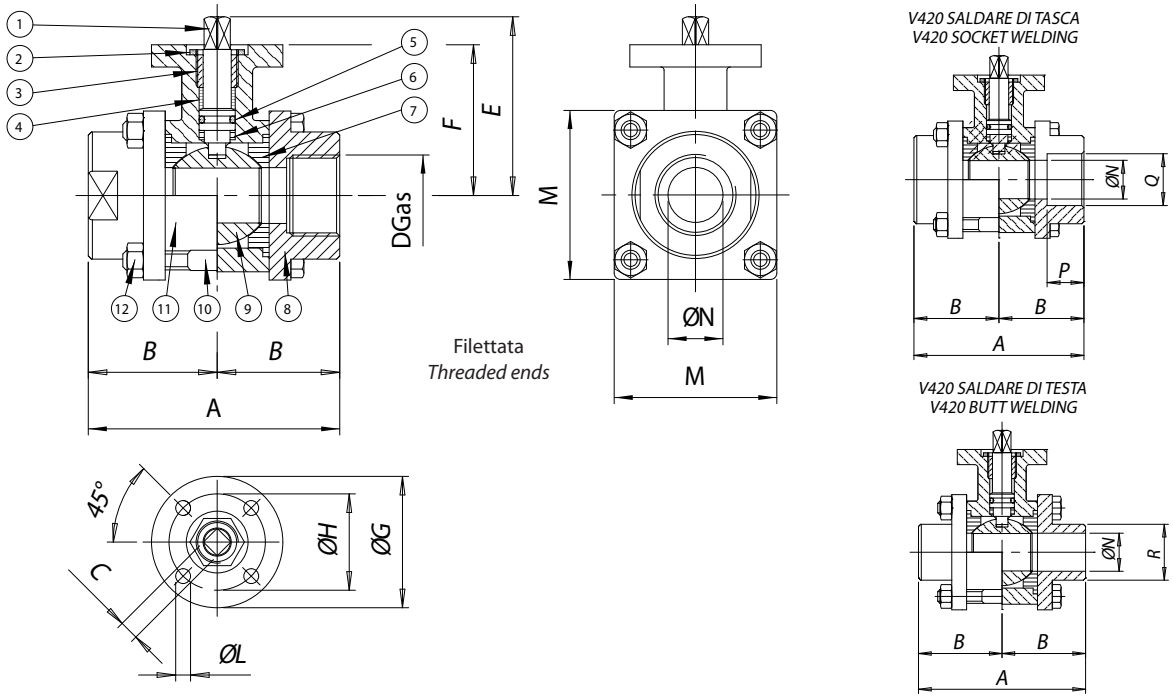
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 420
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V420H * 3 | V420H * 3YX | 0,49 | L420H * 3 | L420H * 3YX | 0,59 | KGBV5503 |
| DN 15 | 1/2" | V420H * 4 | V420H * 4YX | 0,46 | L420H * 4 | L420H * 4YX | 0,56 | KGBV5504 |
| DN 20 | 3/4" | V420H * 5 | V420H * 5YX | 0,65 | L420H * 5 | L420H * 5YX | 0,75 | KGBV5505 |
| DN 25 | 1" | V420H * 6 | V420H * 6YX | 1,23 | L420H * 6 | L420H * 6YX | 1,38 | KGBV5506 |
| DN 32 | 1" 1/4 | V420H * 7 | V420H * 7YX | 1,67 | L420H * 7 | L420H * 7YX | 1,82 | KGBV5507 |
| DN 40 | 1" 1/2 | V420H * 8 | V420H * 8YX | 2,48 | L420H * 8 | L420H * 8YX | 2,68 | KGBV5508 |
| DN 50 | 2" | V420H * 9 | V420H * 9YX | 3,7 | L420H * 9 | L420H * 9YX | 3,9 | KGBV5509 |

* = 40 valvola filettata; * = *40 threaded ends* * = 75 valvola a saldare di tasca; * = *75 socket welding* * = 77 valvola da saldare di testa; * = *77 butt welding*



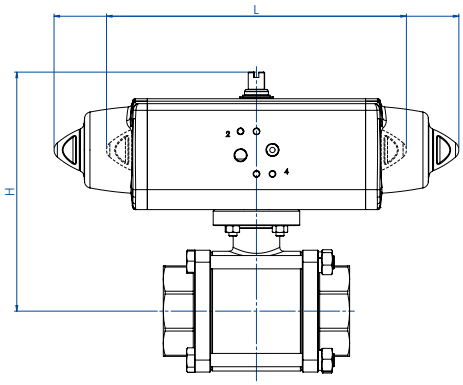

| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Controdado *Nut* | 303 S.S. | | |
| 3 | Ghiera di registro *Ring nut* | 304L S.S. (303 S.S.) | | |
| 4* | Guarnizione perno *Shaft seal* | P.T.F.E. | | |
| 5* | O-ring perno *Shaft o-ring* | FKM | | |
| 6* | Guarnizione perno *Shaft seal* | P.T.F.E. | | |
| 7* | Guarnizione sfera *Ball seal* | P.T.F.E. | | |
| 8 | Flangia *Flange* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 10 | Viti *Screws* | 303 S.S. | | |
| 11 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 12 | Dado *Nut* | 303 S.S. | | |
| * Particolari del kit di ricambio *Components of spare part kit* KGBV55... | | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | D | E | F | øG | øH | øL | □M | øN | Q | P | R |
| DN [mm] | [inch] | | | | | | | | | | | | | | |
| DN 10 | 3/8" | 70 | 35 | 6 | 3/8" | 49,5 | 41,5 | 46 | 36 | 6 | 40 | 10 | 17,8 | 9,7 | 18 |
| DN 15 | 1/2" | 70 | 35 | 6 | 1/2" | 49,5 | 41,5 | 46 | 36 | 6 | 40 | 15 | 22 | 9,7 | 22,5 |
| DN 20 | 3/4" | 80 | 40 | 6 | 3/4" | 53 | 45 | 46 | 36 | 6 | 45 | 20 | 27,3 | 12,7 | 28 |
| DN 25 | 1" | 90 | 45 | 9 | 1" | 64,5 | 51,5 | 65 | 50 | 7 | 60 | 25 | 42,8 | 12,7 | 34,5 |
| DN 32 | 1" 1/4 | 100 | 50 | 9 | 1" 1/4 | 69,5 | 56,5 | 65 | 50 | 7 | 70 | 32 | 42,8 | 12,7 | 43,5 |
| DN 40 | 1" 1/2 | 114 | 57 | 14 | 1" 1/2 | 89 | 76 | 65 | 50 | 7 | 80 | 40 | 48,9 | 12,7 | 49,5 |
| DN 50 | 2" | 136 | 68 | 14 | 2" | 95 | 82 | 65 | 50 | 7 | 90 | 50 | 61,4 | 15,8 | 61,5 |

# ITEM 420
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG420H0*3 | DAN0015411S | KCF045293 | 159,0 | 113,3 | 1,3 | DG420H0*3YX |
| DN 15 | 1/2" | DG420H0*4 | DAN0015411S | KCF045293 | 159,0 | 113,3 | 1,3 | DG420H0*4YX |
| DN 20 | 3/4" | DG420H0*5 | DAN0015411S | KCF045293 | 159,0 | 116,8 | 1,4 | DG420H0*5YX |
| DN 25 | 1" | DG420H0*6 | DAN0030411S | KCF045294 | 174,2 | 130,3 | 2,6 | DG420H0*6YX |
| DN 32 | 1" 1/4 | DG420H0*7 | DAN0030411S | KCF045294 | 174,2 | 135,3 | 2,9 | DG420H0*7YX |
| DN 40 | 1" 1/2 | DG420H0*8 | DAN0060412S | KCF055296 | 198,0 | 161,3 | 4,4 | DG420H0*8YX |
| DN 50 | 2" | DG420H0*9 | DAN0060412S | KCF055296 | 198,0 | 174,0 | 5,8 | DG420H0*9YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG420H0*3 | SRN0015401S | KCF045293 | 233,2 | 120,3 | 1,7 | SG420H0*3YX |
| DN 15 | 1/2" | SG420H0*4 | SRN0015401S | KCF045293 | 233,2 | 120,3 | 1,7 | SG420H0*4YX |
| DN 20 | 3/4" | SG420H0*5 | SRN0015401S | KCF045293 | 233,2 | 123,8 | 1,9 | SG420H0*5YX |
| DN 25 | 1" | SG420H0*6 | SRN0030402S | KCF055295 | 258,8 | 141,5 | 3,3 | SG420H0*6YX |
| DN 32 | 1" 1/4 | SG420H0*7 | SRN0030402S | KCF055295 | 258,8 | 146,5 | 3,6 | SG420H0*7YX |
| DN 40 | 1" 1/2 | SG420H0*8 | SRN0053401S | KCF075297 | 304,2 | 178,8 | 6,0 | SG420H0*8YX |
| DN 50 | 2" | SG420H0*9 | SRN0060401S | KCF075297 | 338,5 | 190,6 | 7,3 | SG420H0*9YX |

* = 0 Valvola filettata (articolo DG420H00_) *Threaded ends (model DG420H00_);*
* = 8 Valvola a saldare di tasca (articolo DG420H08_) *Socket welding (model DG420H08_);*
* = 9 Valvola da saldare di testa (articolo DG420H09_) *Butt welding (model DG420H09_).*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 424

## VALVOLA A SFERA IN ACCIAIO INOX MICROFUSA IN 3 PEZZI 2 VIE FILETTATA O DA SALDARE PASSAGGIO INTEGRALE PN 63.

*2-WAY FULL-BORE THREE PIECE CASTED STAINLESS STEEL BALL VALVE THREADED-ENDS OR BUTT WELD - PN 63.*




### CARATTERISTICHE GENERALI:

- Costruita in 3 pezzi per facilitare l'intervento su impianti ad alta frequenza di manutenzione.
- Estremità: filettate femmina a norma EN 10226-1 Rp (Ex ISO 7/1); a saldare di testa; a saldare di tasca.
- Guarnizioni standard della sfera in PTFE vergine.
- Temperatura di utilizzo: da -20°C a + 180°C (vedi diagramma).
- Pressione di utilizzo: vedi diagramma.
- Fluido intercettato: aria, acqua, gas, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Testa della valvola a norma ISO 5211.
- Per versione con leva: sistema di lucchettaggio integrato.

### *GENERAL FEATURES:*

- *Manufactured in three pieces to facilitate replacement on plants which requires frequent maintenance.*
- *Ends: female threads as per EN 10226-1 Rp (Ex ISO 7/1); socket welding; butt welding.*
- *Standard seals: PTFE.*
- *Working temperature: from -20°C to +180°C (see diagram).*
- *Working pressure: see diagram.*
- *Fluid range: air, water, gas, petroleum and petrochemical products, aggressive media.*
- *Head of the valve as per ISO 5211 specifications.*
- *Integrated locking device for lever version.*

### ESECUZIONI SPECIALI A RICHIESTA:

- Guarnizioni di tenuta in: RPTFE (caricate vetro 15%);
  CTFE (caricate grafite 25%);
  TFM1600.
- Per altre applicazioni contattare il nostro ufficio commerciale.

### *ON REQUEST:*

- *Seals made of: RPTFE (15% glass filled);*
  *CTFE (25% carbon filled);*
  *TFM 1600.*
- *For other applications, please contact our sales department.*

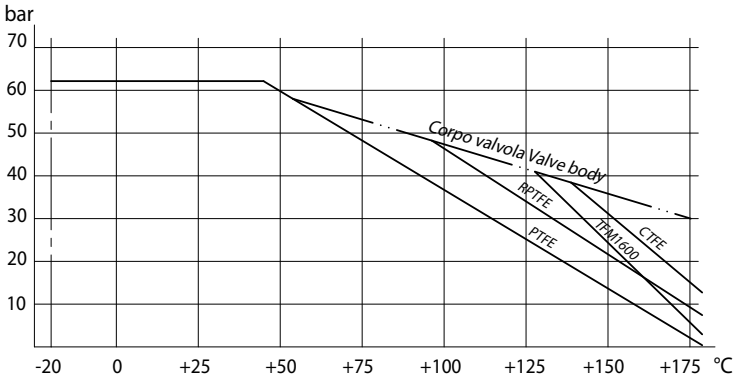
### CERTIFICAZIONI:

- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.
- Conforme alla Direttiva Europea 2014/68/UE PED.

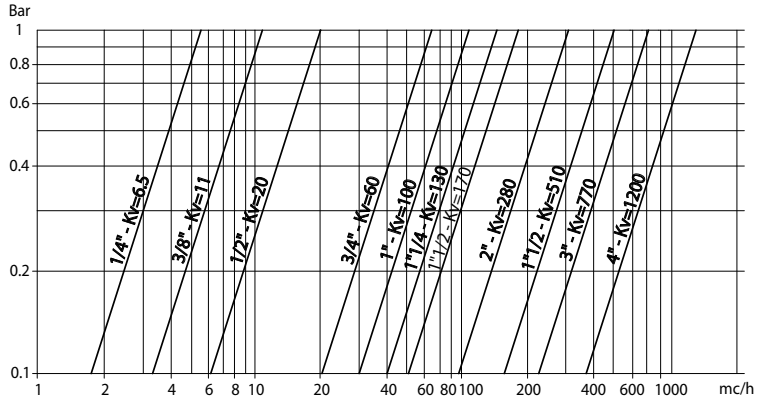
### *CERTIFICATIONS:*

- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*
- *In compliance with European Directive 2014/68/EU PED.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

STAINLESS STEEL BALL VALVES

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 8 1/4"** | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 63 bar | 6 | 7 | 8 | 10 | 14 | 20 | 29 | 42 | 85 | 146 | 235 |

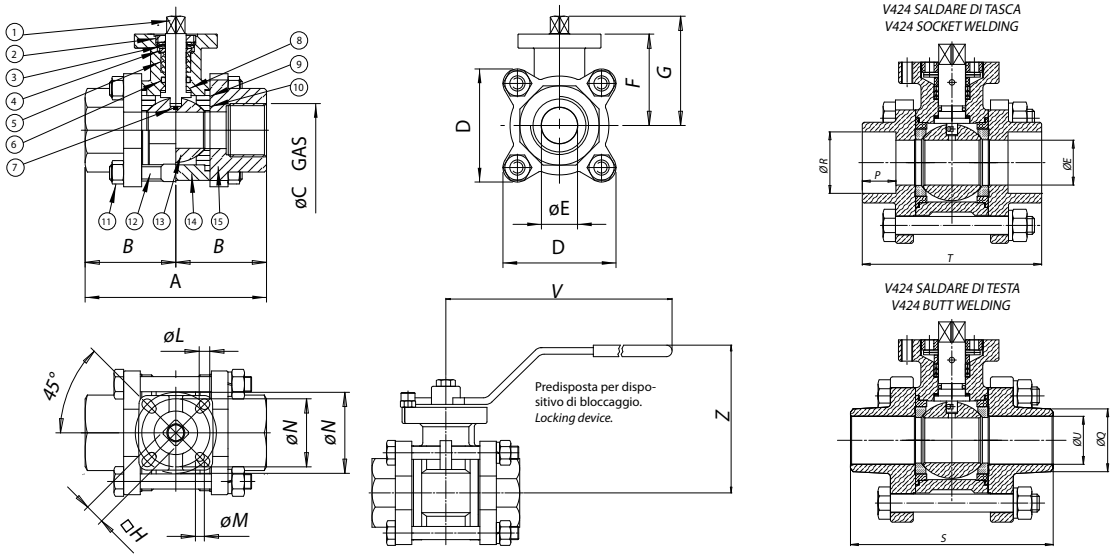
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 424
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kit leva *Lever kit* | Kit guarnizioni *Seals kit* |
| DN 08 | 1/4" | V424H * 2 | V424H * 2YX | 0,57 | L424H * 2 | L424H * 2YX | KLV42402 | KGBV6002 |
| DN 10 | 3/8" | V424H * 3 | V424H * 3YX | 0,57 | L424H * 3 | L424H * 3YX | KLV42402 | KGBV6003 |
| DN 15 | 1/2" | V424H * 4 | V424H * 4YX | 0,67 | L424H * 4 | L424H * 4YX | KLV42402 | KGBV6004 |
| DN 20 | 3/4" | V424H * 5 | V424H * 5YX | 0,93 | L424H * 5 | L424H * 5YX | KLV42402 | KGBV6005 |
| DN 25 | 1" | V424H * 6G | V424H * 6GYX | 1,5 | L424H * 6G | L424H * 6GYX | KLV42406 | KGBV6006 |
| DN 32 | 1" 1/4 | V424H * 7G | V424H * 7GYX | 1,9 | L424H * 7G | L424H * 7GYX | KLV42406 | KGBV6007 |
| DN 40 | 1" 1/2 | V424H * 8 | V424H * 8YX | 3,05 | L424H * 8 | L424H * 8YX | KLV42408 | KGBV6008 |
| DN 50 | 2" | V424H * 9G | V424H * 9GYX | 4,14 | L424H * 9G | L424H * 9GYX | KLV42408 | KGBV6009 |
| DN 65 | 2" 1/2 | V424H410G | V424H410GYX | 9,6 | L424H410G | L424H410GYX | KLV42410 | KGBV6010 |
| DN 80 | 3" | V424H411 | V424H411YX | 14 | L424H411 | L424H411YX | KLV42410 | KGBV6011 |
| DN 100 | 4" | V424H412 | V424H412YX | 22,5 | L424H412 | L424H412YX | KLV42412 | KGBV6012 |

* = 40 valvola filettata (DN 65-DN 100 solo filettata); * = *40 threaded ends (DN 65-DN 100 threaded ends only)*
* = 75 valvola a saldare di tasca; * = *75 socket welding* * = 77 valvola da saldare di testa; * = *77 butt welding*




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 2 | Dado premiguarnizione *Nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Molla a tazza *Belleville washer* | 301 S.S. | 1.4310 | UNI X12CrNi 17 07 |
| 4 | Anello premiguarnizione *Gland* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 5* | Guarnizione di tenuta stelo *V-ring stem packing* | P.T.F.E. | | |
| 6* | O-ring | FKM | | |
| 7 | Dispositivo antistatico *Antistatic device* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 8* | Guarnizione *Pyramidal stem seal* | P.T.F.E. | | |
| 9* | Centraggio guarnizione sfera *Body gasket* | P.T.F.E. | | |
| 10* | Guarnizione sfera *Seal* | P.T.F.E. | | |
| 11 | Dado *Nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 12 | Tirante *Bolt* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 13 | Sfera *Ball* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 14 | Corpo *Body* | 316 S.S. | 1.4408 | |
| 15 | Manicotto *End cap* | 316 S.S. | 1.4408 | |

* Particolari del kit di ricambio *Components of spare part kit* KGBV60...

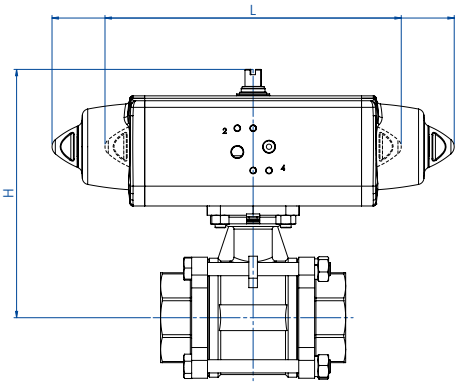
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | | | | | | | | | | | THREADED END | SOCKET WELDING END | | | BUTT WELDING END | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | A | B | ØE | D | F | G | □H | ØL | ØM | ØN | ØC | ØR | P | T | ØU | ØQ | S | V | Z |
| DN 08 | 1/4" | 65 | 32,5 | 11,2 | 48,8 | 42 | 49,5 | 9 | 6 | 6 | 36-42 | 1/4" | 14,3 | 13,0 | 65,0 | 10,4 | 14,8 | 70 | 150 | 78,0 |
| DN 10 | 3/8" | 65 | 32,5 | 12,6 | 48,8 | 42 | 49,5 | 9 | 6 | 6 | 36-42 | 3/8" | 17,7 | 13,0 | 65,0 | 13,7 | 18,5 | 70 | 150 | 78,0 |
| DN 15 | 1/2" | 75 | 37,5 | 15,0 | 48,8 | 42 | 49,5 | 9 | 6 | 6 | 36-42 | 1/2" | 22,0 | 16,0 | 75,0 | 15,0 | 21,0 | 75 | 150 | 78,0 |
| DN 20 | 3/4" | 80 | 40,0 | 20,0 | 50,3 | 45 | 53,5 | 9 | 6 | 6 | 36-42 | 3/4" | 27,5 | 16,0 | 80,0 | 21,4 | 28,3 | 90 | 150 | 82,5 |
| DN 25 | 1" | 90 | 45,0 | 25,0 | 64,0 | 52 | 62,7 | 11 | 7 | 6 | 42-50 | 1" | 34,3 | 17,0 | 90,0 | 27,2 | 35,5 | 100 | 200 | 91,5 |
| DN 32 | 1" 1/4 | 110 | 55,0 | 32,0 | 73,4 | 57 | 67,7 | 11 | 7 | 6 | 42-50 | 1" 1/4 | 43,0 | 20,0 | 110,0 | 35,5 | 43,7 | 110 | 200 | 95,5 |
| DN 40 | 1" 1/2 | 120 | 60,0 | 38,0 | 82,0 | 68 | 81,5 | 11 | 9 | 7 | 50-70 | 1" 1/2 | 49,0 | 20,0 | 120,0 | 41,2 | 50,0 | 125 | 250 | 112,0 |
| DN 50 | 2" | 140 | 70,0 | 50,8 | 94,3 | 77 | 91,0 | 14 | 9 | 7 | 50-70 | 2" | 61,4 | 22,0 | 140,0 | 52,7 | 63,0 | 150 | 250 | 118,5 |
| DN 65 | 2"1/2 | 185 | 92,5 | 65,0 | 165,0 | 100 | 117 | 17 | 11 | 9 | 70-102 | 2" 1/2 | 77,2 | 33,0 | 185,0 | 65,3 | 77,2 | 190 | 300 | 140,0 |
| DN 80 | 3" | 205 | 102,5 | 80,0 | 190,0 | 111 | 127,7 | 17 | 11 | 9 | 70-102 | 3" | 90,0 | 34,3 | 205,0 | 79,5 | 89,8 | 220 | 300 | 151,0 |
| DN 100 | 4" | 240 | 120,0 | 100,0 | 240,0 | 138 | 159,8 | 22 | 13 | 11 | 102-125 | 4" | 115,4 | 41,0 | 240,0 | 102,3 | 115,4 | 270 | 400 | 178,0 |

# ITEM 424
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 8 | 1/4" | DG424H*2 | DAN0015411S | KCF042649 | 159,0 | 116,8 | 1,3 | DG424H*2YX |
| DN 10 | 3/8" | DG424H*3 | DAN0015411S | KCF042649 | 159,0 | 116,8 | 1,3 | DG424H*3YX |
| DN 15 | 1/2" | DG424H*4 | DAN0015411S | KCF042649 | 159,0 | 116,8 | 1,4 | DG424H*4YX |
| DN 20 | 3/4" | DG424H*5 | DAN0015411S | KCF042649 | 159,0 | 119,8 | 1,5 | DG424H*5YX |
| DN 25 | 1" | DG424H*6 | DAN0030411S | KCF042455 | 174,2 | 132,8 | 2,5 | DG424H*6YX |
| DN 32 | 1" 1/4 | DG424H*7 | DAN0030411S | KCF042455 | 174,2 | 137,8 | 2,9 | DG424H*7YX |
| DN 40 | 1" 1/2 | DG424H*8 | DAN0045412S | KCF042455 | 188,5 | 154,8 | 4,3 | DG424H*8YX |
| DN 50 | 2" | DG424H*9 | DAN0060412S | KCF052775 | 198,0 | 169,0 | 5,7 | DG424H*9YX |
| DN 65 | 2" 1/2 | DG424H410 | DAN0120411S | KCF052775 | 244,1 | 208,6 | 12,3 | DG424H410YX |
| DN 80 | 3" | DG424H411 | DAN0240411S | KCF102734 | 313,6 | 254,7 | 17,6 | DG424H411YX |
| DN 100 | 4" | DG424H412 | DAN0360411S | KCF105285 | 339,3 | 292,0 | 27,3 | DG424H412YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 8 | 1/4" | SG424H*2 | SRN0015401S | KCF042649 | 233,2 | 122,8 | 1,7 | SG424H*2YX |
| DN 10 | 3/8" | SG424H*3 | SRN0015401S | KCF042649 | 233,2 | 122,8 | 1,7 | SG424H*3YX |
| DN 15 | 1/2" | SG424H*4 | SRN0015401S | KCF042649 | 233,2 | 122,8 | 1,8 | SG424H*4YX |
| DN 20 | 3/4" | SG424H*5 | SRN0015401S | KCF042649 | 233,2 | 125,8 | 1,9 | SG424H*5YX |
| DN 25 | 1" | SG424H*6 | SRN0030402S | KCF052655 | 258,8 | 144,0 | 3,2 | SG424H*6YX |
| DN 32 | 1" 1/4 | SG424H*7 | SRN0030402S | KCF052655 | 258,8 | 150,0 | 3,6 | SG424H*7YX |
| DN 40 | 1" 1/2 | SG424H*8 | SRN0053401S | KCF072732 | 304,2 | 174,8 | 6,0 | SG424H*8YX |
| DN 50 | 2" | SG424H*9 | SRN0060401S | KCF072849 | 338,5 | 187,6 | 7,2 | SG424H*9YX |
| DN 65 | 2" 1/2 | SG424H410 | SRN0120401S | KCF102734 | 409,6 | 242,7 | 16,6 | SG424H410YX |
| DN 80 | 3" | SG424H411 | SRN0240401S | KCF122735 | 520,5 | 279,0 | 24,3 | SG424H411YX |
| DN 100 | 4" | SG424H412 | SRN0360401S | KCF125286 | 613,0 | 322,0 | 34,6 | SG424H412YX |

* = 40 Valvola filettata (DN 65 - DN 100 solo filettata) - *Threaded ends (DN 65 - DN 100 threaded ends only);*
* = 75 Valvola da saldare di tasca (articolo DG424H75_) - *Socket welding (model DG424H75_);*
* = 77 Valvola da saldare di testa (articolo DG424H77_) - *Butt welding (model DG424H77_).*

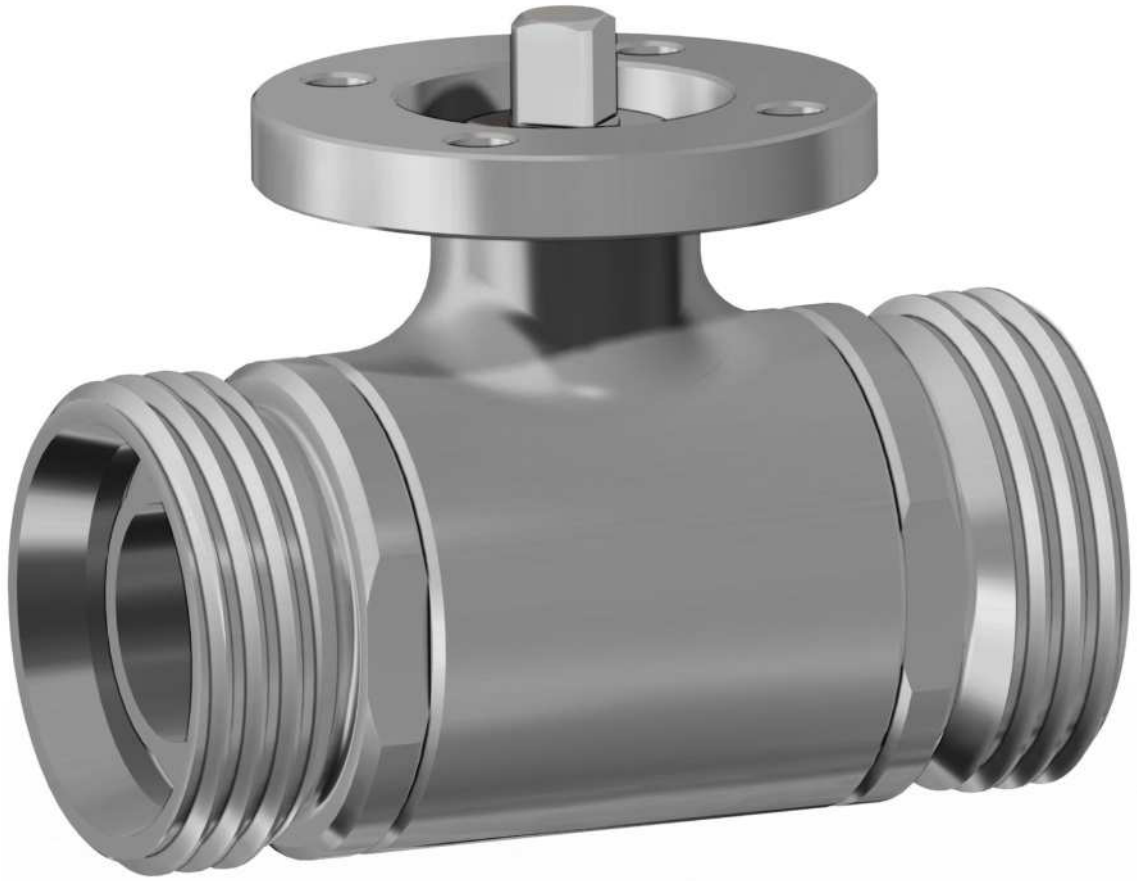
Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 434

## VALVOLA A SFERA IN ACCIAIO INOX 2 VIE FILETTATA DIN 11851 PASSAGGIO INTEGRALE.
## *2-WAY FULL-BORE STAINLESS STEEL BALL VALVE, DIN 11851 THREADED-ENDS.*



### CARATTERISTICHE GENERALI:
- La valvola é costruita in 316L acciaio inox e si presta ad utilizzi che richiedono condizioni igieniche particolari (applicazioni in industria alimentare).
- Estremità a norma DIN 11851.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi diagramma.
- Fluido intercettato: per usi alimentari.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

### *GENERAL FEATURES:*
- *The valve is manufactured in 316L stainless steel and suggested for particular hygienic conditions (food industry applications).*
- *Ends: as per DIN 11851 specifications.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see diagram.*
- *Fluid range: food industries.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

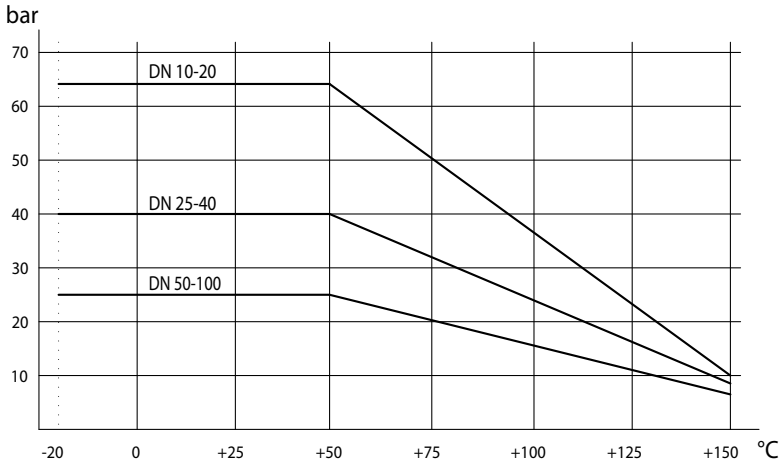
### ESECUZIONI SPECIALI A RICHIESTA:
- Attacchi: SMS - MACON - DIN maschio.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

### *ON REQUEST:*
- *Connection: SMS - MACON - DIN male.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

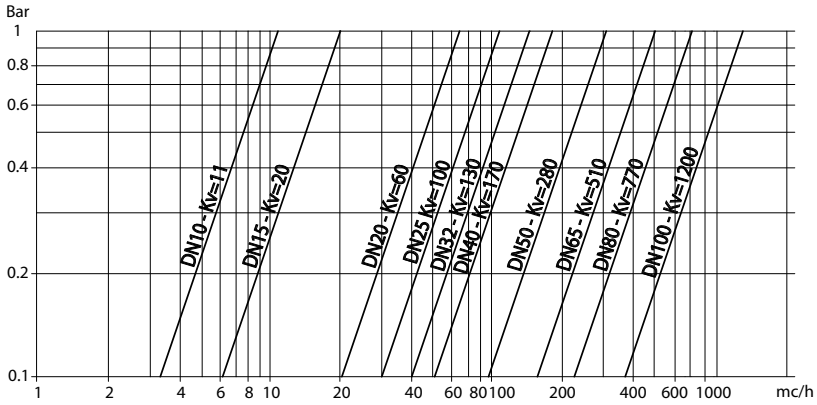
### CERTIFICAZIONI:
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.
- Conforme alla Direttiva Europea 2014/68/UE PED.

### *CERTIFICATIONS:*
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*
- *In compliance with European Directive 2014/68/EU PED.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW/PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*




Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar.

*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

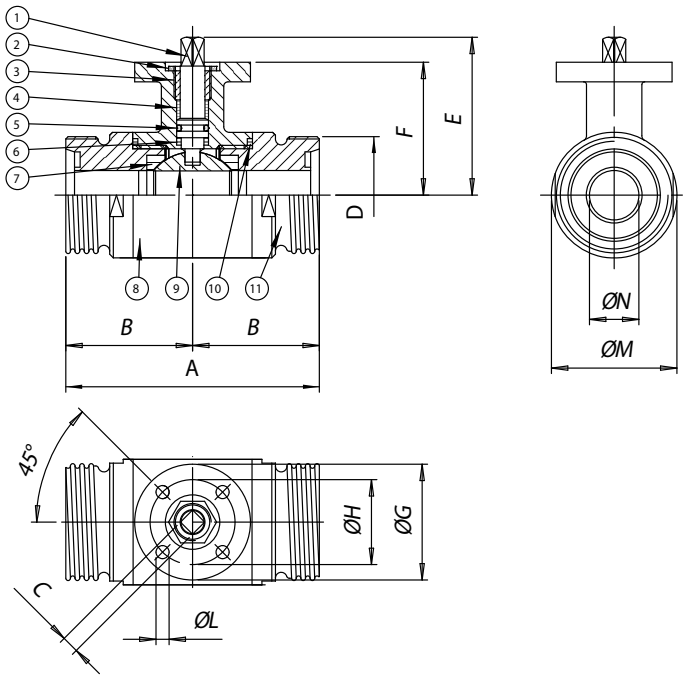
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 25 bar | | | | | | | 41 | 63 | 95 | 148 |
| PN 40 bar | | | | 15 | 20 | 28 | | | | |
| PN 63 bar | 7 | 8 | 11 | | | | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 434
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V434H633 | V434H633YX | 0,5 | L434H633 | L434H633YX | 0,4 | KGBV6303 |
| DN 15 | 1/2" | V434H634 | V434H634YX | 0,6 | L434H634 | L434H634YX | 0,6 | KGBV6304 |
| DN 20 | 3/4" | V434H635 | V434H635YX | 0,8 | L434H635 | L434H635YX | 0,8 | KGBV6305 |
| DN 25 | 1" | V434H636 | V434H636YX | 1,3 | L434H636 | L434H636YX | 1,3 | KGBV6306 |
| DN 32 | 1" 1/4 | V434H637 | V434H637YX | 1,6 | L434H637 | L434H637YX | 1,6 | KGBV6307 |
| DN 40 | 1" 1/2 | V434H638 | V434H638YX | 2,6 | L434H638 | L434H638YX | 2,7 | KGBV6308 |
| DN 50 | 2" | V434H639 | V434H639YX | 3,7 | L434H639 | L434H639YX | 3,8 | KGBV6309 |
| DN 65 | 2" 1/2 | V434H640 | V434H640YX | 6,2 | L434H640 | L434H640YX | 6,2 | KGBV6310 |
| DN 80 | 3" | V434H641 | V434H641YX | 9,2 | L434H641 | L434H641YX | 9,3 | KGBV6311 |
| DN 100 | 4" | V434H642G | V434H642GYX | 14,3 | L434H642 | L434H642YX | 14,0 | KGBV6312 |




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado *Nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304L S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 10* | Guarnizioni di tenuta manicotto *End sealings* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

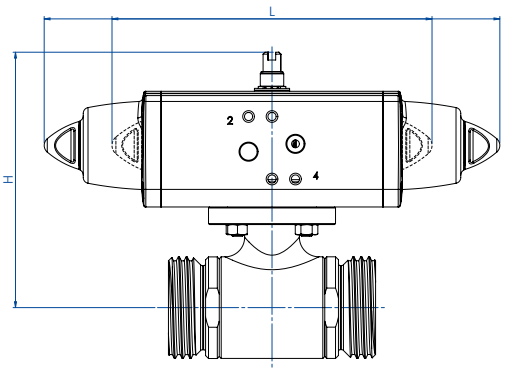
* Particolari del kit di ricambio *Components of spare part kit* KGBV63...

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | D | E | F | øG | øH | øL | øM | øN |
| DN [mm] | [inch] | | | | | | | | | | | |
| DN 10 | 3/8" | 88 | 44 | 6 | 28 | 47 | 39 | 46 | 36 | 6 | 30 | 10 |
| DN 15 | 1/2" | 92 | 46 | 6 | 34 | 49,5 | 41,5 | 46 | 36 | 6 | 35 | 15 |
| DN 20 | 3/4" | 102 | 51 | 6 | 44 | 53 | 45 | 46 | 36 | 6 | 42 | 20 |
| DN 25 | 1" | 106 | 53 | 9 | 52 | 64,5 | 51,5 | 65 | 50 | 7 | 52 | 25 |
| DN 32 | 1" 1/4 | 112 | 56 | 9 | 58 | 69,5 | 56,5 | 65 | 50 | 7 | 60 | 32 |
| DN 40 | 1" 1/2 | 126 | 63 | 14 | 65 | 89 | 76 | 65 | 50 | 7 | 74 | 40 |
| DN 50 | 2" | 136 | 68 | 14 | 78 | 97 | 84 | 65 | 50 | 7 | 90 | 50 |
| DN 65 | 2" 1/2 | 154 | 68 | 17 | 95 | 109,5 | 94,5 | 90 | 70 | 9 | 110 | 65 |
| DN 80 | 3" | 184 | 92 | 17 | 110 | 121 | 106 | 90 | 70 | 9 | 141 | 80 |
| DN 100 | 4" | 190 | 95 | 17 | 130 | 135 | 120 | 125 | 102 | 11 | 160 | 100 |

# ITEM 434
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG434H063 | DAN0015411S | KCF045293 | 159,0 | 111,2 | 1,1 | DG434H063YX |
| DN 15 | 1/2" | DG434H064 | DAN0015411S | KCF045293 | 159,0 | 113,7 | 1,3 | DG434H064YX |
| DN 20 | 3/4" | DG434H065 | DAN0015411S | KCF045293 | 159,0 | 117,2 | 1,6 | DG434H065YX |
| DN 25 | 1" | DG434H066 | DAN0030411S | KCF045294 | 174,2 | 130,7 | 2,3 | DG434H066YX |
| DN 32 | 1" 1/4 | DG434H067 | DAN0030411S | KCF045294 | 174,2 | 135,7 | 2,7 | DG434H067YX |
| DN 40 | 1" 1/2 | DG434H068 | DAN0060412S | KCF055296 | 198,0 | 166,4 | 4,1 | DG434H068YX |
| DN 50 | 2" | DG434H069 | DAN0060412S | KCF055296 | 198,0 | 174,4 | 5,7 | DG434H069YX |
| DN 65 | 2" 1/2 | DG434H070 | DAN0120411S | KCF075298 | 244,1 | 201,5 | 9,2 | DG434H070YX |
| DN 80 | 3" | DG434H071 | DAN0180411S | KCF105299 | 289,9 | 243,5 | 16,6 | DG434H071YX |
| DN 100 | 4" | DG434H072 | DAN0240411S | KCF105300 | 313,6 | 261,1 | 22,5 | DG434H072YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG434H063 | SRN0015401S | KCF045293 | 233,2 | 118,2 | 1,7 | SG434H063YX |
| DN 15 | 1/2" | SG434H064 | SRN0015401S | KCF045293 | 233,2 | 120,7 | 1,9 | SG434H064YX |
| DN 20 | 3/4" | SG434H065 | SRN0015401S | KCF045293 | 233,2 | 124,2 | 2,2 | SG434H065YX |
| DN 25 | 1" | SG434H066 | SRN0030402S | KCF055295 | 258,8 | 141,9 | 3,6 | SG434H066YX |
| DN 32 | 1" 1/4 | SG434H067 | SRN0030402S | KCF055295 | 258,8 | 146,9 | 3,9 | SG434H067YX |
| DN 40 | 1" 1/2 | SG434H068 | SRN0053401S | KCF075297 | 304,2 | 179,3 | 6,5 | SG434H068YX |
| DN 50 | 2" | SG434H069 | SRN0060401S | KCF075297 | 338,5 | 191,0 | 8,0 | SG434H069YX |
| DN 65 | 2" 1/2 | SG434H070 | SRN0120401S | KCF105299 | 409,6 | 235,6 | 13,4 | SG434H070YX |
| DN 80 | 3" | SG434H071 | SRN0180401S | KCF105299 | 474,0 | 254,0 | 21,1 | SG434H071YX |
| DN 100 | 4" | SG434H072 | SRN0240401S | KCF125301 | 520,5 | 285,0 | 30,5 | SG434H072YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

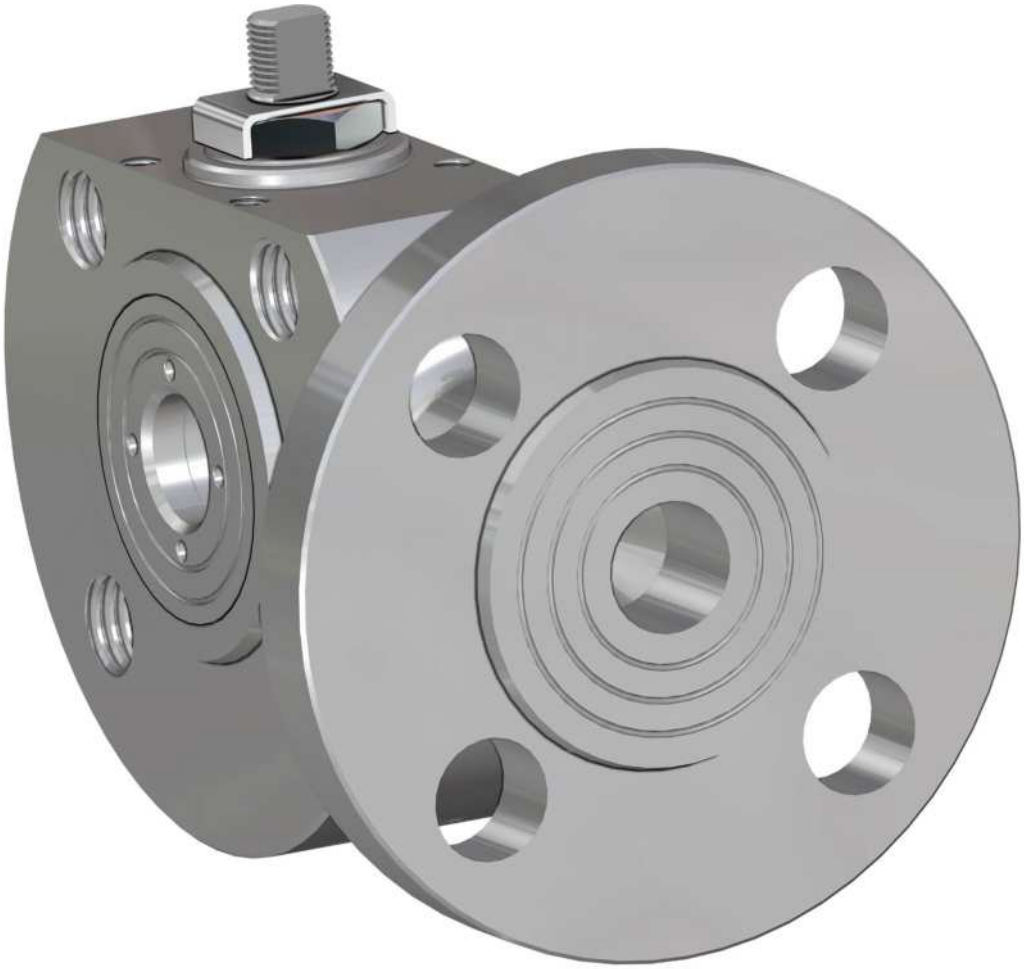
A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 445

## VALVOLA A SFERA IN ACCIAIO INOX 3 VIE FLANGIATA A CORPO PIATTO SFERA A "L", A PASSAGGIO RIDOTTO.

*3-WAY FLAT BODY FLANGED STAINLESS STEEL BALL VALVE "L" PORT, REDUCED BORE.*



**CARATTERISTICHE GENERALI:**

- **La valvola funziona solo come deviatore. Non permette nessuna chiusura della mandata che può avvenire solo dalla via centrale; vedi schema.**
- Norme per flange d'attacco: EN 1092-1 PN40 fino a DN50; PN16 DN65,80,100.
- Temperatura di utilizzo: da -20°C a +150°C (+200°C con guarnizioni speciali).
- Pressione di utilizzo: PN 40 fino a DN50 PN16 oltre.
- Fluido intercettato: acqua, prodotti petroliferi e petrolchimici liquidi, liquidi aggressivi.
- Passaggio ridotto.

***GENERAL FEATURES:***

- ***The valve works only as a diverter. The closure can only take place from the central way; check diagram.***
- *Flanges as per:* EN 1092-1 PN40 fino a DN50; PN16 DN65,80,100.
- *Working temperature: from -20°C to +150°C (+200° C with special seals).*
- *Working pressure: PN 40 up to DN50 PN16 above.*
- *Intercepted fluid: water, petroleum products, petrochemicals and other aggressive liquids.*
- *Reduced bore.*

**ESECUZIONI SPECIALI A RICHIESTA:**

- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
- Sfera a "T" ,vedere schema montaggio funzionamento.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***

- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite.*
- *"T" port , see mounting plan.*
- *For other applications, please contact our sales department.*

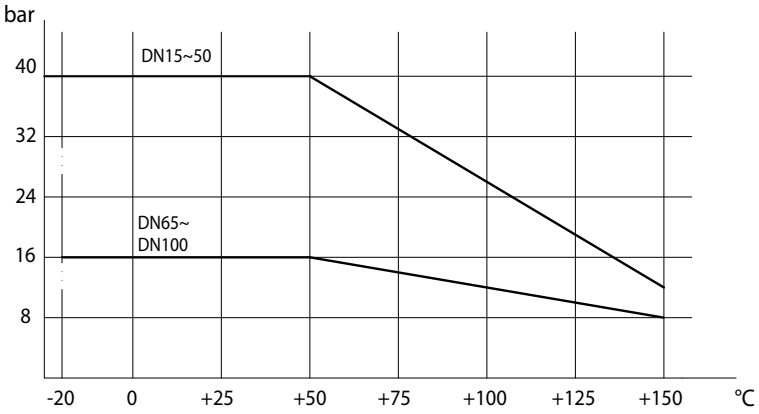
**CERTIFICAZIONI:**

- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***

- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*

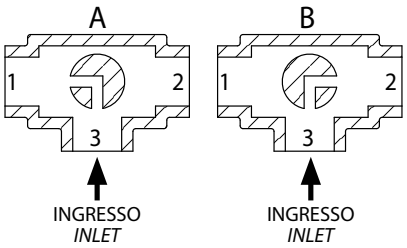



## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*

Vista da sopra *View from above*




## SCHEMA SFERA A "T" (A RICHIESTA) *PLAN FOR "T" PORT (ON REQUEST)*

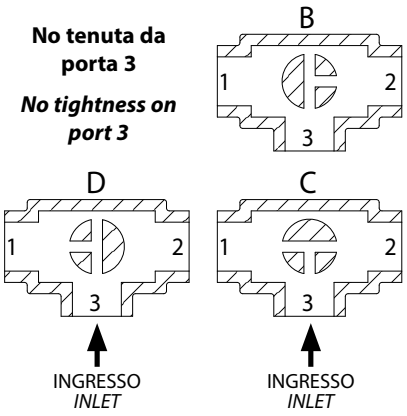
Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*

Vista da sopra *View from above*



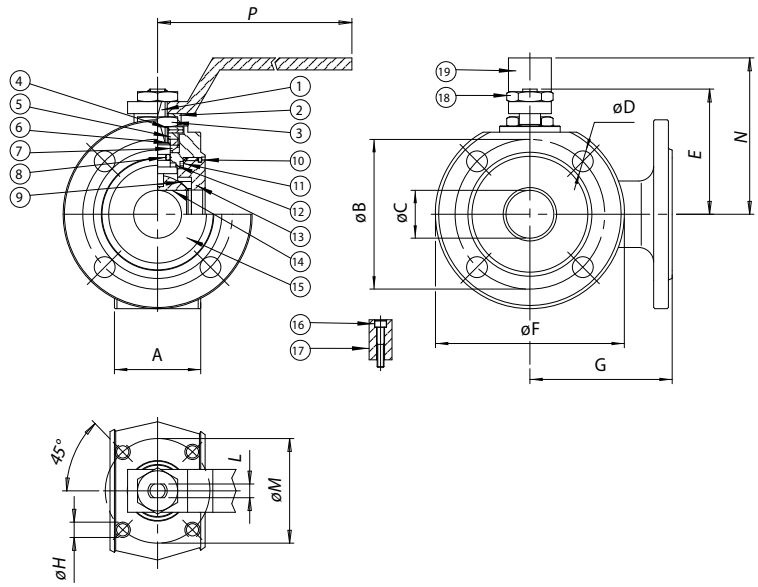

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | 85 | 128 | 212 |
| PN 40 bar | 8 | 13 | 20 | 30 | 42 | 61 | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 445
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* - "L" PORT | | | CON LEVA *WITH LEVER* - "L" PORT | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 15 | 1/2" | V445X604 | V445X604YX | 1,2 | L445X604 | L445X604YX | 1,35 | KGBV4404 |
| DN 20 | 3/4" | V445X605 | V445X605YX | 2 | L445X605 | L445X605YX | 2,15 | KGBV4405 |
| DN 25 | 1" | V445X606 | V445X606YX | 2,65 | L445X606 | L445X606YX | 2,8 | KGBV4406 |
| DN 32 | 1" 1/4 | V445X607 | V445X607YX | 3,8 | L445X607 | L445X607YX | 4 | KGBV4407 |
| DN 40 | 1" 1/2 | V445X608 | V445X608YX | 5,5 | L445X608 | L445X608YX | 5,7 | KGBV4408 |
| DN 50 | 2" | V445X609 | V445X609YX | 6,2 | L445X609 | L445X609YX | 6,5 | KGBV4409 |
| DN 65 | 2" 1/2 | V445X610 | V445X610YX | 10 | L445X610 | L445X610YX | 10,3 | KGBV4410 |
| DN 80 | 3" | V445X611 | V445X611YX | 11,2 | L445X611 | L445X611YX | 11,7 | KGBV4411 |
| DN 100 | 4" | V445X612 | V445X612YX | 20,2 | L445X612 | L445X612YX | 20,7 | KGBV4412 |




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 2 | Piastra bolccadado *Nut holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Dado di bloccaggio *Lock nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 4 | Molla a tazza *Belleville washer* | 301 S.S. | 1.4310 | UNI X5CrNiMo 17 12 |
| 5 | Distanziale *Ring* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 6* | Anello premiguarnizione *Gland nut ring* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 7* | Coppia di tenuta superiore *Top sealing* | P.T.F.E. | | |
| 8* | O-ring di tenuta intermedia *O-ring* | FKM | | |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10* | O-ring di tenuta ghiera *O-ring* | FKM | | |
| 11* | Guarnizioni di tenuta ghiera *Ring nut sealing* | P.T.F.E. | | |
| 12* | Tenuta inferiore *Bottom sealing* | P.T.F.E. | | |
| 13 | Ghiera *Ring nut* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 14 | Sfera *Ball* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 15 | Corpo *Body* | 316 S.S. | 1.4408 | |
| 16 | Vite per fermo di posizione *Holder screw* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 17 | Fermo di posizione *Holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 18 | Dado blocca leva *Lever nut* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 19 | Leva di manovra *Lever* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV44...

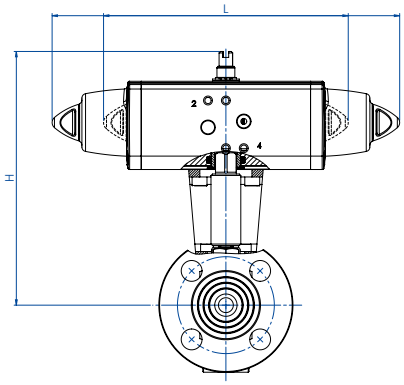
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | A | øB | øC | øD | E | øF | G | øH | L | øM | N | P |
| DN 15 | 1/2" | 35 | 65 | 10 | M12X4 | 48 | 90 | 85 | M5 | 6 | 36 | 65 | 140 |
| DN 20 | 3/4" | 38 | 75 | 15 | M12X4 | 51 | 100 | 90 | M5 | 6 | 36 | 70 | 140 |
| DN 25 | 1" | 43 | 85 | 20 | M12X4 | 62,5 | 110 | 90 | M5 | 8 | 42 | 82 | 180 |
| DN 32 | 1" 1/4 | 54 | 100 | 25 | M16X4 | 67 | 130 | 105 | M5 | 8 | 42 | 85 | 180 |
| DN 40 | 1" 1/2 | 66 | 110 | 32 | M16X4 | 80 | 140 | 120 | M6 | 10 | 50 | 102 | 230 |
| DN 50 | 2" | 83 | 125 | 40 | M16X4 | 87 | 150 | 130 | M6 | 10 | 50 | 110 | 230 |
| DN 65 | 2" 1/2 | 103 | 145 | 50 | M16X4 | 119,5 | 175 | 150 | M8 | 14 | 70 | 137,5 | 350 |
| DN 80 | 3" | 122 | 160 | 65 | M16X8 | 129,5 | 190 | 175 | M8 | 14 | 70 | 150 | 350 |
| DN 100 | 4" | 153 | 180 | 78 | M16X8 | 148,5 | 220 | 185 | M10 | 16 | 102 | 165 | 508 |

# ITEM 445
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | DG445H064 | DAN0015411S | KCNAAHD5247 | 159,0 | 152,8 | 2,0 | DG445H064YX |
| DN 20 | 3/4" | DG445H065 | DAN0030411S | KCNAAHD5247 | 174,2 | 162,8 | 3,0 | DG445H065YX |
| DN 25 | 1" | DG445H066 | DAN0030411S | KCNBCHD5249 | 174,2 | 178,3 | 3,7 | DG445H066YX |
| DN 32 | 1" 1/4 | DG445H067 | DAN0045412S | KCNBCHD5249 | 188,5 | 190,1 | 5,0 | DG445H067YX |
| DN 40 | 1" 1/2 | DG445H068 | DAN0060412S | KCNCCHD5251 | 198,0 | 200,0 | 7,1 | DG445H068YX |
| DN 50 | 2" | DG445H069 | DAN0106411S | KCNCCHD5252 | 237,0 | 219,8 | 7,0 | DG445H069YX |
| DN 65 | 2" 1/2 | DG445H070 | DAN0120411S | KCNDDHD5289 | 244,1 | 235,6 | 12,7 | DG445H070YX |
| DN 80 | 3" | DG445H071 | DAN0180411S | KCNDDHD5290 | 289,9 | 285,5 | 15,8 | DG445H071YX |
| DN 100 | 4" | DG445H072 | DAN0360411S | KCNEEHD5291 | 339,3 | 329,0 | 28,0 | DG445H072YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | SG445H064 | SRN0015401S | KCNAAHD5247 | 233,2 | 159,8 | 2,0 | SG445H064YX |
| DN 20 | 3/4" | SG445H065 | SRN0030402S | KCNACHD5248 | 258,8 | 184,0 | 4,0 | SG445H065YX |
| DN 25 | 1" | SG445H066 | SRN0030402S | KCNBCHD5250 | 258,8 | 189,5 | 4,6 | SG445H066YX |
| DN 32 | 1" 1/4 | SG445H067 | SRN0053401S | KCNBCHD5288 | 304,2 | 208,8 | 6,2 | SG445H067YX |
| DN 40 | 1" 1/2 | SG445H068 | SRN0060401S | KCNCCHD5252 | 338,5 | 216,6 | 8,9 | SG445H068YX |
| DN 50 | 2" | SG445H069 | SRN0090401S | KCNCDHD5253 | 393,7 | 253,5 | 9,0 | SG445H069YX |
| DN 65 | 2" 1/2 | SG445H070 | SRN0120401S | KCNDDHD5290 | 409,6 | 279,7 | 16,4 | SG445H070YX |
| DN 80 | 3" | SG445H071 | SRN0180401S | KCNDDHD5290 | 474,0 | 297,0 | 21,0 | SG445H071YX |
| DN 100 | 4" | SG445H072 | SRN0360401S | KCNEEHD5292 | 613,0 | 359,0 | 38,0 | SG445H072YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 448

## VALVOLA A SFERA IN ACCIAIO INOX 3 VIE FILETTATA CON SFERA A “L” - PASSAGGIO INTEGRALE.

*3-WAY FULL-BORE THREADED-ENDS STAINLESS STEEL BALL VALVE, “L” PORT.*



### CARATTERISTICHE GENERALI:

- **La valvola funziona solo come deviatore. Non permette alcuna chiusura della mandata che può avvenire solo dalla via centrale;** vedi schema.
- La valvola é costruita in 316L acciaio inox.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: aria, acqua, gas, olii, prodotti petroliferi e petrolchimici, fluidi aggressivi.
- Estremità filettate femmina a norma ISO 228.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

### *GENERAL FEATURES:*

- ***The valve can be used as diverted only and the in let can be from the central way, only;*** *see plan.*
- *The valve is manufactured in 316L stainless steel.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see table.*
- *Fluid range: air, water, gas, oils, petroleum and petrochemical products, aggressive media.*
- *Female threaded ends as per* ISO 228 *specifications.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

### ESECUZIONI SPECIALI A RICHIESTA:

- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

### *ON REQUEST:*

- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

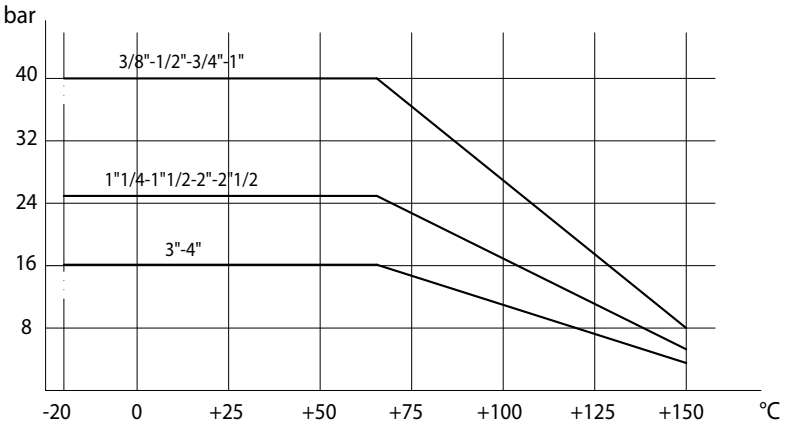
### CERTIFICAZIONI:

- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

### *CERTIFICATIONS:*

- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

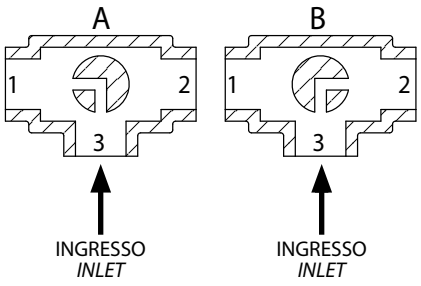
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

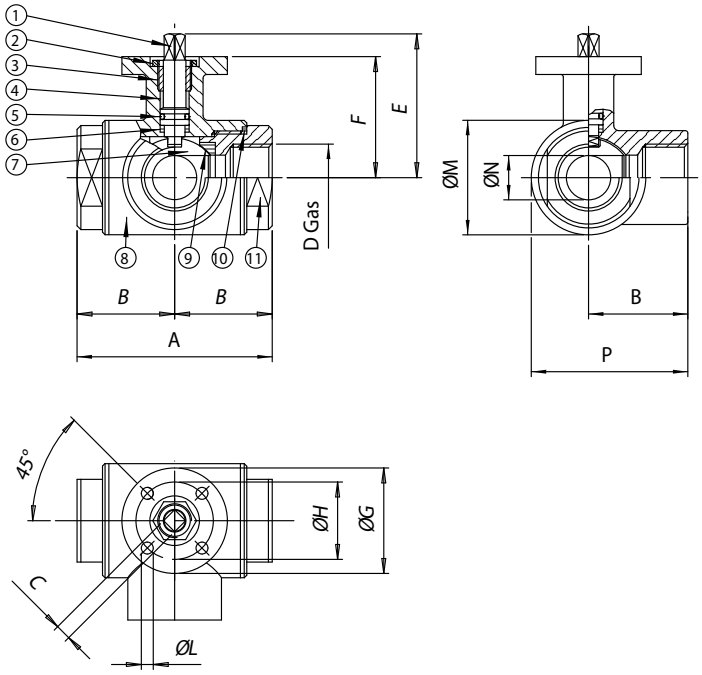
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | | | 140 | 215 |
| PN 25 bar | | | | | 28 | 41 | 61 | 90 | | |
| PN 40 bar | 7 | 10 | 14 | 20 | | | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 448
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* - "L" PORT | | | CON LEVA *WITH LEVER* - "L" PORT | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V448H403 | V448H403YX | 0,6 | L448H403 | L448H403YX | 0,5 | KGBV6603 |
| DN 15 | 1/2" | V448H404 | V448H404YX | 0,8 | L448H404 | L448H404YX | 0,7 | KGBV6604 |
| DN 20 | 3/4" | V448H405 | V448H405YX | 1,4 | L448H405 | L448H405YX | 1,4 | KGBV6605 |
| DN 25 | 1" | V448H406 | V448H406YX | 1,9 | L448H406 | L448H406YX | 1,8 | KGBV6606 |
| DN 32 | 1" 1/4 | V448H407 | V448H407YX | 3,1 | L448H407 | L448H407YX | 3,1 | KGBV6607 |
| DN 40 | 1" 1/2 | V448H408 | V448H408YX | 4,9 | L448H408 | L448H408YX | 5,0 | KGBV6608 |
| DN 50 | 2" | V448H409 | V448H409YX | 6,1 | L448H409 | L448H409YX | 6,0 | KGBV6609 |
| DN 65 | 2" 1/2 | V448H410 | V448H410YX | 8,7 | L448H410 | L448H410YX | 8,8 | KGBV6610 |
| DN 80 | 3" | V448H411G | V448H411GYX | 16,6 | L448H411 | L448H411YX | 16,3 | KGBV6611 |
| DN 100 | 4" | V448H412G | V448H412GYX | 28,0 | L448H412 | L448H412YX | 27,3 | KGBV6612 |







## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado *Nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304 S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10* | Guarnizioni di tenuta manicotti *End sealings* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV66...

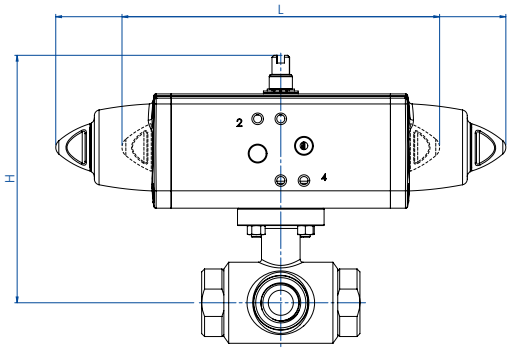
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | □C | D | E | F | øG | øH | øL | øM | øN | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 10 | 3/8" | 72 | 36 | 6 | 3/8" | 54 | 46 | 46 | 36 | 6 | 35 | 10 | 53,5 |
| DN 15 | 1/2" | 82 | 41 | 6 | 1/2" | 57 | 49 | 46 | 36 | 6 | 42 | 15 | 62 |
| DN 20 | 3/4" | 92 | 46 | 9 | 3/4" | 69,5 | 56,5 | 65 | 36 | 7 | 52 | 20 | 72 |
| DN 25 | 1" | 102 | 51 | 9 | 1" | 74 | 61 | 65 | 50 | 7 | 60 | 25 | 81 |
| DN 32 | 1" 1/4 | 118 | 59 | 14 | 1" 1/4 | 94,5 | 81,5 | 65 | 50 | 7 | 72,5 | 32 | 95,3 |
| DN 40 | 1" 1/2 | 134 | 67 | 14 | 1" 1/2 | 102 | 89 | 65 | 50 | 7 | 88 | 40 | 111 |
| DN 50 | 2" | 144 | 72 | 17 | 2" | 106,5 | 91,5 | 65 | 70 | 9 | 101,5 | 50 | 122,8 |
| DN 65 | 2" 1/2 | 160 | 80 | 17 | 2" 1/2 | 116,5 | 101,5 | 90 | 70 | 9 | 121 | 65 | 140,5 |
| DN 80 | 3" | 200 | 100 | 17 | 3" | 131 | 116 | 125 | 102 | 11 | 150 | 80 | 175 |
| DN 100 | 4" | 240 | 120 | 17 | 4" | 146 | 131 | 125 | 102 | 11 | 182 | 100 | 211 |

# ITEM 448
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG448H003 | DAN0015411S | KCF045293 | 159,0 | 118,2 | 1,3 | DG448H003YX |
| DN 15 | 1/2" | DG448H004 | DAN0015411S | KCF045293 | 159,0 | 121,2 | 1,5 | DG448H004YX |
| DN 20 | 3/4" | DG448H005 | DAN0030411S | KCF045294 | 174,2 | 135,7 | 2,7 | DG448H005YX |
| DN 25 | 1" | DG448H006 | DAN0030411S | KCF045294 | 174,2 | 140,2 | 3,1 | DG448H006YX |
| DN 32 | 1" 1/4 | DG448H007 | DAN0060412S | KCF055296 | 198,0 | 171,9 | 4,7 | DG448H007YX |
| DN 40 | 1" 1/2 | DG448H008 | DAN0060412S | KCF055296 | 198,0 | 179,4 | 6,7 | DG448H008YX |
| DN 50 | 2" | DG448H009 | DAN0106411S | KCF075298 | 237,0 | 194,8 | 9,1 | DG448H009YX |
| DN 65 | 2" 1/2 | DG448H010 | DAN0120411S | KCF075298 | 244,1 | 208,5 | 11,8 | DG448H010YX |
| DN 80 | 3" | DG448H011 | DAN0240411S | KCF105300 | 313,6 | 257,1 | 22,4 | DG448H011YX |
| DN 100 | 4" | DG448H012 | DAN0360411S | KCF105300 | 339,3 | 279,0 | 34,2 | DG448H012YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG448H003 | SRN0015401S | KCF045293 | 233,2 | 125,2 | 1,7 | SG448H003YX |
| DN 15 | 1/2" | SG448H004 | SRN0015401S | KCF045293 | 233,2 | 128,2 | 1,9 | SG448H004YX |
| DN 20 | 3/4" | SG448H005 | SRN0030402S | KCF055295 | 258,8 | 146,9 | 3,4 | SG448H005YX |
| DN 25 | 1" | SG448H006 | SRN0030402S | KCF055295 | 258,8 | 151,4 | 3,8 | SG448H006YX |
| DN 32 | 1" 1/4 | SG448H007 | SRN0053401S | KCF075297 | 304,2 | 184,8 | 6,1 | SG448H007YX |
| DN 40 | 1" 1/2 | SG448H008 | SRN0060401S | KCF075297 | 338,5 | 196,0 | 8,2 | SG448H008YX |
| DN 50 | 2" | SG448H009 | SRN0090401S | KCF105299 | 393,7 | 229,0 | 11,6 | SG448H009YX |
| DN 65 | 2" 1/2 | SG448H010 | SRN0120401S | KCF105299 | 409,6 | 242,6 | 15,3 | SG448H010YX |
| DN 80 | 3" | SG448H011 | SRN0240401S | KCF125301 | 520,5 | 281,0 | 28,2 | SG448H011YX |
| DN 100 | 4" | SG448H012 | SRN0360401S | KCF125301 | 613,0 | 309,0 | 45,6 | SG448H012YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 450-451

## VALVOLA A SFERA IN ACCIAIO INOX 3 VIE 4 GUANIZIONI, FILETTATA CON SFERA A “T” O “L” - PASSAGGIO INTEGRALE.

*3 WAY 4 SEALS, FULL-BORE THREADED-ENDS STAINLESS STEEL BALL VALVE, “T” OR “L” PORT.*

**ITEM 450**
Valvola con sfera a "T"

**ITEM 451**
Valvola con sfera a "L"



***ITEM 450***
*Valve "T" port*

***ITEM 451***
*Valve "L" port*

**CARATTERISTICHE GENERALI:**
- La valvola è costruita in 316L acciaio inox, con 4 guarnizioni sulla sfera. Per il funzionamento vedere lo schema.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: per usi alimentari.
- Trattamento esterno: lucidata.
- Estremità filettate femmina a norma ISO 228.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

***GENERAL FEATURES:***
- *The valve is manufactured in 316L stainless steel with 4 seals on ball. See plant for the operation.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see table.*
- *Fluid range: food industry.*
- *Surface treatment: polished.*
- *Threaded ends as per ISO 228 specifications.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

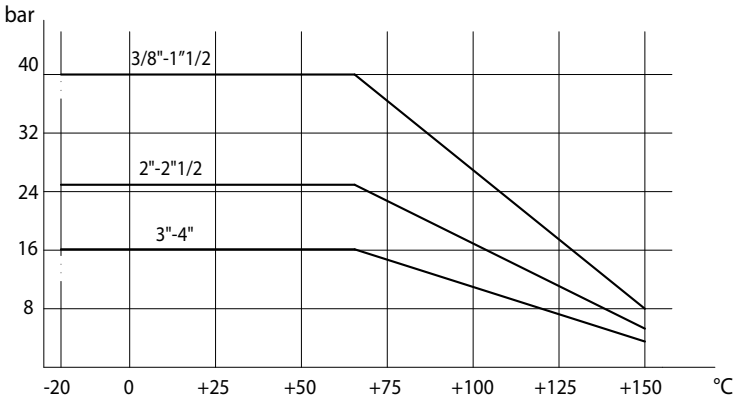
**ESECUZIONI SPECIALI A RICHIESTA:**
- Attacchi: NPT.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Connection: NPT.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

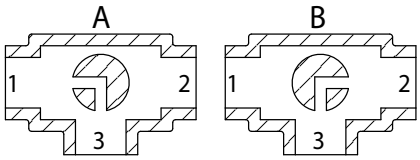
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

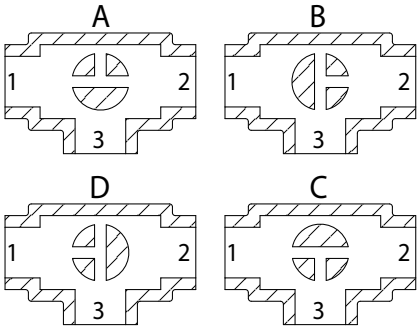
## SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*




Vista da sopra *View from above*

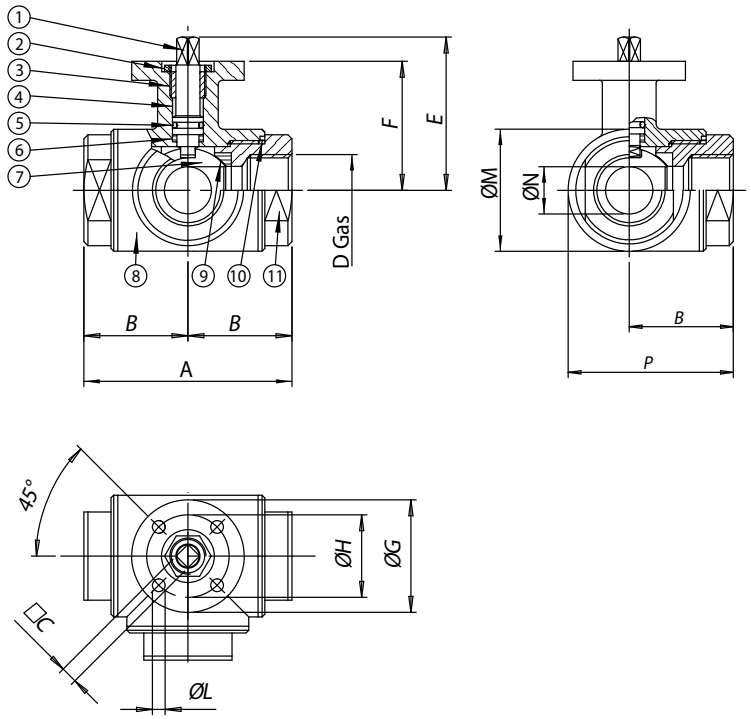
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | | | 212 | 304 |
| PN 25 bar | | | | | | | 83 | 142 | | |
| PN 40 bar | 9 | 18 | 23 | 27 | 36 | 54 | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 450-451
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* "T" port | → ATEX | Asse libero *Free shaft* "L" port | → ATEX | Kg | Con leva *With lever* "T" port | → ATEX | Con leva *With lever* "L" port | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V450H403 | V450H403YX | V451H403 | V451H403YX | 0,9 | L450H403 | L450H403YX | L451H403 | L451H403YX | 0,9 | KGBV4503 |
| DN 15 | 1/2" | V450H404G | V450H404GYX | V451H404G | V451H404GYX | 1,3 | L450H404 | L450H404YX | L451H404 | L451H404YX | 1,2 | KGBV4504 |
| DN 20 | 3/4" | V450H405 | V450H405YX | V451H405 | V451H405YX | 1,9 | L450H405 | L450H405YX | L451H405 | L451H405YX | 1,9 | KGBV4505 |
| DN 25 | 1" | V450H406 | V450H406YX | V451H406 | V451H406YX | 2,7 | L450H406 | L450H406YX | L451H406 | L451H406YX | 2,5 | KGBV4506 |
| DN 32 | 1" 1/4 | V450H407G | V450H407GYX | V451H407G | V451H407GYX | 5,0 | L450H407 | L450H407YX | L451H407 | L451H407YX | 4,4 | KGBV4507 |
| DN 40 | 1" 1/2 | V450H408G | V450H408GYX | V451H408G | V451H408GYX | 6,8 | L450H408 | L450H408YX | L451H408 | L451H408YX | 6,7 | KGBV4508 |
| DN 50 | 2" | V450H409 | V450H409YX | V451H409 | V451H409YX | 8,3 | L450H409 | L450H409YX | L451H409 | L451H409YX | 8,0 | KGBV4509 |
| DN 65 | 2" 1/2 | V450H410G | V450H410GYX | V451H410G | V451H410GYX | 10,3 | L450H410 | L450H410YX | L451H410 | L451H410YX | 9,8 | KGBV4510 |
| DN 80 | 3" | V450H411 | V450H411YX | V451H411 | V451H411YX | 20,7 | L450H411 | L450H411YX | L451H411 | L451H411YX | 20,3 | KGBV4511 |
| DN 100 | 4" | V450H412 | V450H412YX | V451H412 | V451H412YX | 33,0 | L450H412 | L450H412YX | L451H412 | L451H412YX | 32,8 | KGBV4512 |




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado *Nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304L S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10* | Guarnizioni di tenuta manicotti *End sealings* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV45...

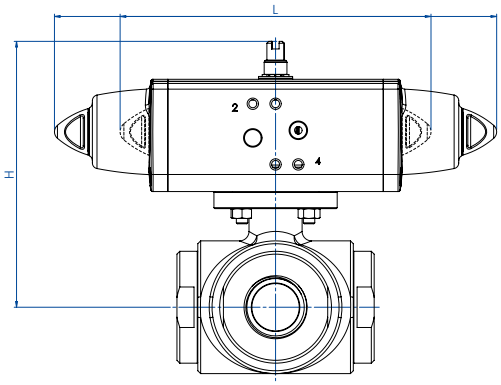
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | □C | D | E | F | øG | øH | øL | øM | øN | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 10 | 3/8" | 72 | 36 | 6 | 3/8" | 54,5 | 46,5 | 46 | 36 | 6 | 45 | 12 | 58,5 |
| DN 15 | 1/2" | 82 | 41 | 6 | 1/2" | 57 | 49 | 54 | 42 | 6 | 52 | 15 | 67 |
| DN 20 | 3/4" | 92 | 46 | 9 | 3/4" | 69,5 | 56,5 | 65 | 50 | 7 | 60 | 20 | 76 |
| DN 25 | 1" | 102 | 51 | 9 | 1" | 74 | 61 | 65 | 50 | 7 | 70 | 25 | 86 |
| DN 32 | 1" 1/4 | 118 | 59 | 14 | 1" 1/4 | 94,5 | 81,5 | 90 | 70 | 9 | 85 | 32 | 101,5 |
| DN 40 | 1" 1/2 | 134 | 67 | 14 | 1" 1/2 | 102 | 89 | 90 | 70 | 9 | 100 | 40 | 117 |
| DN 50 | 2" | 144 | 72 | 17 | 2" | 106,5 | 91,5 | 90 | 70 | 9 | 110 | 50 | 127 |
| DN 65 | 2" 1/2 | 160 | 80 | 17 | 2" 1/2 | 116,5 | 101,5 | 125 | 102 | 11 | 122 | 65 | 141 |
| DN 80 | 3" | 200 | 100 | 17 | 3" | 134 | 116 | 125 | 102 | 11 | 150 | 80 | 175 |
| DN 100 | 4" | 240 | 120 | 17 | 4" | 149 | 131 | 125 | 102 | 11 | 192 | 100 | 216 |

# ITEM 450-451
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | DG45*H003 | DAN0015411S | KCF045293 | 159,0 | 118,7 | 1,7 | DG45*H003YX |
| DN 15 | 1/2" | DG45*H004 | DAN0030412S | KCF045293 | 174,2 | 128,2 | 2,3 | DG45*H004YX |
| DN 20 | 3/4" | DG45*H005 | DAN0045412S | KCF045294 | 188,5 | 141,0 | 3,3 | DG45*H005YX |
| DN 25 | 1" | DG45*H006 | DAN0045412S | KCF045294 | 188,5 | 145,5 | 3,9 | DG45*H006YX |
| DN 32 | 1" 1/4 | DG45*H007 | DAN0060412S | KCF075298 | 198,0 | 171,9 | 6,2 | DG45*H007YX |
| DN 40 | 1" 1/2 | DG45*H008 | DAN0106411S | KCF075304 | 237,0 | 192,3 | 9,5 | DG45*H008YX |
| DN 50 | 2" | DG45*H009 | DAN0120411S | KCF075298 | 244,1 | 198,5 | 11,3 | DG45*H009YX |
| DN 65 | 2" 1/2 | DG45*H010 | DAN0240411S | KCF105300 | 313,6 | 242,6 | 15,9 | DG45*H010YX |
| DN 80 | 3" | DG45*H011 | DAN0360411S | KCF105300 | 339,3 | 264,0 | 27,9 | DG45*H011YX |
| DN 100 | 4" | DG45*H012 | DAN0480411S | KCF125301 | 387,6 | 295,9 | 43,6 | DG45*H012YX |

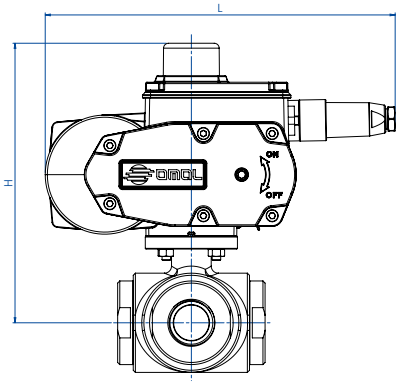
### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | | |
| DN 10 | 3/8" | SG45*H003 | SRN0015401S | KCF045293 | 233,2 | 125,7 | 2,2 | SG45*H003YX |
| DN 15 | 1/2" | SG45*H004 | SRN0030401S | KCF055302 | 258,8 | 139,4 | 3,2 | SG45*H004YX |
| DN 20 | 3/4" | SG45*H005 | SRN0053401S | KCF075303 | 258,8 | 159,8 | 5,1 | SG45*H005YX |
| DN 25 | 1" | SG45*H006 | SRN0053401S | KCF075303 | 304,2 | 164,3 | 5,7 | SG45*H006YX |
| DN 32 | 1" 1/4 | SG45*H007 | SRN0060401S | KCF075304 | 338,5 | 188,5 | 8,0 | SG45*H007YX |
| DN 40 | 1" 1/2 | SG45*H008 | SRN0090401S | KCF105305 | 393,7 | 226,5 | 12,9 | SG45*H008YX |
| DN 50 | 2" | SG45*H009 | SRN0120401S | KCF105299 | 409,6 | 232,6 | 15,5 | SG45*H009YX |
| DN 65 | 2" 1/2 | SG45*H010 | SRN0240401S | KCF125301 | 520,5 | 266,5 | 22,3 | SG45*H010YX |
| DN 80 | 3" | SG45*H011 | SRN0360401S | KCF125301 | 613,0 | 294,0 | 37,9 | SG45*H011YX |
| DN 100 | 4" | SG45*H012 | SRN0480401S | KCF145306 | 648,2 | 329,0 | 56,7 | SG45*H012YX |

* = 0 valvola con sfera a "T" (articolo 450) - *"T" port (model 450);* * = 1 valvola con sfera a "L" (articolo 451) - *"L" port (model 451)*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*






### CON ATTUATORE ELETTRICO ON-OFF (230 Vac) *WITH ON-OFF ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | C45*A5E03 | EA0035A5C000 | KCF055302 | 250,0 | 183,5 | 4,6 |
| DN 15 | 1/2" | C45*A5E04 | EA0035A5C000 | KCF055302 | 250,0 | 186,0 | 4,9 |
| DN 20 | 3/4" | C45*A5E05 | EA0035A5C000 | KCF052621 | 250,0 | 193,5 | 5,7 |
| DN 25 | 1" | C45*A5G06 | EA0070A5C000 | KCF052621 | 250,0 | 198,0 | 6,5 |
| DN 32 | 1" 1/4 | CG45*A5G07 | EA0070A5C000 | KCF075298 | 250,0 | 218,5 | 8,4 |
| DN 40 | 1" 1/2 | CG45*A5I08 | EA0130A5C000 | KCF075304 | 280,0 | 246,5 | 14,2 |
| DN 50 | 2" | C45*A5I09 | EA0130A5C000 | KCF075298 | 280,0 | 249,0 | 15,9 |
| DN 65 | 2" 1/2 | CG45*A5K10 | EA0240A5C000 | KCF105300 | 280,0 | 259,0 | 18,0 |
| DN 80 | 3" | E45*16N11 | AE160040 | KCE361987 | 256,5 | 301,0 | 30,4 |
| DN 100 | 4" | E45*16R12 | AE160060 | KCE561985 | 381,0 | 365,0 | 54,5 |

### CON ATTUATORE ELETTRICO MODULANTE (230 VAC) *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN | [inch] | | | | | | |
| DN 10 | 3/8" | M45*16C03 | AM160002 | KCF055302 | 165,8 | 166,0 | 4,1 |
| DN 15 | 1/2" | M45*16C04 | AM160002 | KCF055302 | 165,8 | 168,5 | 4,4 |
| DN 20 | 3/4" | M45*16F05 | AM160005 | KCE285434 | 207,5 | 220,0 | 6,6 |
| DN 25 | 1" | M45*16F06 | AM160005 | KCE285434 | 207,5 | 224,5 | 7,2 |
| DN 32 | 1" 1/4 | MG45*16L07 | AM160020 | KCE362068 | 256,5 | 266,5 | 13,3 |
| DN 40 | 1" 1/2 | MG45*16L08 | AM160020 | KCE362068 | 256,5 | 274,0 | 15,7 |
| DN 50 | 2" | M45*16L09 | AM160020 | KCE362092 | 256,5 | 276,5 | 17,4 |
| DN 65 | 2" 1/2 | MG45*16L10 | AM160020 | KCE365427 | 256,5 | 286,5 | 19,2 |
| DN 80 | 3" | M45*16P11 | AM160050 | KCE561985 | 381,0 | 350,0 | 44,2 |
| DN 100 | 4" | M45*16P12 | AM160050 | KCE561985 | 381,0 | 365,0 | 56,8 |

* = 0 valvola con sfera a "T" (articolo 450) - *"T" port (model 450);* * = 1 valvola con sfera a "L" (articolo 451) - *"L" port (model 451).*

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

Versione ATEX non disponibile per attuatori elettrici. *ATEX version not available for electric actuator.*

# ITEM 460-461

## VALVOLA A SFERA IN ACCIAIO INOX 3 VIE 4 GUARNIZIONI, FLANGIATA SFERA A “T” O “L” - PASSAGGIO INTEGRALE.

*3-WAY 4 SEALS FULL-BORE FLANGED STAINLESS STEEL BALL VALVE, “T” OR “L” PORT.*

**ITEM 460**
Valvola con sfera a "T"

**ITEM 461**
Valvola con sfera a "L"



***ITEM 460***
*Valve "T" port*

***ITEM 461***
*Valve "L" port*

**CARATTERISTICHE GENERALI:**
- La valvola é costruita in 316L acciaio inox.
- Flange d’attacco: EN 1092-1.
- Con 4 guarnizioni sulla sfera, permette la deviazione del flusso in tutte le direzioni, vedere schema.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: aria, acqua, fluidi alimentari.
- Trattamento esterno: lucidata.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

***GENERAL FEATURES:***
- *The valve is manufactured in 316L stainless steel.*
- *Flanges as per* EN 1092-1.
- *Valve with 4 ball seats. Inlet from any of the 3 ends. see plan.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see table.*
- *Fluid range: air, water, food industry.*
- *Surface treatment: polished.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

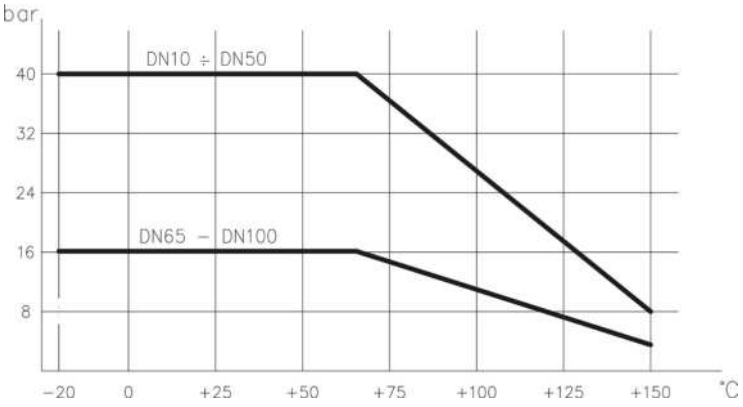
**ESECUZIONI SPECIALI A RICHIESTA:**
- Flange: Acciaio zincato - ASME B16.5 Classe 150,300.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Flanges: Zinc-plated* - ASME B16.5 Classe 150,300.
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

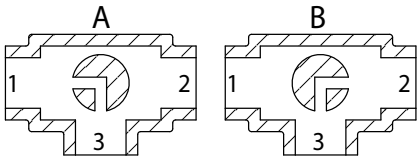
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

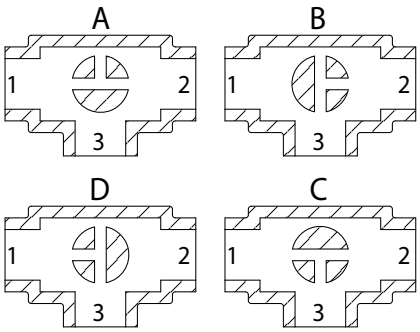
## SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*




Vista da sopra *View from above*

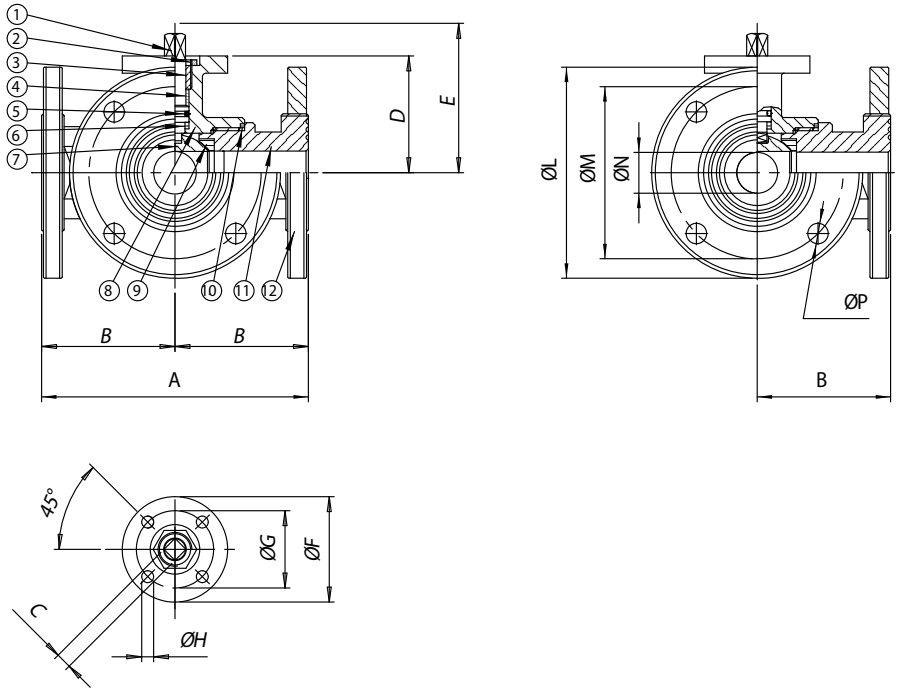
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | | 142 | 212 | 304 |
| PN 40 bar | 9 | 18 | 23 | 27 | 36 | 54 | 83 | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 460-461
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* "T" port | → ATEX | Asse libero *Free shaft* "L" port | → ATEX | Kg | Con leva *With lever* "T" port | → ATEX | Con leva *With lever* "L" port | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V460H603 | V460H603YX | V461H603 | V461H603YX | 2,7 | L460H603 | L460H603YX | L461H603 | L461H603YX | 2,7 | KGBV4803 |
| DN 15 | 1/2" | V460H604G | V460H604GYX | V461H604G | V461H604GYX | 3,3 | L460H604 | L460H604YX | L461H604 | L461H604YX | 3,2 | KGBV4804 |
| DN 20 | 3/4" | V460H605 | V460H605YX | V461H605 | V461H605YX | 4,8 | L460H605 | L460H605YX | L461H605 | L461H605YX | 4,8 | KGBV4805 |
| DN 25 | 1" | V460H606 | V460H606YX | V461H606 | V461H606YX | 6,7 | L460H606 | L460H606YX | L461H606 | L461H606YX | 6,2 | KGBV4806 |
| DN 32 | 1" 1/4 | V460H607 | V460H607YX | V461H607 | V461H607YX | 10,5 | L460H607 | L460H607YX | L461H607 | L461H607YX | 10,6 | KGBV4807 |
| DN 40 | 1" 1/2 | V460H608G | V460H608GYX | V461H608G | V461H608GYX | 14,0 | L460H608 | L460H608YX | L461H608 | L461H608YX | 13,7 | KGBV4808 |
| DN 50 | 2" | V460H609 | V460H609YX | V461H609 | V461H609YX | 18,2 | L460H609 | L460H609YX | L461H609 | L461H609YX | 18,2 | KGBV4809 |
| DN 65 | 2" 1/2 | V460H610G | V460H610GYX | V461H610G | V461H610GYX | 23,6 | L460H610 | L460H610YX | L461H610 | L461H610YX | 23,2 | KGBV4810 |
| DN 80 | 3" | V460H611 | V460H611YX | V461H611 | V461H611YX | 33,6 | L460H611 | L460H611YX | L461H611 | L461H611YX | 33,5 | KGBV4811 |
| DN 100 | 4" | V460H612 | V460H612YX | V461H612 | V461H612YX | 51,0 | L460H612 | L460H612YX | L461H612 | L461H612YX | 49,0 | KGBV4812 |







## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado *Nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304L S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10* | Guarnizioni di tenuta manicotti *End sealings* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 12 | Flangia *Flange* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV46...

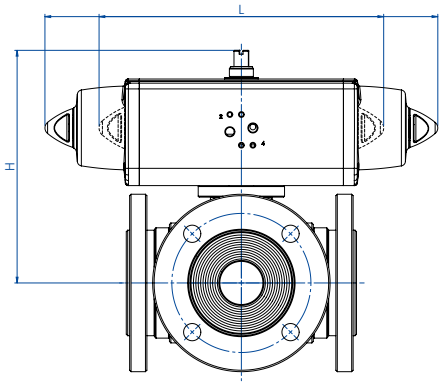
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | A | B | □C | D | E | øF | øG | øH | øL | øM | øN | n°xøP |
| DN 10 | 3/8" | 120 | 60 | 6 | 46,5 | 54,5 | 46 | 36 | 6 | 90 | 60 | 10 | 4x14 |
| DN 15 | 1/2" | 130 | 65 | 6 | 49 | 57 | 54 | 42 | 6 | 95 | 65 | 15 | 4x14 |
| DN 20 | 3/4" | 140 | 70 | 9 | 56,5 | 69,5 | 65 | 50 | 7 | 105 | 75 | 20 | 4x14 |
| DN 25 | 1" | 150 | 75 | 9 | 61 | 74 | 65 | 50 | 7 | 115 | 85 | 25 | 4x14 |
| DN 32 | 1" 1/4 | 180 | 90 | 14 | 81,5 | 94,5 | 65 | 50 | 7 | 140 | 100 | 32 | 4x18 |
| DN 40 | 1" 1/2 | 200 | 100 | 14 | 89 | 102 | 90 | 70 | 9 | 150 | 110 | 40 | 4x18 |
| DN 50 | 2" | 220 | 110 | 17 | 91,5 | 106,5 | 90 | 70 | 9 | 165 | 125 | 50 | 4x18 |
| DN 65 | 2" 1/2 | 240 | 120 | 17 | 101,5 | 116,5 | 125 | 102 | 11 | 185 | 145 | 65 | 4x18 |
| DN 80 | 3" | 260 | 130 | 17 | 116 | 134 | 125 | 102 | 11 | 200 | 160 | 80 | 8x18 |
| DN 100 | 4" | 300 | 150 | 17 | 131 | 149 | 125 | 102 | 11 | 220 | 180 | 100 | 8x18 |

# ITEM 460-461
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG46*H063 | DAN0015411S | KCF045293 | 159,0 | 118,7 | 3,4 | DG46*H063YX |
| DN 15 | 1/2" | DG46*H064 | DAN0030412S | KCF045293 | 174,2 | 128,2 | 3,9 | DG46*H064YX |
| DN 20 | 3/4" | DG46*H065 | DAN0045412S | KCF045294 | 188,5 | 141,0 | 6,1 | DG46*H065YX |
| DN 25 | 1" | DG46*H066 | DAN0045412S | KCF045294 | 188,5 | 145,5 | 7,8 | DG46*H066YX |
| DN 32 | 1" 1/4 | DG46*H067 | DAN0060412S | KCF055296 | 198,0 | 171,9 | 12,4 | DG46*H067YX |
| DN 40 | 1" 1/2 | DG46*H068 | DAN0106411S | KCF075304 | 237,0 | 192,3 | 16,6 | DG46*H068YX |
| DN 50 | 2" | DG46*H069 | DAN0120411S | KCF075298 | 244,1 | 198,5 | 21,1 | DG46*H069YX |
| DN 65 | 2" 1/2 | DG46*H070 | DAN0240411S | KCF105300 | 313,6 | 242,6 | 27,7 | DG46*H070YX |
| DN 80 | 3" | DG46*H071 | DAN0360411S | KCF105300 | 339,3 | 264,0 | 39,6 | DG46*H071YX |
| DN 100 | 4" | DG46*H072 | DAN0480411S | KCF125301 | 387,6 | 295,9 | 57,7 | DG46*H072YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG46*H063 | SRN0015401S | KCF045293 | 233,2 | 125,7 | 3,9 | SG46*H063YX |
| DN 15 | 1/2" | SG46*H064 | SRN0030401S | KCF055302 | 258,8 | 139,4 | 4,5 | SG46*H064YX |
| DN 20 | 3/4" | SG46*H065 | SRN0053401S | KCF075303 | 304,2 | 159,8 | 7,4 | SG46*H065YX |
| DN 25 | 1" | SG46*H066 | SRN0053401S | KCF075303 | 304,2 | 164,3 | 9,6 | SG46*H066YX |
| DN 32 | 1" 1/4 | SG46*H067 | SRN0060401S | KCF075297 | 338,5 | 188,5 | 13,8 | SG46*H067YX |
| DN 40 | 1" 1/2 | SG46*H068 | SRN0090401S | KCF105305 | 393,7 | 226,5 | 20,0 | SG46*H068YX |
| DN 50 | 2" | SG46*H069 | SRN0120401S | KCF105299 | 409,6 | 232,6 | 24,5 | SG46*H069YX |
| DN 65 | 2" 1/2 | SG46*H070 | SRN0240401S | KCF125301 | 520,5 | 266,5 | 35,1 | SG46*H070YX |
| DN 80 | 3" | SG46*H071 | SRN0360401S | KCF125301 | 613,0 | 294,0 | 51,6 | SG46*H071YX |
| DN 100 | 4" | SG46*H072 | SRN0480401S | KCF145306 | 648,2 | 329,0 | 62,3 | SG46*H072YX |

* = 0 valvola con sfera a "T" (articolo 460) - *"T" port (model 460);* * = 1 valvola con sfera a "L" (articolo 461) - *"L" port (model 461)*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 464-465

VALVOLA A SFERA IN ACCIAIO INOX 3 VIE 4 GUANIZIONI, SFERA A "T" O "L" FILETTATA DIN 11851 PASSAGGIO INTEGRALE.

*3 WAY 4 SEALS, FULL-BORE STAINLESS STEEL BALL VALVE, "T" OR "L" PORT, DIN 11851 THREADED-ENDS.*

**ITEM 464**
Valvola con sfera a "T"

**ITEM 465**
Valvola con sfera a "L"



***ITEM 464***
*Valve "T" port*

***ITEM 465***
*Valve "L" port*

**CARATTERISTICHE GENERALI:**
- La valvola é costruita in 316L acciaio inox e si presta ad utilizzi che richiedono condizioni igieniche particolari (applicazioni in industria alimentare).
- Con 4 guarnizioni sulla sfera permette la deviazione del flusso in tutte le direzioni con chiusura della mandata su uno dei tre attacchi.
- Estremità filettate DIN 11851.
- Temperatura di utilizzo: da -20°C a + 150°C.
- Pressione di utilizzo: vedi tabella.
- Fluido intercettato: per usi alimentari.
- Testa della valvola a norma ISO 5211.
- **La versione con leva non ha la testa della valvola a norma ISO 5211 e non è possibile montare alcun tipo di attuatore.**

***GENERAL FEATURES:***
- *The valve is manufactured in 316L stainless steel and suggested for particular hygienic conditions (food industry applications).*
- *Valve with 4 ball seats. Inlet from any of the 3 ends. It can also shut of the flow.*
- *Ends: as per DIN 11851 specifications.*
- *Working temperature: from -20°C to +150°C.*
- *Working pressure: see table.*
- *Fluid range: food industry.*
- *Head of the valve as per ISO 5211 specifications.*
- ***The manual version (with lever) doesn't have the ISO 5211 top work and its therefore not possible to mount on it any kind of actuators.***

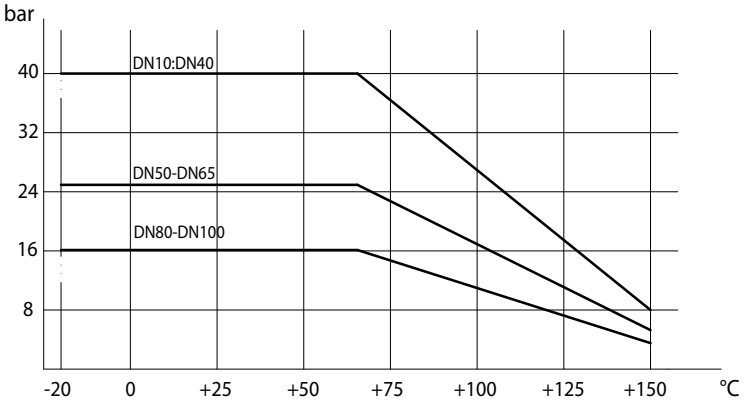
**ESECUZIONI SPECIALI A RICHIESTA:**
- Attacchi: SMS - MACON - DIN maschio.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite;
  Polietilene alta densità.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Connection: SMS - MACON - DIN male.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite;*
  *High-molecular weight polyethylene.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

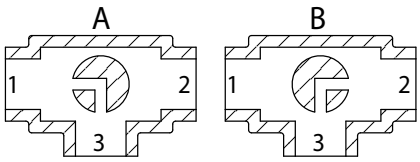
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*



Vista da sopra *View from above*

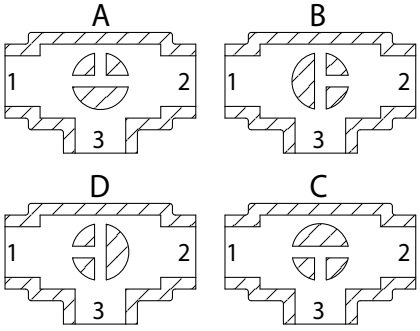
## SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*



Vista da sopra *View from above*

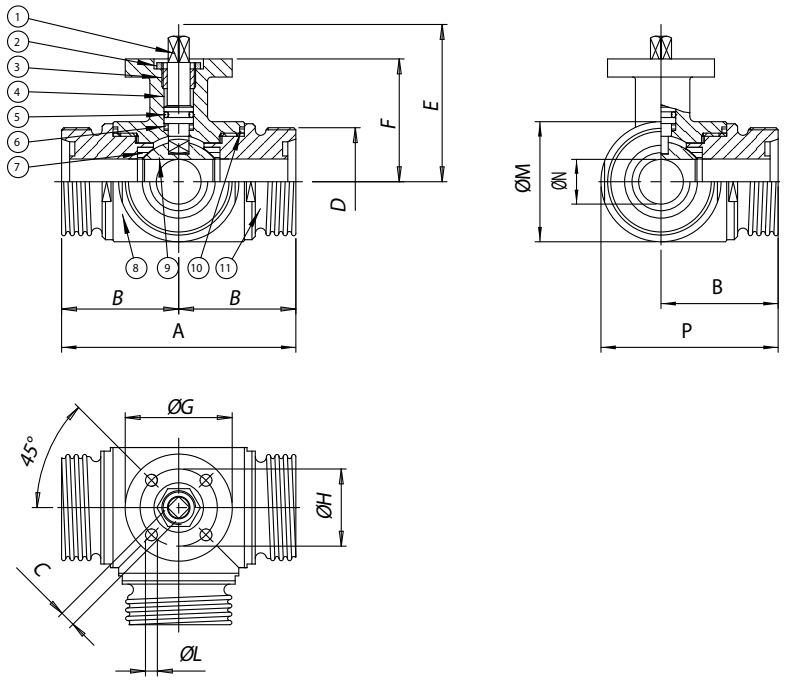
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | | | 212 | 304 |
| PN 25 bar | | | | | | | 83 | 142 | | |
| PN 40 bar | 9 | 18 | 23 | 27 | 36 | 54 | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 464-465
## ACCIAIO INOX *STAINLESS STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* "T" port | → ATEX | Asse libero *Free shaft* "L" port | → ATEX | Kg | Con leva *With lever* "T" port | → ATEX | Con leva *With lever* "L" port | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V464H633 | V464H633YX | V465H633 | V465H633YX | 1,1 | L464H633 | L464H633YX | L465H633 | L465H633YX | 1,1 | KGBV4803 |
| DN 15 | 1/2" | V464H634G | V464H634GYX | V465H634G | V465H634GYX | 1,5 | L464H634 | L464H634YX | L465H634 | L465H634YX | 1,4 | KGBV4804 |
| DN 20 | 3/4" | V464H635 | V464H635YX | V465H635 | V465H635YX | 2,5 | L464H635 | L464H635YX | L465H635 | L465H635YX | 2,3 | KGBV4805 |
| DN 25 | 1" | V464H636 | V464H636YX | V465H636 | V465H636YX | 3,2 | L464H636 | L464H636YX | L465H636 | L465H636YX | 3,1 | KGBV4806 |
| DN 32 | 1" 1/4 | V464H637 | V464H637YX | V465H637 | V465H637YX | 5,0 | L464H637 | L464H637YX | L465H637 | L465H637YX | 5,1 | KGBV4807 |
| DN 40 | 1" 1/2 | V464H638G | V464H638GYX | V465H638G | V465H638GYX | 7,6 | L464H638 | L464H638YX | L465H638 | L465H638YX | 7,4 | KGBV4808 |
| DN 50 | 2" | V464H639 | V464H639YX | V465H639 | V465H639YX | 9,1 | L464H639 | L464H639YX | L465H639 | L465H639YX | 9,0 | KGBV4809 |
| DN 65 | 2" 1/2 | V464H640G | V464H640GYX | V465H640G | V465H640GYX | 11,5 | L464H640 | L464H640YX | L465H640 | L465H640YX | 11,0 | KGBV4810 |
| DN 80 | 3" | V464H641 | V464H641YX | V465H641 | V465H641YX | 22,1 | L464H641 | L464H641YX | L465H641 | L465H641YX | 22,4 | KGBV4811 |
| DN 100 | 4" | V464H642 | V464H642YX | V465H642 | V465H642YX | 35,4 | L464H642 | L464H642YX | L465H642 | L465H642YX | 35,0 | KGBV4812 |




## MATERIALI *MATERIALS*

| | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 2 | Dado *Nut* | 303 S.S. | | |
| 3 | Anello premiguarnizione *Gland nut ring* | 304L S.S. (303 S.S.) | | |
| 4* | Anello di tenuta superiore *Top tight ring* | P.T.F.E. | | |
| 5* | O-ring di tenuta perno *Shaft o-ring* | FKM | | |
| 6* | Dischetto di tenuta perno *Washer* | P.T.F.E. | | |
| 7* | Guarnizioni di tenuta laterale Seals | P.T.F.E. | | |
| 8 | Corpo *Body* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 9 | Sfera *Ball* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |
| 10* | Guarnizioni di tenuta manicotti *End sealings* | P.T.F.E. | | |
| 11 | Manicotto femmina *End* | 316L S.S. | 1.4401 | UNI X2CrNiMo 17 12 |

* Particolari del kit di ricambio *Components of spare part kit* KGBV48...

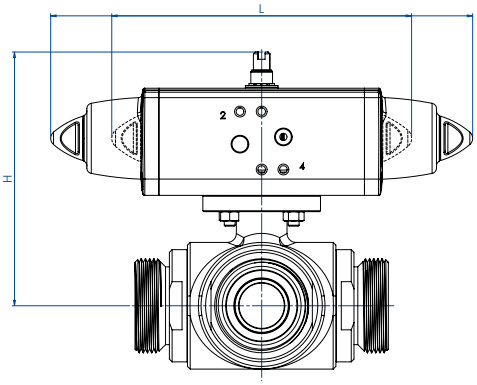
## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | □C | D | E | F | øG | øH | øL | øM | øN | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 10 | 3/8" | 108 | 54 | 6 | 28 | 54,5 | 46,5 | 46 | 36 | 6 | 45 | 10 | 76,5 |
| DN 15 | 1/2" | 118 | 59 | 6 | 34 | 57 | 49 | 54 | 42 | 6 | 52 | 15 | 85 |
| DN 20 | 3/4" | 130 | 65 | 9 | 44 | 69,5 | 56,5 | 65 | 50 | 7 | 60 | 20 | 95 |
| DN 25 | 1" | 140 | 70 | 9 | 52 | 74 | 61 | 65 | 50 | 7 | 70 | 25 | 105 |
| DN 32 | 1" 1/4 | 156 | 78 | 14 | 58 | 94,5 | 81,5 | 65 | 50 | 7 | 85 | 32 | 120,5 |
| DN 40 | 1" 1/2 | 172 | 86 | 14 | 65 | 102 | 89 | 90 | 70 | 9 | 100 | 40 | 136 |
| DN 50 | 2" | 182 | 91 | 17 | 78 | 106,5 | 91,5 | 90 | 70 | 9 | 110 | 50 | 146 |
| DN 65 | 2" 1/2 | 196 | 98 | 17 | 95 | 116,5 | 101,5 | 125 | 102 | 11 | 122 | 65 | 159 |
| DN 80 | 3" | 256 | 128 | 17 | 110 | 134 | 116 | 125 | 102 | 11 | 150 | 80 | 203 |
| DN 100 | 4" | 286 | 143 | 17 | 130 | 149 | 131 | 125 | 102 | 11 | 192 | 100 | 239 |

# ITEM 464-465
## ACCIAIO INOX *STAINLESS STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG46*H063 | DAN0015411S | KCF045293 | 159,0 | 118,7 | 1,8 | DG46*H063YX |
| DN 15 | 1/2" | DG46*H064 | DAN0030412S | KCF045293 | 174,2 | 128,2 | 2,2 | DG46*H064YX |
| DN 20 | 3/4" | DG46*H065 | DAN0045412S | KCF045294 | 188,5 | 141,0 | 3,5 | DG46*H065YX |
| DN 25 | 1" | DG46*H066 | DAN0045412S | KCF045294 | 188,5 | 145,5 | 4,5 | DG46*H066YX |
| DN 32 | 1" 1/4 | DG46*H067 | DAN0060412S | KCF055296 | 198,0 | 171,9 | 6,9 | DG46*H067YX |
| DN 40 | 1" 1/2 | DG46*H068 | DAN0106411S | KCF075304 | 237,0 | 192,3 | 10,2 | DG46*H068YX |
| DN 50 | 2" | DG46*H069 | DAN0120411S | KCF075298 | 244,1 | 198,5 | 12,2 | DG46*H069YX |
| DN 65 | 2" 1/2 | DG46*H070 | DAN0240411S | KCF105300 | 313,6 | 242,6 | 16,0 | DG46*H070YX |
| DN 80 | 3" | DG46*H071 | DAN0360411S | KCF105300 | 339,3 | 264,0 | 29,0 | DG46*H071YX |
| DN 100 | 4" | DG46*H072 | DAN0480411S | KCF125301 | 387,6 | 295,9 | 46,2 | DG46*H072YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG46*H063 | SRN0015401S | KCF045293 | 233,2 | 125,7 | 2,2 | SG46*H063YX |
| DN 15 | 1/2" | SG46*H064 | SRN0030401S | KCF055302 | 258,8 | 139,4 | 2,8 | SG46*H064YX |
| DN 20 | 3/4" | SG46*H065 | SRN0053401S | KCF075303 | 304,2 | 159,8 | 4,8 | SG46*H065YX |
| DN 25 | 1" | SG46*H066 | SRN0053401S | KCF075303 | 304,2 | 164,3 | 6,3 | SG46*H066YX |
| DN 32 | 1" 1/4 | SG46*H067 | SRN0060401S | KCF075297 | 338,5 | 188,5 | 8,4 | SG46*H067YX |
| DN 40 | 1" 1/2 | SG46*H068 | SRN0090401S | KCF105305 | 393,7 | 226,5 | 13,6 | SG46*H068YX |
| DN 50 | 2" | SG46*H069 | SRN0120401S | KCF105299 | 409,6 | 232,6 | 15,6 | SG46*H069YX |
| DN 65 | 2" 1/2 | SG46*H070 | SRN0240401S | KCF125301 | 520,5 | 266,5 | 23,4 | SG46*H070YX |
| DN 80 | 3" | SG46*H071 | SRN0360401S | KCF125301 | 613,0 | 294,0 | 40,3 | SG46*H071YX |
| DN 100 | 4" | SG46*H072 | SRN0480401S | KCF145306 | 648,2 | 329,0 | 60,7 | SG46*H072YX |

* = 4 Valvola con sfera a "T" (articolo 464) - *"T" port (model 464);* * = 5 Valvola con sfera a "L" (articolo 465) - *"L" port (model 465)*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

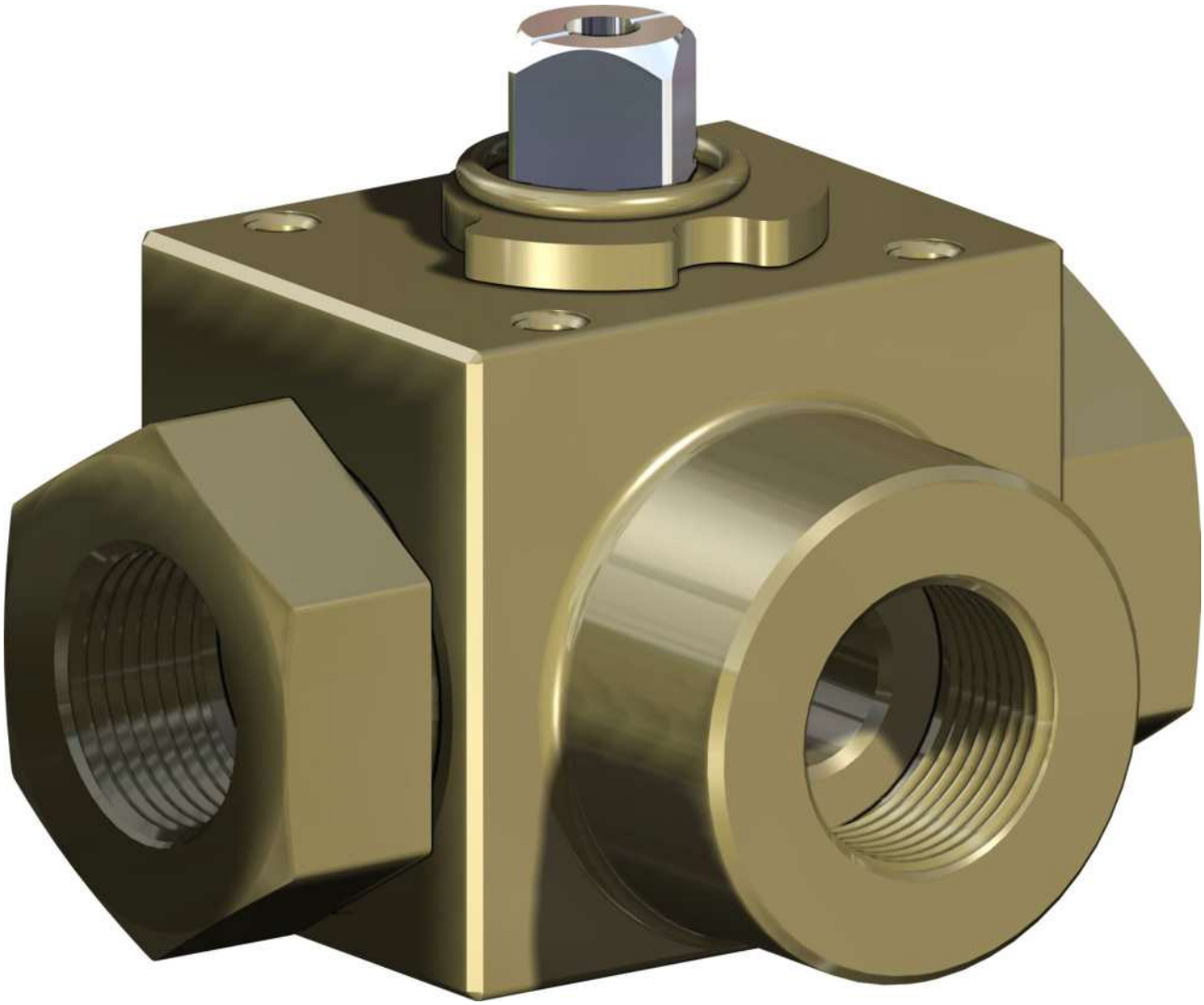
A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 541

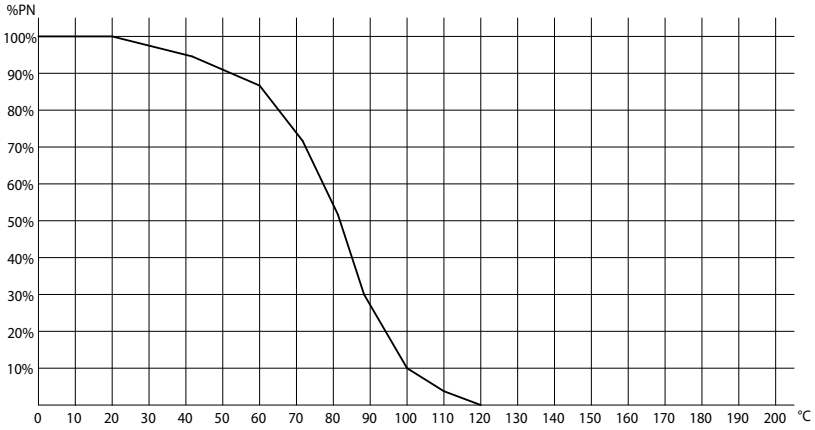
## VALVOLA A SFERA IN ACCIAIO AL CARBONIO 3 VIE FILETTATA CON SFERA A “L” PER ALTA PRESSIONE PASSAGGIO INTEGRALE.

*3-WAY FULL-BORE THREADED-ENDS HIGH PRESSURE CARBON STEEL BALL VALVE "L" PORT.*



| | |
|---|---|
| **CARATTERISTICHE GENERALI:**<br>• Estremità filettate femmina a norma DIN/ISO 228.<br>• La valvola funziona solo come deviatore non permette alcuna chiusura della mandata ed é obbligatoriamente collegata al manicotto centrale.<br>• Temperatura di utilizzo: da -10°C a +100°C.<br>• Pressione di utilizzo: 3/8”-1/2” PN 500; 3/4”-1” PN 315.<br>• Fluido intercettato: olii, prodotti petroliferi e petrolchimici. | ***GENERAL FEATURES:***<br>• *Threaded ends as per DIN/ISO 228.*<br>• *The valve can be used as DIVERTER ONLY and must be connected at the central end only.*<br>• *Working temperature: from -10°C to + 100°C.*<br>• *Working pressure: 3/8”-1/2” PN 500; 3/4”-1” PN 315.*<br>• *Field of use: oils, petroleum and petrochemical products.* |
| **ESECUZIONI SPECIALI A RICHIESTA:**<br>• Per altre applicazioni consultare il nostro ufficio commerciale. | ***ON REQUEST:***<br>• *For other applications, please contact our sales department.* |
| **CERTIFICAZIONI:**<br>• Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.<br>• Certificato ATEX a richiesta. | ***CERTIFICATIONS:***<br>• *ATEX version in conformity with European Directive 2014/34/EU.*<br>• *ATEX certificate on request.* |

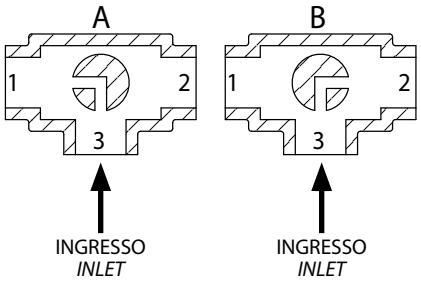
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

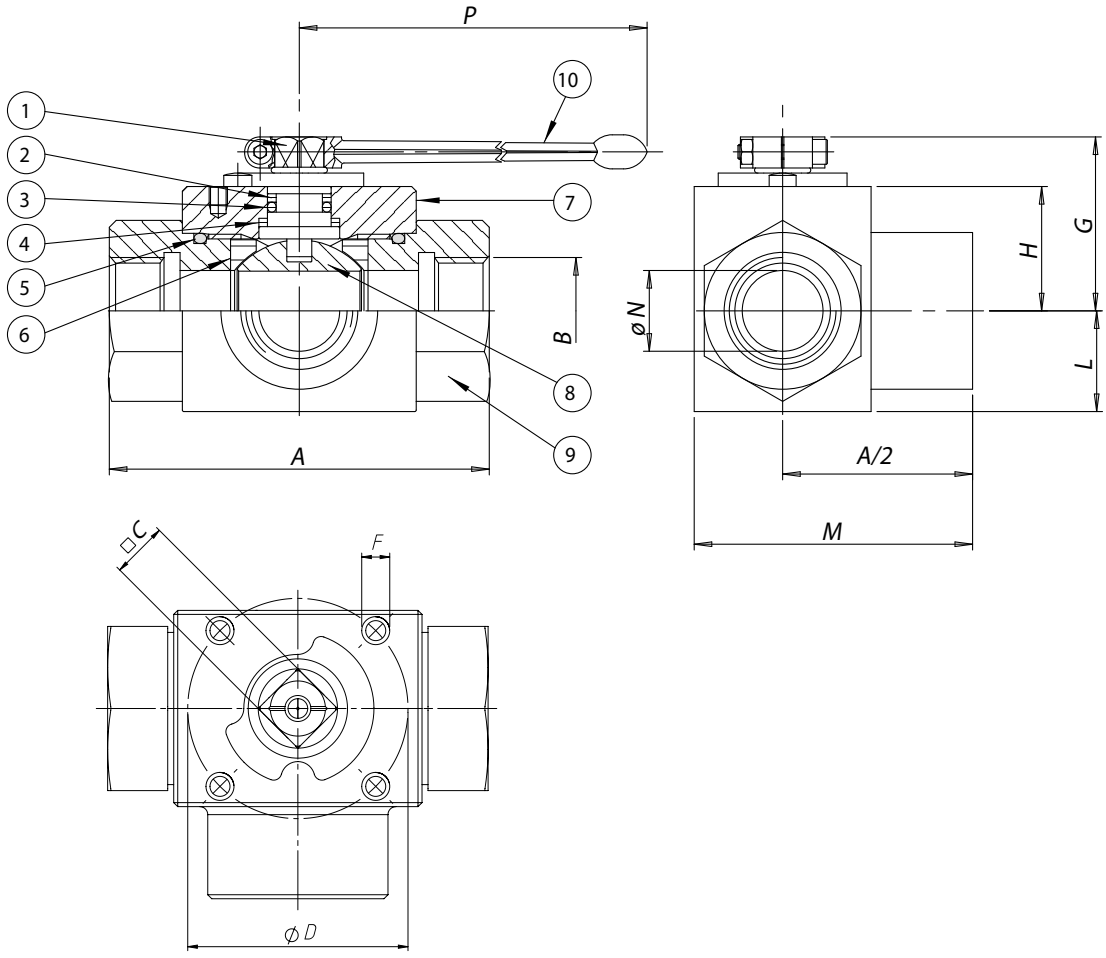
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | |
|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** |
| PN 315 bar | | | 34 | 37 |
| PN 500 bar | 15 | 18 | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 541
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 10 | 3/8" | V541B403G | V541B403GYX | 0,7 | L541B403G | L541B403GYX | 0,85 | KGBV8103 |
| DN 15 | 1/2" | V541B404G | V541B404GYX | 0,8 | L541B404G | L541B404GYX | 0,95 | KGBV8104 |
| DN 20 | 3/4" | V541B405G | V541B405GYX | 1,7 | L541B405G | L541B405GYX | 1,9 | KGBV8105 |
| DN 25 | 1" | V541B406G | V541B406GYX | 2,6 | L541B406G | L541B406GYX | 2,8 | KGBV8106 |




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| 1 | Stelo *Shaft* | Acciaio al carbonio *Carbon steel* | CF9SMn28 |
| 2* | Anello antiestrusione *Washer for o-ring protection* | P.T.F.E. | |
| 3* | O-ring tenuta stelo *O-ring* | FPM | |
| 4* | Dischetto di tenuta superiore *Washer* | POM + MoS2 | |
| 5* | O-ring di tenuta laterale *O-ring* | FPM | |
| 6* | Guarnizioni di tenuta sfera *Ball sealing* | POM + MoS2 | |
| 7 | Corpo *Body* | Acciaio al carbonio *Carbon steel* | CF9SMn28 |
| 8 | Sfera *Ball* | Acciaio al carbonio cromata *Carbon steel chromium plated* | CF9SMn28 |
| 9 | Manicotto femmina *Threaded end* | Acciaio al carbonio *Carbon steel* | CF9SMn28 |
| 10 | Leva *Lever* | Acciaio al carbonio *Carbon steel* | |

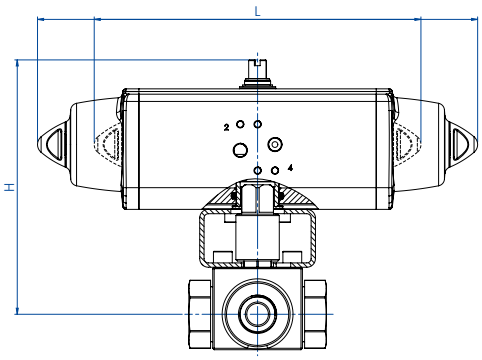
* Particolari del kit di ricambio *Components of spare part kit* KGBV81...

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | B | □C | D | ISO | F | G | H | L | M | øN | P |
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 10 | 3/8" | 72 | 3/8" | 9 | 36 | F03 | M5 | 34,3 | 20,5 | 17,5 | 52 | 10 | 115 |
| DN 15 | 1/2" | 83 | 1/2" | 9 | 36 | F03 | M5 | 35 | 21 | 19 | 59 | 13 | 115 |
| DN 20 | 3/4" | 95 | 3/4" | 14 | 50 | F05 | M6 | 50,8 | 32,5 | 24,5 | 72 | 20 | 200 |
| DN 25 | 1" | 113 | 1" | 14 | 50 | F05 | M6 | 53,8 | 35,5 | 29,5 | 85,5 | 25 | 200 |

# ITEM 541
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | DG541H003 | DAN0030411S | KCNAADD5484 | 174,3 | 167,2 | 2,1 | DG541H003YX |
| DN 15 | 1/2" | DG541H004 | DAN0030411S | KCNAADD5484 | 174,3 | 169,2 | 2,2 | DG541H004YX |
| DN 20 | 3/4" | DG541H005 | DAN0060412S | KCNCCDD5486 | 198,1 | 207,4 | 4,0 | DG541H005YX |
| DN 25 | 1" | DG541H006 | DAN0060412S | KCNCCDD5486 | 198,1 | 215,4 | 4,9 | DG541H006YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 10 | 3/8" | SG541H003 | SRN0030402S | KCNACDD5485 | 259,0 | 188,4 | 3,4 | SG541H003YX |
| DN 15 | 1/2" | SG541H004 | SRN0030402S | KCNACDD5485 | 259,0 | 190,4 | 3,5 | SG541H004YX |
| DN 20 | 3/4" | SG541H005 | SRN0060401S | KCNCCDD5487 | 360,8 | 224,0 | 5,9 | SG541H005YX |
| DN 25 | 1" | SG541H006 | SRN0060401S | KCNCCDD5487 | 360,8 | 232,0 | 6,8 | SG541H006YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 545

## VALVOLA A SFERA IN ACCIAIO AL CARBONIO 3 VIE FLANGIATA A CORPO PIATTO SFERA A "L", A PASSAGGIO RIDOTTO.

*3-WAY FLAT BODY FLANGED CARBON STEEL BALL VALVE "L" PORT, REDUCED BORE.*



**CARATTERISTICHE GENERALI:**

- **La valvola funziona solo come deviatore. Non permette nessuna chiusura della mandata che può avvenire solo dalla via centrale; vedi schema.**
- Norme per flange d'attacco: EN 1092-1 PN40 FINO A DN50; PN16 DN65,80,100.
- Temperatura di utilizzo: da -10°C a +150°C (+200°C con guarnizioni speciali).
- Pressione di utilizzo: vedi diagramma.
- Fluido intercettato: acqua, prodotti petroliferi e petrolchimici liquidi.
- Passaggio ridotto.

***GENERAL FEATURES:***

- ***The valve works only as a diverter. The closure can only take place from the central way; check diagram.***
- *Flanges as per: EN 1092-1 PN40 FINO A DN50; PN16 DN65,80,100.*
- *Working temperature: from -10°C to +150°C (+200° C with special seals).*
- *Working pressure: see diagram.*
- *Intercepted fluid: water, liquid petroleum products and petrochemicals.*
- *Reduced bore.*

**ESECUZIONI SPECIALI A RICHIESTA:**

- Corpo in A350 LF2 per -20°C.
- Guarnizioni di tenuta in: PTFE caricato vetro;
  PTFE caricato carbografite.
- Sfera a "T" con ingresso solo su porta 3.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***

- *Body in A350 LF2 for -20°C.*
- *Seals made of: PTFE glass filled;*
  *PTFE with carbon graphite.*
- *"T" port (port 3 inlet only).*
- *For other applications, please contact our sales department.*

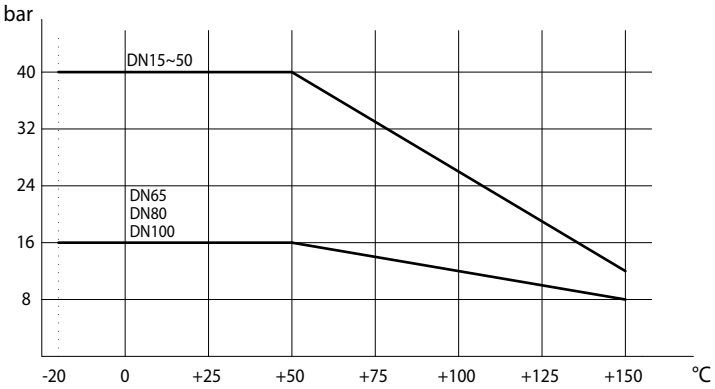
**CERTIFICAZIONI:**

- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***

- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*

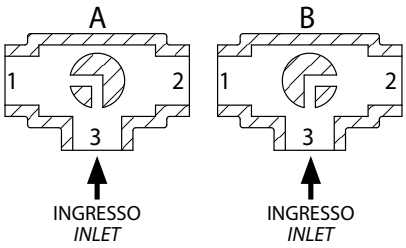



## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*

Vista da sopra *View from above*




## SCHEMA SFERA A "T" (A RICHIESTA) *PLAN FOR "T" PORT (ON REQUEST)*

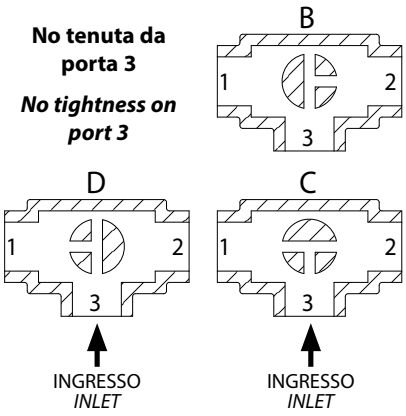
Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*

Vista da sopra *View from above*



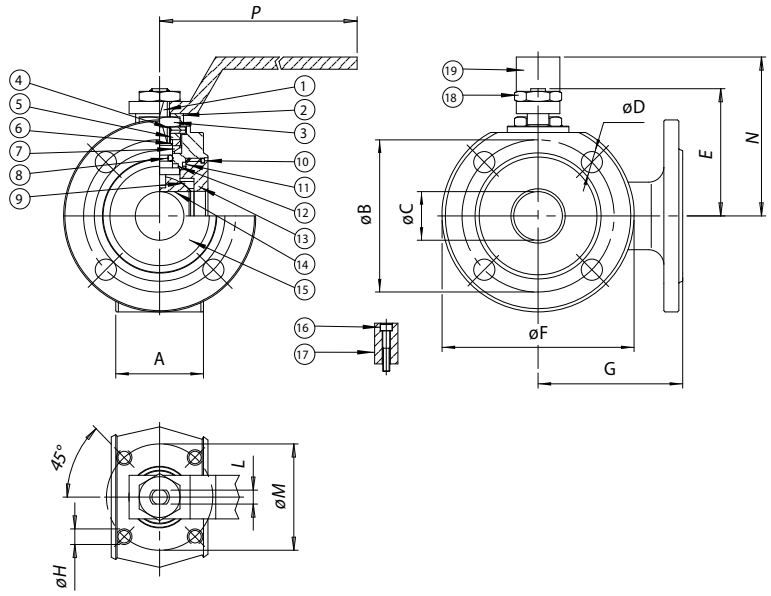

| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 16 bar | | | | | | | 85 | 128 | 212 |
| PN 40 bar | 8 | 13 | 20 | 30 | 42 | 61 | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 545
## ACCIAIO AL CARBONIO *CARBON STEEL*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* - "L" PORT | | | CON LEVA *WITH LEVER* - "L" PORT | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | → ATEX | Kg | Con leva *With lever* | → ATEX | Kg | Kit guarnizioni *Seals kit* |
| DN 15 | 1/2" | V545X604 | V545X604YX | 1,2 | L545X604 | L545X604YX | 1,35 | KGBV4404 |
| DN 20 | 3/4" | V545X605 | V545X605YX | 2 | L545X605 | L545X605YX | 2,15 | KGBV4405 |
| DN 25 | 1" | V545X606 | V545X606YX | 2,65 | L545X606 | L545X606YX | 2,8 | KGBV4406 |
| DN 32 | 1" 1/4 | V545X607 | V545X607YX | 3,8 | L545X607 | L545X607YX | 4 | KGBV4407 |
| DN 40 | 1" 1/2 | V545X608 | V545X608YX | 5,5 | L545X608 | L545X608YX | 5,7 | KGBV4408 |
| DN 50 | 2" | V545X609 | V545X609YX | 6,2 | L545X609 | L545X609YX | 6,5 | KGBV4409 |
| DN 65 | 2" 1/2 | V545X610 | V545X610YX | 10 | L545X610 | L545X610YX | 10,3 | KGBV4410 |
| DN 80 | 3" | V545X611 | V545X611YX | 11,2 | L545X611 | L545X611YX | 11,7 | KGBV4411 |
| DN 100 | 4" | V545X612 | V545X612YX | 20,2 | L545X612 | L545X612YX | 20,7 | KGBV4412 |




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 2 | Piastra bloccadado *Nut holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Dado di bloccaggio *Lock nut* | Acciaio al carbonio *Carbon steel* | | |
| 4 | Molla a tazza *Belleville washer* | 50Crv4 | | |
| 5 | Distanziale *Ring* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 6* | Anello premiguarnizione *Gland nut ring* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 7* | Coppia di tenuta superiore *Top sealing* | P.T.F.E. | | |
| 8* | O-ring di tenuta intermedia *O-ring* | FKM | | |
| 9* | Guarnizioni di tenuta laterale *Seals* | P.T.F.E. | | |
| 10* | O-ring tenuta ghiera *O-ring* | FKM | | |
| 11* | Guarnizioni di tenuta ghiera *Ring nut sealing* | P.T.F.E. | | |
| 12* | Tenuta inferiore *Bottom sealing* | P.T.F.E. | | |
| 13 | Ghiera *Ring nut* | A105 | | |
| 14 | Sfera *Ball DN15-DN50* | 316 S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 14 | Sfera *Ball DN65-DN100* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 15 | Corpo *Body* | A105 | | |
| 16 | Vite per fermo posizione *Holder screw* | Acciaio al carbonio *Carbon steel* | | |
| 17 | Fermo di posizione *Holder* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 18 | Dado blocca leva *Lever nut* | Acciaio al carbonio *Carbon steel* | | |
| 19 | Leva di manovra *Lever* | Acciaio al carbonio *Carbon steel* | | |

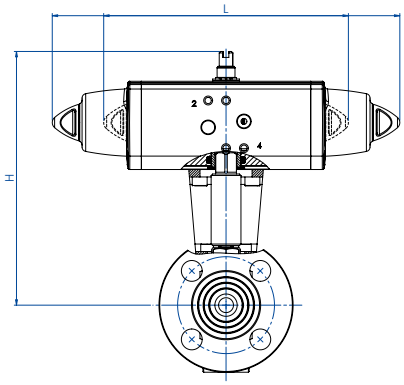
* Particolari del kit di ricambio *Components of spare part kit* KGBV63...

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | øB | øC | øD | E | øF | G | øH | L | øM | N | P |
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 15 | 1/2" | 35 | 65 | 10 | M12X4 | 48 | 90 | 85 | M5 | 6 | 36 | 65 | 140 |
| DN 20 | 3/4" | 38 | 75 | 15 | M12X4 | 51 | 100 | 90 | M5 | 6 | 36 | 70 | 140 |
| DN 25 | 1" | 43 | 85 | 20 | M12X4 | 62,5 | 110 | 90 | M5 | 8 | 42 | 82 | 180 |
| DN 32 | 1" 1/4 | 54 | 100 | 25 | M16X4 | 67 | 130 | 105 | M5 | 8 | 42 | 85 | 180 |
| DN 40 | 1" 1/2 | 66 | 110 | 32 | M16X4 | 80 | 140 | 120 | M6 | 10 | 50 | 102 | 230 |
| DN 50 | 2" | 83 | 125 | 40 | M16X4 | 87 | 150 | 130 | M6 | 10 | 50 | 110 | 230 |
| DN 65 | 2" 1/2 | 103 | 145 | 50 | M16X4 | 119,5 | 175 | 150 | M8 | 14 | 70 | 137,5 | 350 |
| DN 80 | 3" | 122 | 160 | 65 | M16X8 | 129,5 | 190 | 175 | M8 | 14 | 70 | 150 | 350 |
| DN 100 | 4" | 153 | 180 | 78 | M16X8 | 148,5 | 220 | 185 | M10 | 16 | 102 | 165 | 508 |

# ITEM 545
## ACCIAIO AL CARBONIO *CARBON STEEL*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | DG545H064 | DAN0015411S | KCNAAHD5247 | 159,0 | 152,8 | 2,0 | DG545H064YX |
| DN 20 | 3/4" | DG545H065 | DAN0030411S | KCNAAHD5247 | 174,2 | 162,8 | 3,0 | DG545H065YX |
| DN 25 | 1" | DG545H066 | DAN0030411S | KCNBCHD5249 | 174,2 | 178,3 | 3,7 | DG545H066YX |
| DN 32 | 1" 1/4 | DG545H067 | DAN0045412S | KCNBCHD5249 | 188,5 | 190,1 | 5,0 | DG545H067YX |
| DN 40 | 1" 1/2 | DG545H068 | DAN0060412S | KCNCCHD5251 | 198,0 | 200,0 | 7,1 | DG545H068YX |
| DN 50 | 2" | DG545H069 | DAN0106411S | KCNCCHD5252 | 237,0 | 219,8 | 7,0 | DG545H069YX |
| DN 65 | 2" 1/2 | DG545H070 | DAN0120411S | KCNDDHD5289 | 244,1 | 235,6 | 12,7 | DG545H070YX |
| DN 80 | 3" | DG545H071 | DAN0180411S | KCNDDHD5290 | 289,9 | 285,5 | 15,8 | DG545H071YX |
| DN 100 | 4" | DG545H072 | DAN0360411S | KCNEEHD5291 | 339,3 | 329,0 | 28,0 | DG545H072YX |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg | ATEX |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| DN 15 | 1/2" | SG545H064 | SRN0015401S | KCNAAHD5247 | 233,2 | 159,8 | 2,0 | SG545H064YX |
| DN 20 | 3/4" | SG545H065 | SRN0030402S | KCNACHD5248 | 258,8 | 184,0 | 4,0 | SG545H065YX |
| DN 25 | 1" | SG545H066 | SRN0030402S | KCNBCHD5250 | 258,8 | 189,5 | 4,6 | SG545H066YX |
| DN 32 | 1" 1/4 | SG545H067 | SRN0053401S | KCNBCHD5288 | 304,2 | 208,8 | 6,2 | SG545H067YX |
| DN 40 | 1" 1/2 | SG545H068 | SRN0060401S | KCNCCHD5252 | 338,5 | 216,6 | 8,9 | SG545H068YX |
| DN 50 | 2" | SG545H069 | SRN0090401S | KCNCDHD5253 | 393,7 | 253,5 | 9,0 | SG545H069YX |
| DN 65 | 2" 1/2 | SG545H070 | SRN0120401S | KCNDDHD5290 | 409,6 | 279,7 | 16,4 | SG545H070YX |
| DN 80 | 3" | SG545H071 | SRN0180401S | KCNDDHD5290 | 474,0 | 297,0 | 21,0 | SG545H071YX |
| DN 100 | 4" | SG545H072 | SRN0360401S | KCNEEHD5292 | 613,0 | 359,0 | 38,0 | SG545H072YX |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 615-616

## VALVOLA A SFERA IN PVC 2 VIE CON ATTACCHI FILETTATI O DA INCOLLARE - PASSAGGIO INTEGRALE.

*2-WAY FULL-BORE PVC BALL VALVE, THREADED OR GLUED ENDS.*

**ITEM 615**
Connessione: filettata

***ITEM 615***
*Connection: threaded*

**ITEM 616**
Connessione: da incollare

***ITEM 616***
*Connection: to be glued*



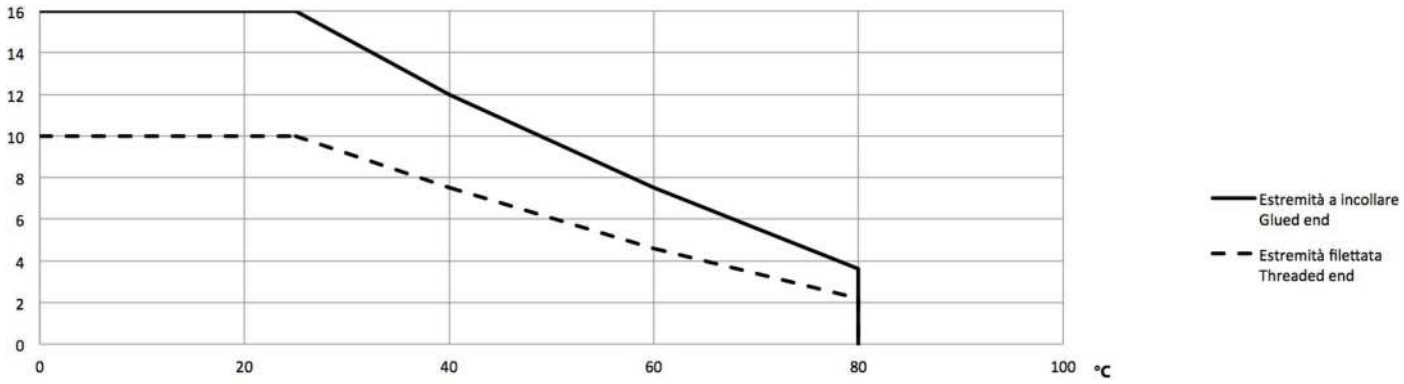
**UP TO DN50**



**DN65 ÷ DN100**

| **CARATTERISTICHE GENERALI:** | ***GENERAL FEATURES:*** |
|---|---|
| • Temperatura di esercizio: da 0°C a 80°C.<br>• Pressione di esercizio: vedi diagramma.<br>• Applicazioni: sostanze chimiche, fluidi ai quali il PVC è chimicamente resistente.<br>• Attacchi: filettati femmina a norma DIN/ISO 228/1;<br>• da incollare a norma ISO 727 UNI EN 1452.<br>• PN 16 sino a 20°C se classificata CHIMICAMENTE RESISTENTE con fluido impiegato per le valvole con attacchi da incollare, PN10 per attacchi filettati. | • *Working temperature: from 0°C to 80°C.*<br>• *Working pressure: see diagram.*<br>• *Applications: chemical and all kinds of fluids compatible with PVC.*<br>• *Connections: Female threaded as per DIN/ISO 228/1;*<br>• *to be glued ISO 727 UNI EN 1452.*<br>• *PN 16 till 20°C if classified chemical resistant with the used fluid with glued ends, PN10 with threaded ends.* |
| **ESECUZIONI SPECIALI A RICHIESTA:** | ***ON REQUEST:*** |
| • Contattare il nostro ufficio commerciale. | • *Please contact our sales department.* |

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*






## PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW-PRESSURE LOSS AND Kv NOMINAL COEFFICIENT*

| | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 | DN65 | DN80 | DN100 |
|---|---|---|---|---|---|---|---|---|---|---|
| Kv100 | 70 | 185 | 350 | 700 | 1000 | 1600 | 3100 | 5000 | 7000 | 11000 |
| KV | 4,2 | 11,1 | 21 | 42 | 60 | 96 | 186 | 300 | 420 | 660 |

KV100 litri al minuto *KV100 liters per minute*
KV metricubi/ora *KV cubic meters / hour*

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar. *Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

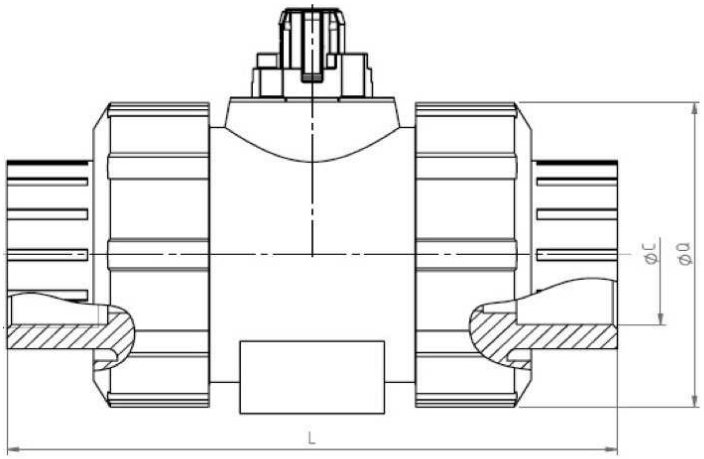
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | **DN 10 3/8"** | **DN 15 1/2"** | **DN 20 3/4"** | **DN 25 1"** | **DN 32 1"1/4** | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** |
| PN 10/16 bar | 2 | 2 | 3 | 4 | 5,5 | 7,5 | 10 | 15 | 23 | 40 |

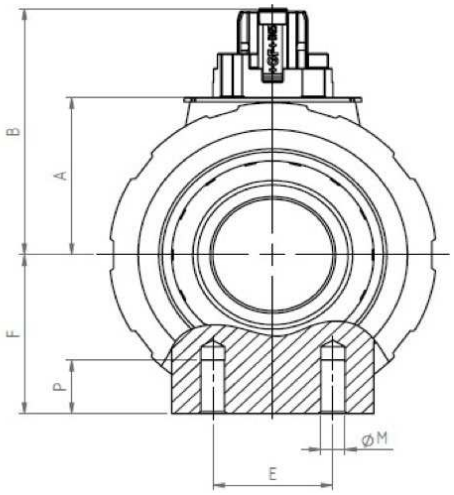
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

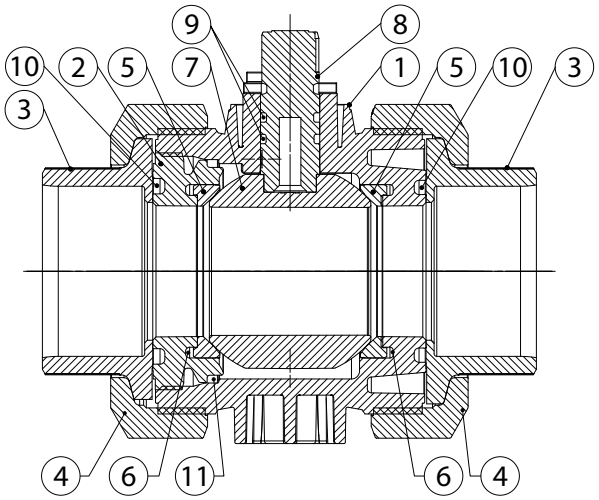
*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

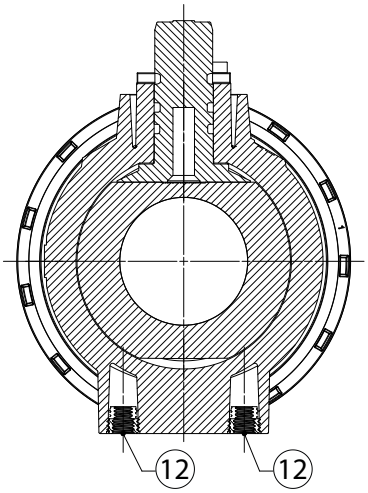
# ITEM 615-616
## PVC *PVC*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero filettata *Free shaft threaded* | Asse libero da incollare *Free shaft to be glued* | Kg | Con leva filettata *With lever threaded* | Con leva da incollare *With lever to be glued* | Kg |
| DN 10 | 3/8" | V615P203 | V616P753 | 0,1 | L615P203 | L616P753 | 0,16 |
| DN 15 | 1/2" | V615P204 | V616P754 | 0,1 | L615P204 | L616P754 | 0,16 |
| DN 20 | 3/4" | V615P205 | V616P755 | 0,2 | L615P205 | L616P755 | 0,25 |
| DN 25 | 1" | V615P206 | V616P756 | 0,3 | L615P206 | L616P756 | 0,35 |
| DN 32 | 1" 1/4 | V615P207 | V616P757 | 0,55 | L615P207 | L616P757 | 0,62 |
| DN 40 | 1" 1/2 | V615P208 | V616P758 | 0,76 | L615P208 | L616P758 | 0,85 |
| DN 50 | 2" | V615P209 | V616P759 | 1,1 | L615P209 | L616P759 | 1,56 |
| DN 65 | 2" 1/2 | V615P210 | V616P760 | 3,3 | L615P210 | L616P760 | 3,57 |
| DN 80 | 3" | V615P211 | V616P761 | 5 | L615P211 | L616P761 | 5,38 |
| DN 100 | 4" | V615P212 | V616P762 | 11,1 | L615P212 | L616P762 | 11,6 |




## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | L Filettata *Threaded* | L Incollare *Glued* | ØQ | ØC Filettate *Threaded* | ØC Incollare *Glued* | A | B | E | F | ØM | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | |
| DN 10 | 3/8" | 92 | 95 | 50 | 3/8" | 16 | 26,1 | 41 | 25 | 27 | 6 | 12 |
| DN 15 | 1/2" | 95 | 100 | 50 | 1/2" | 20 | 26,1 | 41 | 25 | 27 | 6 | 12 |
| DN 20 | 3/4" | 110 | 114 | 58 | 3/4" | 25 | 30 | 48,5 | 25 | 30 | 6 | 12 |
| DN 25 | 1" | 123 | 127 | 68 | 1" | 32 | 35,2 | 55 | 25 | 36 | 6 | 12 |
| DN 32 | 1" 1/4 | 146 | 146 | 84 | 1"1/4 | 40 | 44 | 66,9 | 45 | 44 | 8 | 15 |
| DN 40 | 1" 1/2 | 157 | 152 | 97 | 1"1/2 | 50 | 50,2 | 73,1 | 45 | 51 | 8 | 15 |
| DN 50 | 2" | 183 | 177 | 124 | 2" | 63 | 62 | 89,4 | 45 | 64 | 8 | 15 |
| DN 65 | 2" 1/2 | 233 | 233 | 166 | 2"1/2 | 75 | 84,1 | 126 | 70 | 85 | 8 | 15 |
| DN 80 | 3" | 254 | 254 | 200 | 3" | 90 | 95,9 | 138 | 70 | 105 | 8 | 15 |
| DN 100 | 4" | 301 | 301 | 238 | 4" | 110 | 109,9 | 152 | 120 | 123 | 12 | 22 |

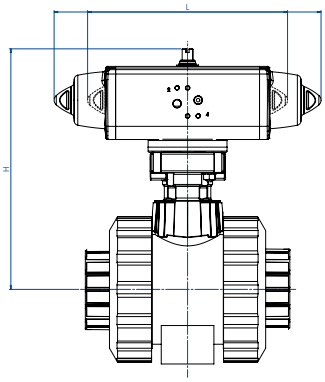
## MATERIALI *MATERIALS*

| | | |
|---|---|---|
| 1 | Corpo *Body* | PVC |
| 2 | Supporto guarnizione sfera *Ball sealing support* | PVC |
| 3 | Manicotto *End* | PVC |
| 4 | Ghiera *Nut ring* | PVC |
| 5 | Guarnizione tenuta sfera *Ball sealing* | PTFE |
| 6 | O-ring retroseggio *Backing seal* | EPDM |
| 7 | Sfera *Ball* | PVC |
| 8 | Stelo *Stem* | PVC |
| 9 | O-ring stelo *Shaft o-ring* | EPDM |
| 10 | O-ring tenuta manicotto *Valve end seal* | EPDM |
| 11 | O-ring corpo *Body seal* | EPDM |
| 12 | Inserti di montaggio *Mounting insert* | S.S. |

# ITEM 615-616
## PVC *PVC*
## CON ATTUATORE *WITH ACTUATOR*







### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO valvola filettata *ITEM CODE threaded valve* | ARTICOLO valvola da incollare *ITEM CODE to be glued valve* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| 10 | 3/8" | DG615H003 | DG616H083 | DAN0015412S | KCF045453 | 159,0 | 119,0 | 1,0 |
| 15 | 1/2" | DG615H004 | DG616H084 | DAN0015412S | KCF045453 | 159,0 | 119,0 | 1,0 |
| 20 | 3/4" | DG615H005 | DG616H085 | DAN0015412S | KCF045454 | 159,0 | 128,0 | 1,2 |
| 25 | 1" | DG615H006 | DG616H086 | DAN0015412S | KCF045454 | 159,0 | 133,0 | 1,3 |
| 32 | 1"1/4 | DG615H007 | DG616H087 | DAN0015412S | KCF045455 | 159,0 | 145,0 | 1,6 |
| 40 | 1"1/2 | DG615H008 | DG616H088 | DAN0030411S | KCF045678 | 174,2 | 158,0 | 2,0 |
| 50 | 2" | DG615H009 | DG616H089 | DAN0030411S | KCF045456 | 174,2 | 175,0 | 2,7 |
| 65 | 2"1/2 | DG615H010 | DG616H090 | DAN0030411S | KCF045457 | 174,2 | 250,0 | 4,7 |
| 80 | 3" | DG615H011 | DG616H091 | DAN0045412S | KCF045457 | 188,5 | 267,0 | 6,8 |
| 100 | 4" | DG615H012 | DG616H092 | DAN0060412S | KCF055459 | 198,0 | 265,0 | 10,5 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO valvola filettata *ITEM CODE threaded valve* | ARTICOLO valvola da incollare *ITEM CODE to be glued valve* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| 10 | 3/8" | SG615H003 | SG616H083 | SRN0015402S | KCF045453 | 233,2 | 126,0 | 1,5 |
| 15 | 1/2" | SG615H004 | SG616H084 | SRN0015402S | KCF045453 | 233,2 | 126,0 | 1,5 |
| 20 | 3/4" | SG615H005 | SG616H085 | SRN0015402S | KCF045454 | 233,2 | 135,0 | 1,7 |
| 25 | 1" | SG615H006 | SG616H086 | SRN0015402S | KCF045454 | 233,2 | 140,0 | 1,8 |
| 32 | 1"1/4 | SG615H007 | SG616H087 | SRN0015402S | KCF045455 | 233,2 | 152,0 | 2,0 |
| 40 | 1"1/2 | SG615H008 | SG616H088 | SRN0030402S | KCF055461 | 258,8 | 168,0 | 3,0 |
| 50 | 2" | SG615H009 | SG616H089 | SRN0030402S | KCF055462 | 258,8 | 185,0 | 3,7 |
| 65 | 2"1/2 | SG615H010 | SG616H090 | SRN0030402S | KCF055463 | 258,8 | 260,0 | 5,7 |
| 80 | 3" | SG615H011 | SG616H091 | SRN0053401S | KCF075498 | 304,2 | 287,0 | 8,6 |
| 100 | 4" | SG615H012 | SG616H092 | SRN0060401S | KCF075499 | 338,5 | 282,0 | 12,3 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*



# ITEM 635-636-637-638

## VALVOLA A SFERA IN PVC 3 VIE CON ATTACCHI FILETTATI O DA INCOLLARE - SFERA A “T” O “L” PASSAGGIO INTEGRALE.

*3-WAY FULL-BORE PVC BALL VALVE, THREADED OR GLUED ENDS, “T” OR “L” PORT.*

**ITEM 635**
Connessione: filettata
Valvola con sfera a "T"

***ITEM 635***
*Connection: threaded*
*Valve "T" port*

**ITEM 636**
Connessione: filettata
Valvola con sfera a "L"

***ITEM 636***
*Connection: threaded*
*Valve "L" port*

**ITEM 637**
Connessione: da incollare
Valvola con sfera a "T"

***ITEM 637***
*Connection: to be glued*
*Valve "T" port*

**ITEM 638**
Connessione: da incollare
Valvola con sfera a "L"

***ITEM 638***
*Connection: to be glued*
*Valve "L" port*



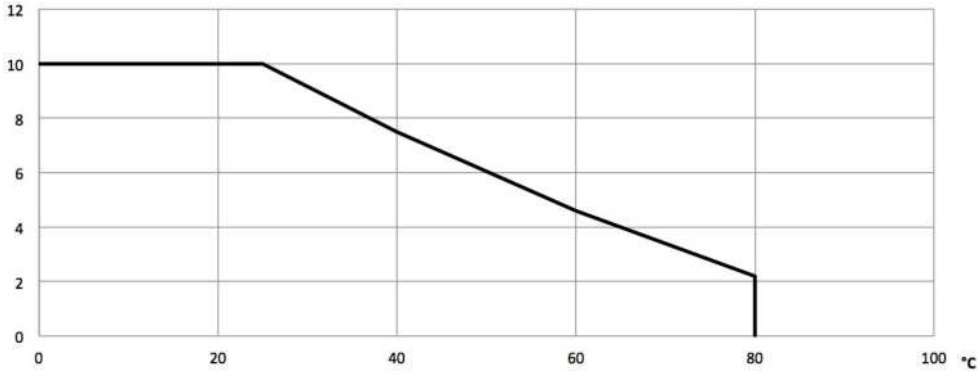
**CARATTERISTICHE GENERALI:**
- Valvola di smistamento e miscelazione con 3 guarnizioni. Permette la deviazione del flusso in tutte le direzioni con chiusura della mandata su uno dei tre attacchi.
- Temperatura di esercizio: da 0°C a +80°C.
- Pressione di esercizio: vedi diagramma.
- Applicazioni: sostanze chimiche, fluidi ai quali il PVC é chimicamente resistente.
- Attacchi: filettati femmina a norma DIN/ISO 228/1; da incollare a norma ISO 727 UNI EN 1452.
- PN 10 sino a 25°C se classificata CHIMICAMENTE RESISTENTE con fluido impiegato.

***GENERAL FEATURES:***
- *Valve with 3 seats for mixing and diverting processes. It’s possible to select two ways and shut off flow in the third way.*
- *Working temperature: from 0°C to +80°C.*
- *Working pressure: see diagram.*
- *Applications: chemicals and all kind of fluids compatible with PVC.*
- *Connections: Female threaded as per DIN/ISO 228/1; to be glued as per ISO 727 UNI EN 1452.*
- *PN 10 till 25°C if classified chemical resistant with the used fluid.*

**ESECUZIONI SPECIALI A RICHIESTA:**
- Contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Please contact our sales department.*

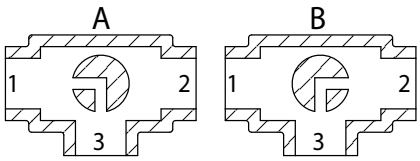
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## SCHEMA SFERA A "L" *PLAN FOR "L" PORT*

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** la posizione di riposo della sfera deve essere la "**A**".
Con attuatore **SR NORMALMENTE APERTO** la posizione di riposo della sfera deve essere la "**B**".

*N.B.: "**A**" must be the rest position of the ball with **SR FAIL CLOSE** actuator.*
*"**B**" must be the rest position of the ball with **SR FAIL OPEN** actuator.*




Vista da sopra *View from above*

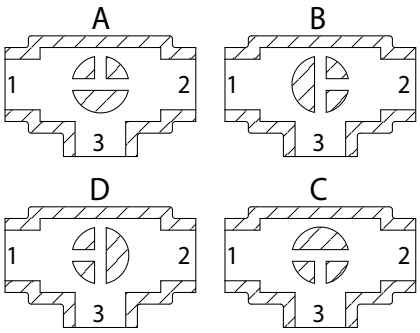
## SCHEMA SFERA A "T" *PLAN FOR "T" PORT*

Con l'attuatore sono possibili solo due posizioni con rotazione di 90°: la configurazione della sfera deve essere sempre comunicata al nostro ufficio commerciale.

N.B.: Con attuatore **SR NORMALMENTE CHIUSO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso antiorario.
Con attuatore **SR NORMALMENTE APERTO** scegliere la posizione di riposo della sfera; alimentando, l'attuatore ruota in senso orario.

*With actuator 2 positions with 90° rotation are possible only: the configuration of the ball must always be communicated at our sales department.*

*N.B.: Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.*
*Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.*




Vista da sopra *View from above*

## PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE Kv
## *FLOW-PRESSURE LOSS DIAGRAM AND Kv NOMINAL COEFFICIENT*

| SFERA "L" *"L" PORT* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
| Kv100 | 50 | 75 | 150 | 280 | 480 | 620 | 1230 |
| KV | 3 | 4,5 | 9 | 16,8 | 28,8 | 37,2 | 73,8 |

| SFERA "T" *"T" PORT* | | | | | | | |
|---|---|---|---|---|---|---|---|
| | DN10 | DN15 | DN20 | DN25 | DN32 | DN40 | DN50 |
| Kv100 | 140 | 200 | 470 | 793 | 1290 | 1910 | 3100 |
| KV | 8,4 | 12 | 28,2 | 47,6 | 77,4 | 114,6 | 186 |

KV100 litri al minuto *KV100 liters per minute*
KV metricubi/ora *KV cubic meters / hour*

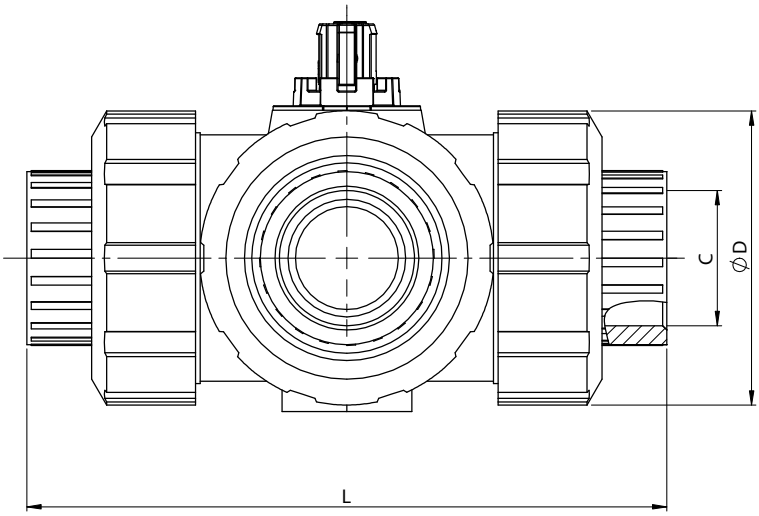
Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar. *Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

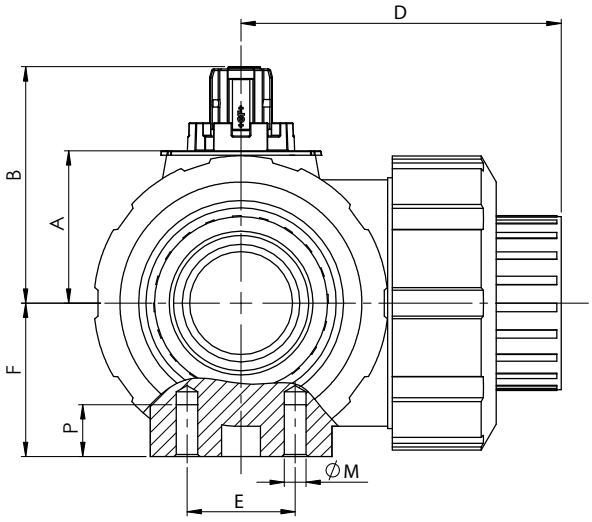
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | DN 10 3/8" | DN 15 1/2" | DN 20 3/4" | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" |
| PN 10 bar | 2 | 2 | 3 | 4 | 5,5 | 7,5 | 10 |

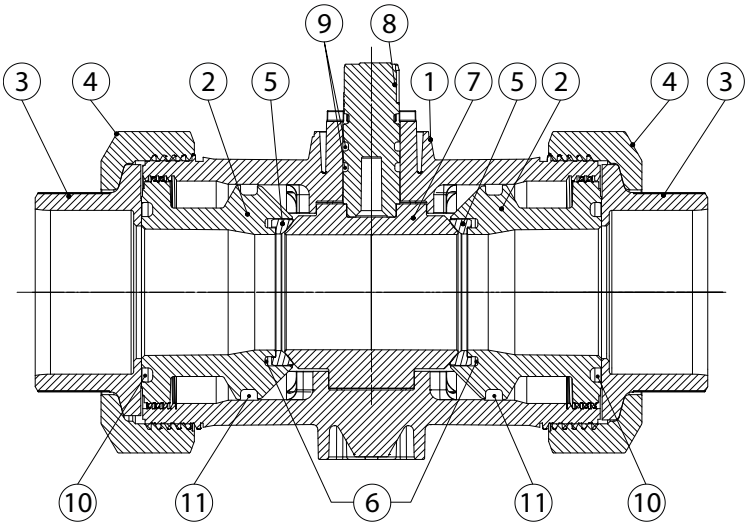
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.
*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

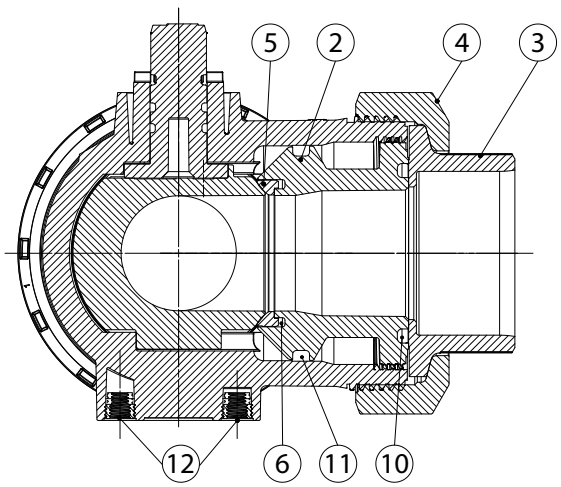
# ITEM 635-636-637-638
## PVC *PVC*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Asse libero filettata *Free shaft threaded* | | Asse libero da incollare *Free shaft to be glued* | | Kg | Con leva filettata *With lever threaded* | | Con leva da incollare *With lever to be glued* | | Kg |
| DN [mm] | [inch] | "T" port | "L" port | "T" port | "L" port | | "T" port | "L" port | "T" port | "L" port | |
| DN 10 | 3/8" | V635P203 | V636P203 | V637P753 | V638P753 | 0,18 | L635P203 | L636P203 | L637P753 | L638P753 | 0,24 |
| DN 15 | 1/2" | V635P204 | V636P204 | V637P754 | V638P754 | 0,19 | L635P204 | L636P204 | L637P754 | L638P754 | 0,25 |
| DN 20 | 3/4" | V635P205 | V636P205 | V637P755 | V638P755 | 0,30 | L635P205 | L636P205 | L637P755 | L638P755 | 0,36 |
| DN 25 | 1" | V635P206 | V636P206 | V637P756 | V638P756 | 0,49 | L635P206 | L636P206 | L637P756 | L638P756 | 0,55 |
| DN 32 | 1" 1/4 | V635P207 | V636P207 | V637P757 | V638P757 | 0,81 | L635P207 | L636P207 | L637P757 | L638P757 | 0,94 |
| DN 40 | 1" 1/2 | V635P208 | V636P208 | V637P758 | V638P758 | 1,21 | L635P208 | L636P208 | L637P758 | L638P758 | 1,39 |
| DN 50 | 2" | V635P209 | V636P209 | V637P759 | V638P759 | 2,50 | L635P209 | L636P209 | L637P759 | L638P759 | 2,7 |




## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C Filettata *Threaded* | C Incollare *Glued* | D Filettata *Threaded* | D Incollare *Glued* | E | F | L Filettata *Threaded* | L Incollare *Glued* | øM | P | øQ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | |
| DN 10 | 3/8" | 26,1 | 41 | 3/8" | 16 | 54 | 52 | 25 | 28 | 113 | 109 | 6 | 8 | 50 |
| DN 15 | 1/2" | 26,1 | 41 | 1/2" | 20 | 56 | 54 | 25 | 28 | 117 | 112 | 6 | 8 | 50 |
| DN 20 | 3/4" | 30 | 48,5 | 3/4" | 25 | 66 | 64 | 25 | 32 | 135 | 131 | 6 | 8 | 58 |
| DN 25 | 1" | 35,2 | 55 | 1" | 32 | 74 | 72 | 25 | 36 | 155 | 151 | 6 | 8 | 68 |
| DN 32 | 1" 1/4 | 44 | 66,9 | 1" 1/4 | 40 | 89 | 90 | 45 | 45 | 179 | 181 | 8 | 9 | 84 |
| DN 40 | 1" 1/2 | 50,2 | 73,1 | 1" 1/2 | 50 | 102,5 | 105 | 45 | 51 | 201 | 205 | 8 | 9 | 97 |
| DN 50 | 2" | 62 | 89,4 | 2" | 63 | 130,5 | 133,5 | 45 | 65 | 255 | 261 | 8 | 9 | 124 |

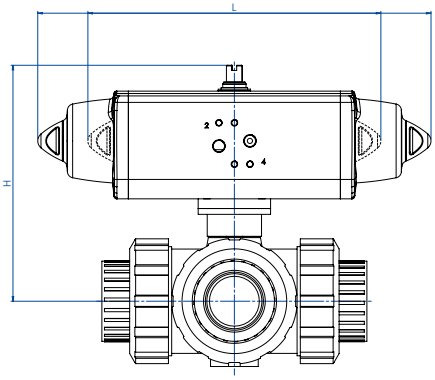
## MATERIALI *MATERIALS*

| | | |
|---|---|---|
| 1 | Corpo *Body* | PVC |
| 2 | Supporto guarnizione sfera *Ball sealing support* | PVC |
| 3 | Manicotto *End* | PVC |
| 4 | Ghiera *Nut ring* | PVC |
| 5 | Guarnizione tenuta sfera *Ball sealing* | PTFE |
| 6 | O-ring retroseggio *Backing seal* | EPDM |
| 7 | Sfera *Ball* | PVC |
| 8 | Stelo *Stem* | PVC |
| 9 | O-ring stelo *Shaft o-ring* | EPDM |
| 10 | O-ring tenuta manicotto *Valve end seal* | EPDM |
| 11 | O-ring corpo *Body seal* | EPDM |
| 12 | Inserti di montaggio *Mounting insert* | S.S. |

# ITEM 635-636-637-638
## PVC *PVC*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO valvola filettata *ITEM CODE threaded valve* | ARTICOLO valvola da incollare *ITEM CODE to be glued valve* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| 10 | 3/8" | DG63*H003 | DG63*H083 | DAN0015412S | KCF045453 | 159,0 | 119,0 | 1,18 |
| 15 | 1/2" | DG63*H004 | DG63*H084 | DAN0015412S | KCF045453 | 159,0 | 119,0 | 1,19 |
| 20 | 3/4" | DG63*H005 | DG63*H085 | DAN0015412S | KCF045454 | 159,0 | 128,0 | 1,30 |
| 25 | 1" | DG63*H006 | DG63*H086 | DAN0015412S | KCF045454 | 159,0 | 133,0 | 1,49 |
| 32 | 1"1/4 | DG63*H007 | DG63*H087 | DAN0015412S | KCF045455 | 159,0 | 145,0 | 1,81 |
| 40 | 1"1/2 | DG63*H008 | DG63*H088 | DAN0030411S | KCF045678 | 174,0 | 158,0 | 2,21 |
| 50 | 2" | DG63*H009 | DG63*H089 | DAN0030411S | KCF045456 | 174,0 | 175,0 | 3,50 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO valvola filettata *ITEM CODE threaded valve* | ARTICOLO valvola da incollare *ITEM CODE to be glued valve* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | |
| 10 | 3/8" | SG63*H003 | SG63*H083 | SRN0015402S | KCF045453 | 233,2 | 126,0 | 1,68 |
| 15 | 1/2" | SG63*H004 | SG63*H084 | SRN0015402S | KCF045453 | 233,2 | 126,0 | 1,69 |
| 20 | 3/4" | SG63*H005 | SG63*H085 | SRN0015402S | KCF045454 | 233,2 | 135,0 | 1,80 |
| 25 | 1" | SG63*H006 | SG63*H086 | SRN0015402S | KCF045454 | 233,2 | 140,0 | 1,99 |
| 32 | 1"1/4 | SG63*H007 | SG63*H087 | SRN0015402S | KCF045455 | 233,2 | 152,0 | 2,31 |
| 40 | 1"1/2 | SG63*H008 | SG63*H088 | SRN0030402S | KCF055461 | 258,8 | 168,0 | 3,21 |
| 50 | 2" | SG63*H009 | SG63*H089 | SRN0030402S | KCF055462 | 258,8 | 185,0 | 4,50 |

* Articolo 635: valvola filettata Sfera a T - Articolo 636: valvola filettata Sfera a L - Articolo 637: valvola da incollare Sfera a T - Articolo 638: valvola da incollare Sfera a L.
** Item 635: threaded valve T port - Item 636: threaded valve L port - Item 637: to be glued valve T port - Item 638: to be glued valve L port.*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

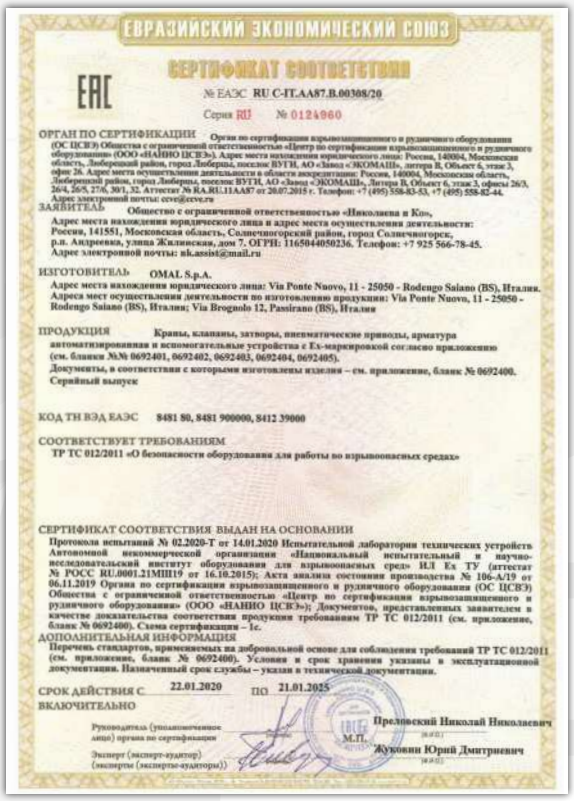
A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*





ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко". ОГРН: 1165044050236
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +79255667845. Адрес электронной почты: nk.assist@mail.ru.
**в лице** генерального директора Николаевой Нины Сергеевны
**заявляет, что** Арматура промышленная трубопроводная: краны шаровые, серия MAGNUM, типы M1, M4, M5, M6; серия THOR, типы T1, T2, T3; серия SUPREME, тип S; серия HERCULES, типы VHA4, VHA5, VHA6, LHA4, LHA5, LHA6; типы 100, 101, 153, 400, 401, 410, 412, 432, 414, 415, 417, 510, 512, 514, 515, 517, 532.
**изготовитель** "OMAL S.p.A"
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.
Код ТН ВЭД 8481808199. Серийный выпуск.
**соответствует требованиям**
Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)
**Декларация о соответствии принята на основании**
Протоколы испытаний Испытательной лаборатории изготовителя № ОМ 000589 от 30.06.2015, № ОМ 000863 от 30.06.2015, № ОМ 000589 от 30.06.2015, № 15BM001184 от 30.06.2015.
Обоснование безопасности OMAL ОБ.
Технический паспорт шарового крана VS.14.
Руководство по установке, эксплуатации и обслуживанию UMAH1000-RUS.
Чертежи 1_2350, 1_2437, Y_4321, Y_4322, Y_2395, Y_1104, Y_1118.
Сертификаты испытания материалов изготовителем № Y_4279-2015 от 20.05.2015, № ОА 011390 от 10.06.2015, № 2015-VE 000801 от 30.07.2015, № ОА 015204 от 31.07.2015.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 № 236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д
**Дополнительная информация**
Применяемый стандарт: ГОСТ Р 53672-2009 "Арматура трубопроводная. Общие требования безопасности". Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 15 лет.
Общество с ограниченной ответственностью "Николаева и Ко" (уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017)
**Декларация о соответствии действительна с даты регистрации по 17.07.2020 включительно**
Николаева Нина Сергеевна
**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10610**
**Дата регистрации декларации о соответствии: 18.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ
№ ЕАЭС RU C-IT.АА87.В.00308/20
Серия RU № 0124960
ОРГАН ПО СЕРТИФИКАЦИИ Органы по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: ocve@ecve.ru
ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru
ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия
ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск
КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000
СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»
СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.
СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО
Руководитель (уполномоченное лицо) органа по сертификации Предтеченский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФИКАТ ЭКСПЕРТИЗЫ ТИПА / TYPE EXAMINATION CERTIFICATE
Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2324-17
Зарегистрирован в реестре органа по оценке соответствия «ПРОМТЕСТ» под №
Registered at the Record of conformity assessment body "PROMTEST" under №
Термін дії з 25.07.2017 р. до 03.09.2020 р.
Срок действия / Term of validity from
Сертифікат видано 'OMAL S.p.A.' Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія
Сертификат выдан / Certificate is issued on
Продукція Крани кульові без електричного обладнання (згідно з додатком) 8481
Продукция / Production
Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT) Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі
Соответствует требованиям / Comply with the requirements
Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія
Производитель / Producer
Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Італія
Место производства / Place of production
Додаткова інформація
Дополнительная информация / Additional information
Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ" Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.
Сертификат выдан органом оценки соответствия / Certificate is issued by the conformity assessment body
На підставі Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ ПРОМТЕСТ
На основании / On the grounds of
Керівник органу з оцінки відповідності Самотой В.І.
Руководитель органа по оценке соответствия / Director of the conformity assessment body
М.П. / L.S.
Дійсність сертифіката відповідності можна перевірити на вебсайті органу з оцінки відповідності "ПРОМТЕСТ"
Действие сертификата соответствия можно проверить на вебсайте органа по оценке соответствия "ПРОМТЕСТ"
Validity of the Certificate of conformity can be checked on the site of the conformity assessment body, which is stated in the

**▲ UKR**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.

*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*



PASCAL
CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04001HH Rev. 01
Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
Consorzio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115
ATTESTA
ATTESTS
che il sistema qualità adottato da
that the quality system operated by
FABBRICANTE MANUFACTURER OMAL S.p.A. Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa Operational Office Address Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA
per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, modulo H, della Direttiva 2014/68/UE.
for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.
AUTORIZZA
AUTHORIZES
ad apporre, sui prodotti di seguito specificati, il marchio / to provide the above mentioned products, the mark CE 1115
ACCESSORI A PRESSIONE PRESSURE ACCESSORIES VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES
Modelli coperti Covered models Vedere elenco riportato in Appendice A See list in Appendix A
Rapporti di valutazione Evaluation Reports 004_ROQ_2018_07_22 004_RAO_2019_09_13
CONDIZIONI DI VALIDITA' VALIDITY TERMS AND CONDITIONS
ACCREDIA
Prima Emissione First Issue 18/09/2007
Emissione corrente Current issue 18/09/2019
Data di Scadenza Expiring date 17/09/2022
Consorzio PASCAL srl

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*





2.

# VALVOLE A FARFALLA

# *BUTTERFLY VALVES*

# VALVOLE A FARFALLA · INDICE


Pag:

2. • **VALVOLE A FARFALLA**

• Caratteristiche generali valvole a farfalla **375-376-377** & **385-386-387** 398



2.1 • **ITEM 375-376-377** **406**
Valvola a farfalla in ghisa per montaggio tra flange tipo "Wafer"



2.2 • **ITEM 385-386-387** **420**
Valvola a farfalla in ghisa per montaggio tra flange tipo "Lug"



2.3 • **ITEM 270-474** **434**
Valvola a farfalla "metallo-metallo" per montaggio tra flange tipo "Wafer"



2.4 • **ITEM 490-492-493-494** **436**
Valvola a farfalla 2 vie filettata ISO 228/1, DIN 11851, da saldare, clamp



2.5 • **ITEM 675** **444**
Valvola a farfalla in PVC per montaggio tra flange tipo "Wafer"

2.6 • Certificati valvole a farfalla 448

# BUTTERFLY VALVES · INDEX

Pag:

2. • **BUTTERFLY VALVES**

• General features butterfly valves **375-376-377** & **385-386-387** 398



2.1 • **ITEM 375-376-377** **406**
Cast iron butterfly valve for mounting between flanges, "Wafer" type



2.2 • **ITEM 385-386-387** **420**
Cast iron butterfly valve for mounting between flanges, "Lug" type



2.3 • **ITEM 270-474** **434**
Butterfly valve "metal-metal" for mounting between flanges, "Wafer" type



2.4 • **ITEM 490-492-493-494** **436**
Stainless steel butterfly valve with ISO 228/1 threaded, butt welded, DIN 11851 ends, clamp

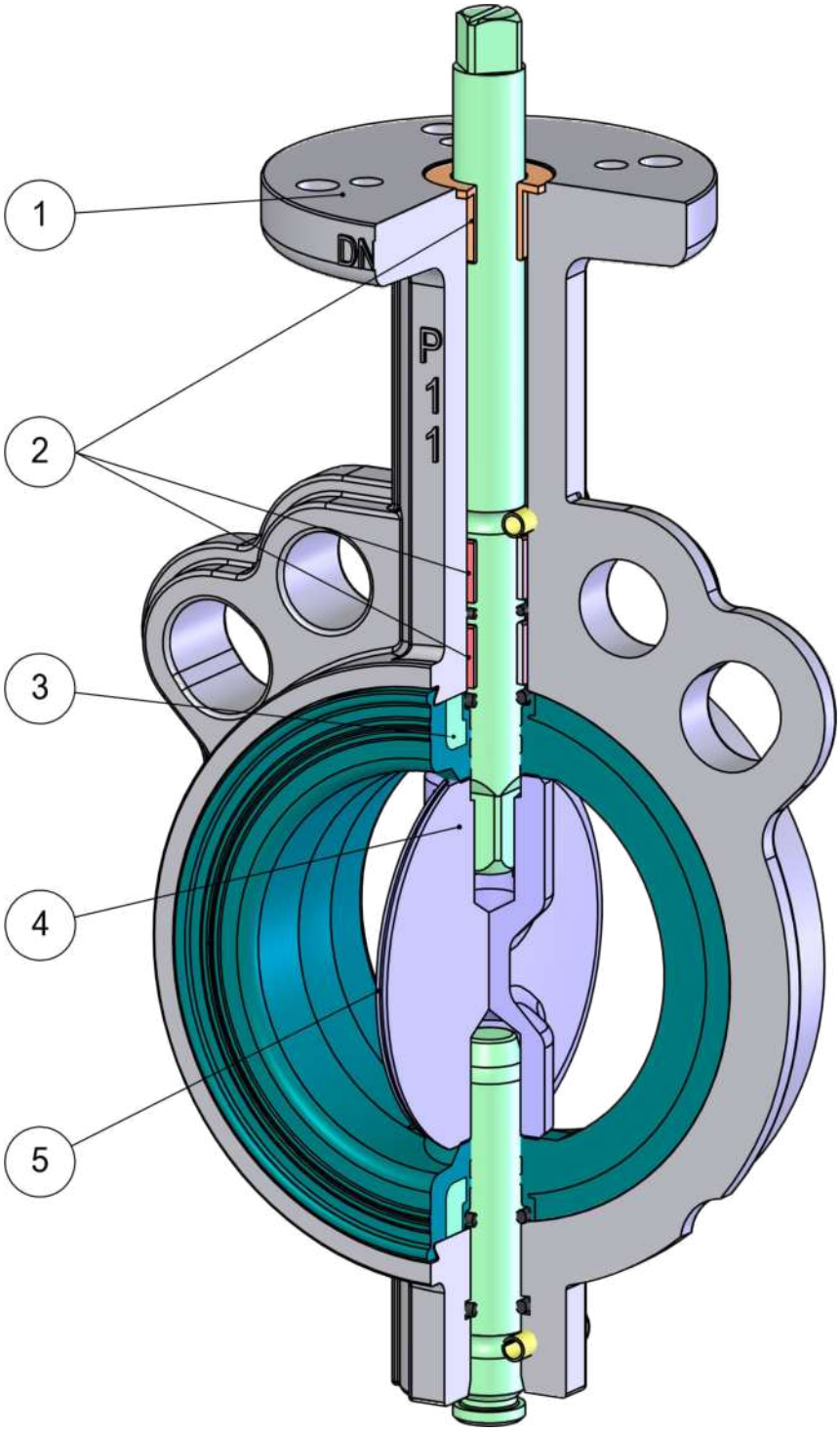


2.5 • **ITEM 675** **444**
PVC butterfly valve for mounting between flanges, "Wafer" type

2.6 • Butterfly valves certificates 448

# ITEMS 375-376-377 & 385-386-387

## VALVOLE A FARFALLA IN GHISA *CAST IRON BUTTERFLY VALVES*



| FEATURES & BENEFITS | | |
|---|---|---|
| 1 | Testa valvola normalizzata EN ISO 5211<br>*EN ISO 5211 top mounting* | *Facilità di accoppiamento con qualsiasi azionamento.*<br>*Easy coupling with every kind of drives.* |
| 2 | Tre boccole guida sull'albero<br>*Three guiding bushings on the shaft* | Si ha un perfetto allineamento dell'albero sul corpo e si evitano oscillazioni anche con alte pressioni.<br>*It grants a perfect alignment of the shaft on the body and prevents oscillations even with high pressure.* |
| | | Si riduce l'attrito tra albero e corpo.<br>*Less friction between the shaft and body.* |
| 3 | Guarnizione vulcanizzata su anello rigido<br>*Vulcanized liner on rigid ring* | La guarnizione subisce minor deformazione durante l'utilizzo.<br>*Less deformation of the liner.* |
| | | Viene facilitato il montaggio/smontaggio della tenuta per eventuali manutenzioni.<br>*Easy assembly / disassembly of the liner for maintenance.* |
| | | La guarnizione non subisce deformazione tra le flange durante l'assemblaggio .<br>*No deformation of the liner between the flanges during assembly.* |
| | | Maggior accuratezza dimensionale durante la fase di stampaggio.<br>*Greater dimensional accuracy during the injection/molding.* |
| 4 | Albero in 2 pezzi senza elementi di fissaggio<br>*Shaft in 2 pieces without fixing components* | Viene facilitato il montaggio/smontaggio della lente per eventuali manutenzioni.<br>*Easy assembly / disassembly of the disc for maintenance.* |
| | | Maggior Kv grazie alla sezione centrale del disco più sottile rispetto ad una valvola con un unico albero.<br>*Higher Kv thanks to the central section of the disk thinner than a valve with a single shaft.* |
| 5 | Circonferenza della lente con finitura lappata<br>*Lapped surface of the disc's circumference* | Miglior tenuta e minor usura della guarnizione.<br>*Better tightness and less wear of the liner.* |
| | | Si ha una coppia minore grazie al minor attrito tra disco e guarnizione.<br>*Lower torque due to less friction between the disc and liner.* |
| | Vasta gamma di materiali<br>*Wide range of LINER materials* | Possibilità di utilizzo su diverse applicazioni.<br>*Various applications possibility.* |
| | Certificato ATEX<br>*ATEX Certificate* | *Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.*<br>*Installation is allowed in a potential explosive environment.* |
| | *Certificato PED*<br>*PED Certificate* | *Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.*<br>*Full compliance with European Safety Standards for Pressure Equipment.* |

# VALVOLA A FARFALLA IN GHISA OMAL
# *CAST IRON OMAL BUTTERFLY VALVE*



### CARATTERISTICHE GENERALI:

Le valvole a farfalla OMAL, disponibili nelle versioni wafer e lug nelle misure da DN 40 a DN 600 (lug DN 300) , sono studiate e realizzate per far fronte alla maggioranza delle applicazioni in tutti i settori dell'industria

- Requisiti generali in accordo UNI EN593.
- Scartamenti normalizzati EN 558 serie 20.
- Tenuta secondo **EN 12266-1 rate A** con una pressione differenziale di 16 bar.
- Guarnizione integrale semirigida ottenuta mediante vulcanizzazione dello strato di elastomero su un anello rigido di supporto.
- Geometria della guarnizione ottimizzata per una perfetta aderenza al corpo valvola e tenuta sulle flange senza ulteriori elementi aggiuntivi. Il serraggio delle flange non influisce sulla coppia di azionamento né sul funzionamento della valvola stessa.
- Finitura della farfalla con bordi lappati che permette di ottimizzare la tenuta, di ridurre la coppia di manovra e di diminuire sensibilmente l'usura della guarnizione.
- Bussole guida sull'albero.
- Accoppiamento stelo-lente con doppio albero realizzato senza elementi di fissaggio (viti, bulloni, spine ecc..) onde eliminare punti a rischio di corrosione e rottura.
- Facilitati inoltre eventuali disassemblaggi per manutenzioni o pulizia.
- Accoppiamento con qualsiasi azionamento (pneumatico, elettrico, manuale, ecc..) facilitato dal collo valvola con piano normalizzato EN ISO 5211.
- Tutti i particolari sono adeguatamente trattati per garantire piena compatibilità con la maggior parte dei fluidi utilizzati nei processi industriali.

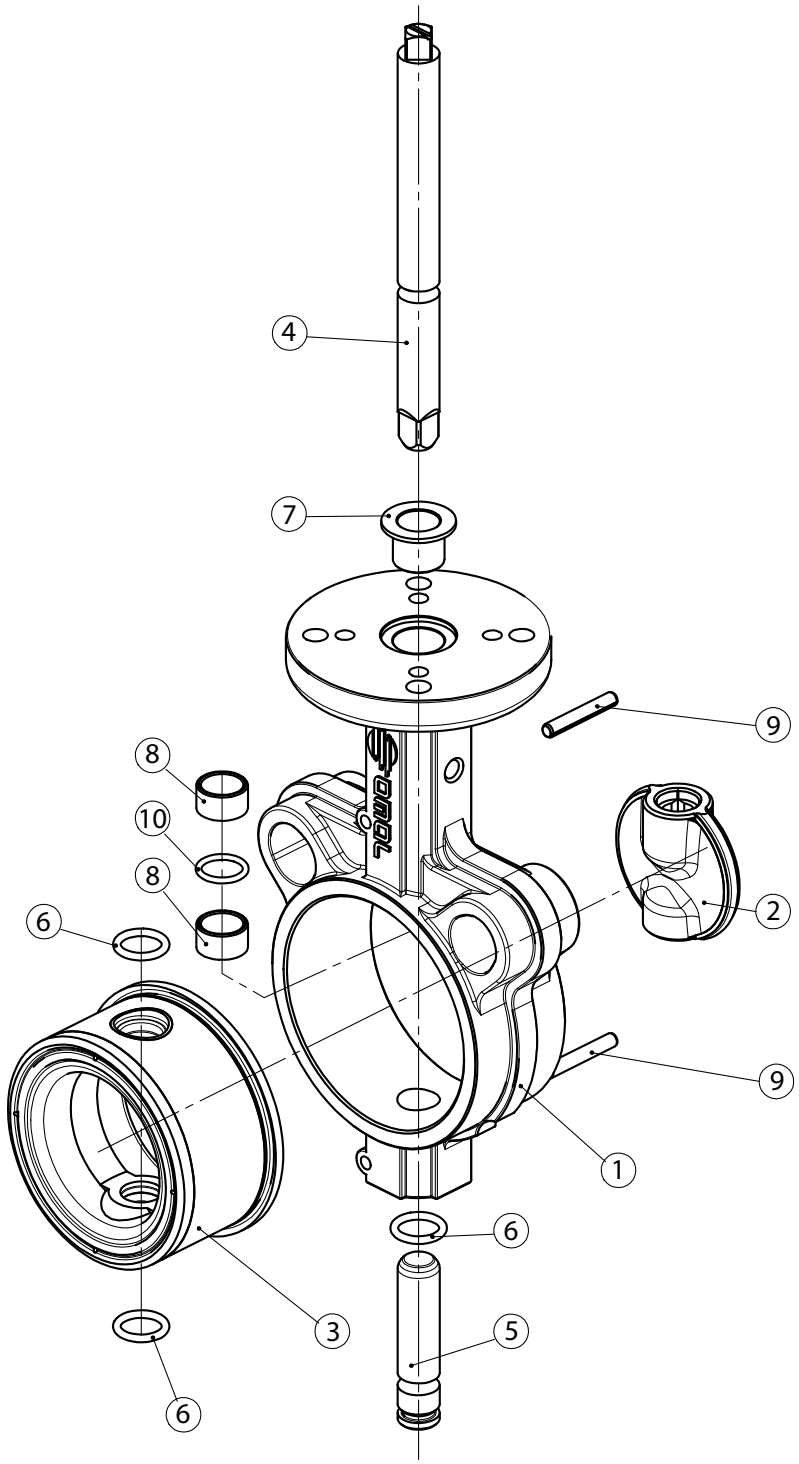
I dati e le caratteristiche di questo catalogo potrebbero essere variati a scopo di miglioramento tecnico anche senza preavviso e pertanto, non sono vincolanti ai fini della fornitura.

### *GENERAL FEATURES:*

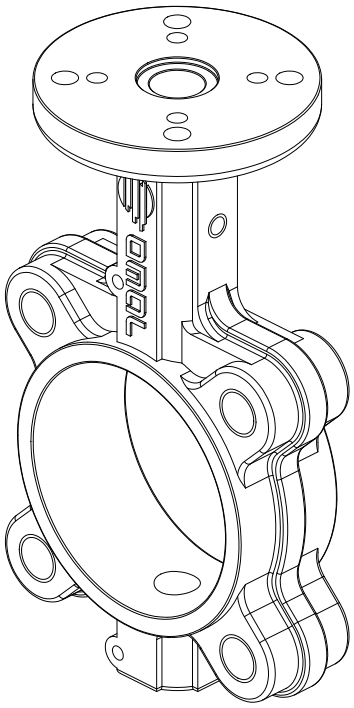
*OMAL butterfly valves, available in wafer or lug version from DN 40 to DN 600 (lug DN 300), are designed and manufactured to be used in most applications in all industrial fields.*

- *General requirements in accordance with UNI EN593.*
- *Face to face as per EN 558 series 20.*
- *Tightness at 16 bar according to **EN 12266-1 rate A.***
- *Integral sealing (with liner vulcanized on hard ring) which avoids any contact between fluid and valve body.*
- *Sealing design allowing perfect adherence to the valve body and perfect tightness to the flanges, without additional parts. Clamping between flanges does not influence the torque of the valve.*
- *Lapped disc edges that allows better tightness, reduced torque and low wear of the liner.*
- *Bushes to support the shaft.*
- *Coupling between stem and disc with two shafts (better Kv) carried out with no additional fittings (e.g. screws, bolts, pins, etc.) to avoid any risk of corrosion and breaking.*
- *Valve neck with top work as per EN ISO 5211 for easy connections with all different types of actuators.*
- *All components properly treated against corrosion.*

*OMAL will be free to change all specifications and data included in this catalogue at any time, so as to improve the quality and the performance of its products.*




## CORPO LUG *LUG BODY*



| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | A536 65-45-12 (GGG50) (Equivalente a *Equivalent to* EN-GJS-450-10 EN-JS 1040) |
| 2 | Lente *Disc* | A536 65-45-12 (GGG50) - A351 CF8M (316 S.S.) |
| 3* | Guarnizione *Liner* | EPDM-NBR |
| 4 | Albero di comando *Upper shaft* | A276 S42000 (420 S.S.) (Equivalente a *Equivalent to* X20CR13; 1.4021) |
| 5 | Albero inferiore *Lower shaft* | A276 S42000 (420 S.S.) (Equivalente a *Equivalent to* X20CR13; 1.4021) |
| 6* | O-ring inferiore Lower O-ring | EPDM-NBR (FKM solo se particolare a *with part. 3 in* FKM) |
| 7* | Boccola superiore *Upper bush* | Resina epossidica *Epoxy resin* |
| 8* | Boccole guida *Shaft bush* | Resina epossidica con PTFE per le misure da DN40 a DN300, Bronzo per le misure da DN350 a DN600 *Epoxy resin with PTFE from DN40 to DN300, Bronze from DN350 to DN600* |
| 9* | Spine elastiche *Elastic pin* | Acciaio inox *Stainless steel* |
| 10* | O-ring albero *Shaft O-ring* | EPDM-NBR |

* Particolari del kit di ricambio KGF... *Components of spare part kit KGF...*

A richiesta sono disponibili altri materiali. Per questi e per altre esigenze consultare i nostri uffici.
*If other valve materials are required, please contact our offices.*

## CARATTERISTICHE - MATERIALI - CAMPO D'IMPIEGO

### TABELLA DEI MATERIALI

| CORPO | STELO | LENTE | GUARNIZIONE |
|---|---|---|---|
| ***DN40 - 600***<br>GHISA A536 65-45-12*<br>RIVESTITO VERN. EPOSSIDICA RAL 5015*<br><br>GHISA A536 65-45-12<br>RIVESTITO RILSAN | ACCIAIO INOX A276 S4200 *<br>ACCIAIO INOX A564 TP 630 | ***DN40 - 600***<br>GHISA A536 65-45-12*<br>RIVESTITO NICHEL CHIMICO<br><br>***DN40 - 300***<br>GHISA A536 65-45-12<br>RIVESTITO VERN. EPOSSIDICA<br><br>GHISA A536 65-45-12<br>RIVESTITO RILSAN<br><br>ACCIAIO INOX A351-CF8M (316 S.S.)*<br>ACCIAIO INOX A351-CF8M (316 S.S.) LUCIDATO<br>ACCIAIO INOX A351-CF3M<br>ACCIAIO INOX A351-CF3M LUCIDATO<br>ACCIAIO INOX CF8M (316 S.S.) RIVESTITO F46<br><br>BRONZO/ALLUMINIO B148C95400 * | ***DN40 - 600***<br>EPDM*<br>NBR*<br><br>***DN40 - 300***<br>FKM*<br>PTFE ON EPDM*<br>NBR*<br><br>NBR BIANCO<br>NBR BIANCO PER ACQUA<br>HNBR<br>NBR CARBOX<br><br>SILICONE |

*Fornitura OMAL standard

### GUIDA ALL'UTILIZZO DEI MATERIALI

| MATERIALE | CARATTERISTICHE | APPLICAZIONI |
|---|---|---|
| GHISA A536 65-45-12 | Resistenza meccanica paragonabile a quella dell'acciaio.<br>Temperatura di utilizzo: da -25°C a +250°C. | Impieghi generici<br>Normalmente usata per corpo e farfalla |
| BRONZO - ALLUMINIO | Buona resistenza alla corrosione | Fluidi corrosivi, acqua di mare |
| RIVESTIMENTO RILSAN | Resistenza molto buona alla corrosione | Impieghi generici<br>Normalmente usata per corpo e farfalla |
| ACCIAIO INOX A351-CF8M | Resistenza molto buona alla corrosione | Circuiti alimentari, chimici, farmaceutici ecc.. |
| EPDM | Temperatura di utilizzo: da -25°C a +135°C.<br>Sconsigliato per idrocarburi. | Acqua (addolcita, industriale, glicole, di mare), vapore acqueo, ozono, basi e acidi diluiti, solventi acetonici, alcool, soda caustica, agenti atmosferici |
| NBR | Buone proprietà meccaniche (abrasione), buona tenuta agli olii minerali a certi idrocarburi e ai solventi alifatici<br>Temperatura di utilizzo: -23°C a +82°C. Sconsigliato con acetone, con chetoni, nitrati e idrocarburi clorurati. | Servizi generali, aria compressa, acqua fredda, fluidi idraulici, metano, butano, petrolio, acqua di mare, circuiti abrasivi di trasporto pneumatico, grassi animali e vegetali. |
| NBR BIANCO | Buone proprietà meccaniche (abrasione), buona tenuta agli olii minerali a certi idrocarburi e ai solventi alifatici<br>Temperatura di utilizzo: -23°C a +82°C. Sconsigliato con acetone, con chetoni, nitrati e idrocarburi clorurati. | Servizi generali, aria compressa, acqua fredda, fluidi idraulici, metano, butano, petrolio, acqua di mare e circuiti abrasivi di trasporto pneumatico. |
| NBR BIANCO PER ACQUA POTABILE | Specificamente formulato per impiego con acqua destinata al consumo umano in accordo ed in conformita' al D.L. 174/2004.<br>Temperatura di utilizzo: -23°C a +82°C. Sconsigliato con acetone, con chetoni, nitrati e idrocarburi clorurati. | Servizi generali, aria compressa, acqua fredda, fluidi idraulici, metano, butano, petrolio, acqua di mare e circuiti abrasivi di trasporto pneumatico. |
| NBR CARBOX | Buone proprietà meccaniche (abrasione), buona tenuta agli olii minerali a certi idrocarburi e ai solventi alifatici<br>Temperatura di utilizzo: -10°C a +82°C. Sconsigliato con acetone, con chetoni, nitrati e idrocarburi clorurati.<br>Eccellente resistenza all'abrasione. | Fluidi e polveri abrasive |
| HNBR | Eccellenti proprietà meccaniche (abrasione), buona tenuta agli olii minerali a certi idrocarburi e ai solventi alifatici<br>Temperatura di utilizzo: -20°C a +120°C. Sconsigliato con acetone, con chetoni, nitrati e idrocarburi clorurati. | Servizi generali, aria compressa, acqua fredda, fluidi idraulici, metano, butano, petrolio, acqua di mare e circuiti abrasivi di trasporto pneumatico. |
| FKM | Resistenza molto buona a: calore, luce, agenti atmosferici, solventi bezoici. Impermeabile ai gas. Sconsigliato per vapore e acqua bollente<br>Temperatura di utilizzo: -10°C a +190°C. | Solventi (meno gli acetonici), idrocarburi solidi, carburanti ossigenanti, acidi, basi, fluidi idraulici, olii. |
| SILICONE PER ALTA TEMPERATURA | Resistenza molto buona per acqua surriscaldata e vapore (fino a 150°)<br>Temperatura di utilizzo: -25°C a 160°C. | Aria o gas inerte caldo (fino a +180°C), industrie alimentari, acqua, vapore. |
| PTFE ON EPDM | Resistenza chimica molto buona a solventi e prodotti corrosivi. Sconsigliato per fluidi abrasivi, metalli alcalini (potassio, sodio), fluoro gassoso<br>Temperatura di utilizzo: -25°C a +150°C (utilizzo solo transitorio oltre +135°C). | Industrie alimentari e chimiche con prodotti molto corrosivi. |

**N.B.** Nella tabella sopra sono riportate le caratteristiche peculiari, e le conseguenti applicazioni specifiche, di ogni materiale che OMAL Vi mette a disposizione. Ciononostante, in situazioni inusuali (come installazioni speciali, contatti con fluidi particolari, condizioni straordinarie di pressione e temperatura, ecc..), la variazione dei fattori che influenzano corrosione e abrasione, può alterare le prestazioni dei materiali. In ogni caso, Vi ricordiamo che spetta comunque al cliente la scelta finale del materiale e che il nostro ufficio commerciale sarà lieto di esaminare qualsiasi Vostra esigenza.

## FEATURES - MATERIALS - APPLICATIONS FIELD

### TABLE OF ALL AVAILABLE MATERIALS

| BODY | STEM | DISC | LINER |
|---|---|---|---|
| ***DN40 - 600***<br>*CAST IRON A536 65-45-12 **<br>*EPOXY COATED*<br>*CAST IRON A536 65-45-12*<br>*RILSAN COATED* | *STAINLESS STEEL* A276 S4200 *<br>*STAINLESS STEEL* A564 TP 630 | ***DN40 - 600***<br>*CAST IRON A536 65-45-12**<br>*CHEMICAL NICKEL PLATING*<br>***DN40 - 300***<br>*CAST IRON A536 65-45-12*<br>*EPOXY COATED*<br>*CAST IRON A536 65-45-12*<br>*RILSAN COATED*<br>*STAINLESS STEEL* A351-CF8M (316 S.S.)*<br>*STAINLESS STEEL* A351-CF8M (316 S.S.) *POLISHED*<br>*STAINLESS STEEL* A351-CF3M<br>*STAINLESS STEEL* A351-CF3M *POLISHED*<br>*STAINLESS STEEL CF8M* (316 S.S.)<br>*F46 COATED*<br>*BRONZE/ALUMINIUM B148C95400 ** | ***DN40 - 600***<br>*EPDM**<br>*NBR**<br>***DN40 - 300***<br>*FKM**<br>*PTFE ON EPDM**<br>*NBR**<br>*WHITE NBR*<br>*POTABLE WATER WHITE NBR*<br>*HNBR*<br>*CARBOX NBR*<br>*SILICONE* |

**Standard OMAL supply*

### MATERIAL APPLICATIONS

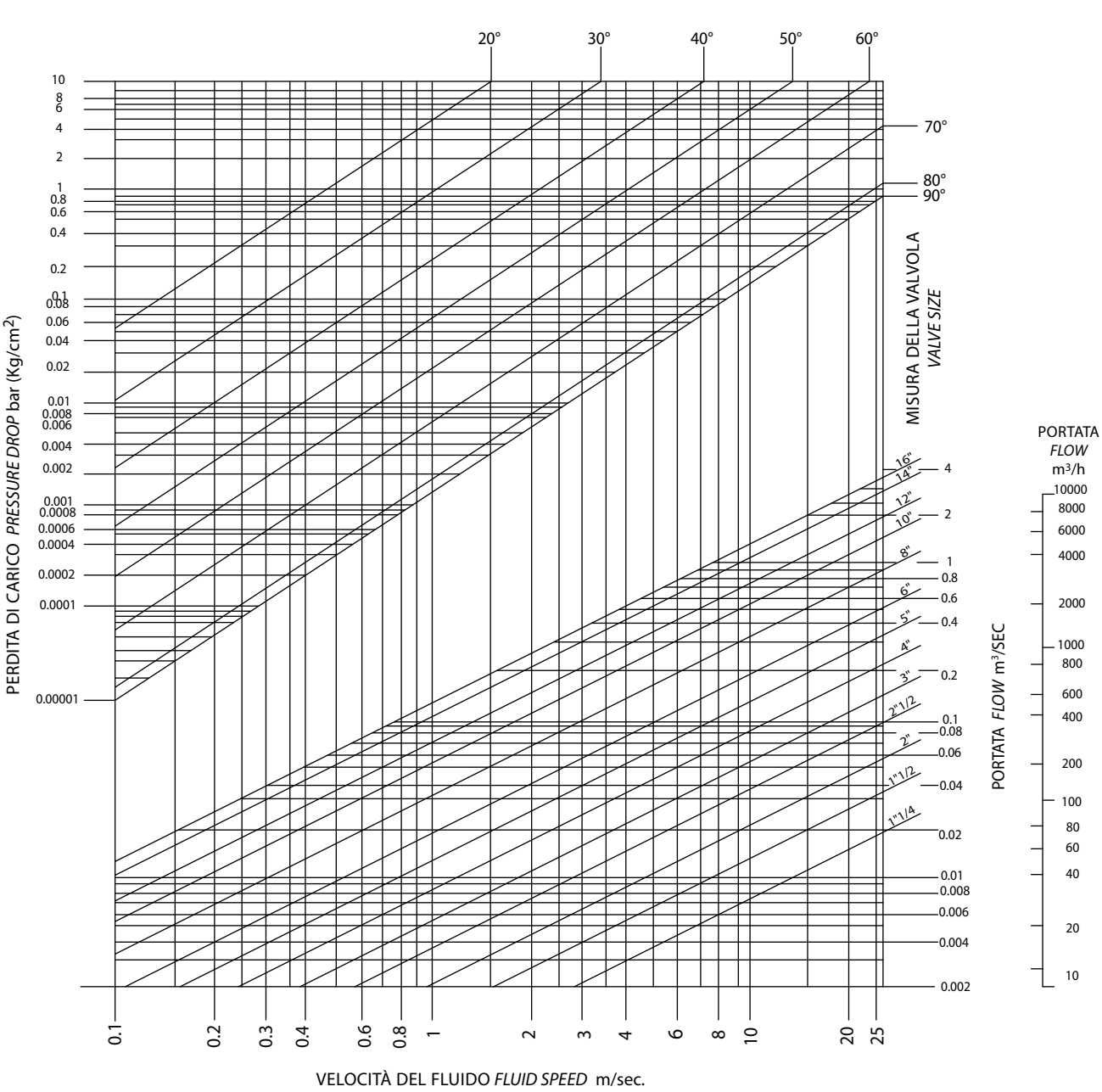
| MATERIAL | FEATURES | APPLICATIONS |
|---|---|---|
| *CAST IRON A536 65-45-12* | *Mechanical strength as good as stainless steel*<br>*Operating temperature (°C): -25°/+250.* | *General applications*<br>*Used as a standard for body and disc* |
| *BRONZE - ALUMINIUM* | *Good corrosion resistance* | *Corrosive fluids, sea water* |
| *RILSAN COATED* | *Excellent corrosion resistance* | *General applications*<br>*Used as a standard for body and disc* |
| *STAINLESS STEEL A351-CF8M* | *Excellent corrosion resistance* | *Food, chemical, pharmaceutical...etc* |
| *EPDM* | *Operating temperature (°C): -25°/+135.*<br>*Unsuitable for hydrocarbons.* | *Water (soft, sea, glycolic and industrial), steam, ozone, bases and diluted acids, acetic solvents, alcohol, caustic soda, atmospheric agents.* |
| *NBR* | *Good abrasion/wear resistance. Good chemical and mechanical srenght to mineral oils, some hydrocarbons and aliphatic solvents.*<br>*Operating temperature (°C): -23 / + 82.*<br>*Unsuitable for acetone, ketones, nitrates and chlorinated hydrocarbons.* | *General applications, compressed air, cold water, hydraulic fluids, methane, butane, petroleum, sea water, abrasive materials for pneumatic circuits, animal and vegetables fats.* |
| *WHITE NBR* | *Good abrasion/wear resistance. Good chemical and mechanical srenght to mineral oils, some hydrocarbons and aliphatic solvents.*<br>*Operating temperature (°C): -23 / + 82.*<br>*Unsuitable for acetone, ketones, nitrates and chlorinated hydrocarbons.* | *General applications, compressed air, cold water, hydraulic fluids, methane, butane, petroleum, sea water and abrasive materials for pneumatic circuits.* |
| *POTABLE WATER WHITE NBR* | *Suitable for potable water accordingly to italian law D.L. 174/2004.*<br>*Operating temperature (°C): -23 / + 82.*<br>*Unsuitable for acetone, ketones, nitrates and chlorinated hydrocarbons.* | *General applications, compressed air, cold drinking water, hydraulic fluids, methane, butane, petroleum, sea water and abrasive materials for pneumatic circuits.* |
| *CARBOX NBR* | *Good abrasion/wear resistance. Good chemical and mechanical srenght to mineral oils, some hydrocarbons and aliphatic solvents.*<br>*Operating temperature (°C): -10 / + 82.*<br>*Unsuitable for acetone, ketones, nitrates and chlorinated hydrocarbons.* | *Abrasive dusts and fluids* |
| *HNBR* | *Good abrasion/wear resistance. Good chemical and mechanical srenght to mineral oils, some hydrocarbons and aliphatic solvents.*<br>*Operating temperature (°C): -20 / +120.*<br>*Unsuitable for acetone, ketones, nitrates and chlorinated hydrocarbons.* | *General applications, compressed air, cold water, hydraulic fluids, methane, butane, petroleum, sea water and abrasive materials for pneumatic circuits.* |
| *FKM* | *Excellent chemical and mechanical strenght to heat, atmospheric agents, benzoic solvents. Gas-proof. Unsuitable for steam and boiling water.*<br>*Operating temperature (°C): -10 / +190.* | *Solvents (acetic excluded), solid hydrocarbons, oxygenating fuels, acids, bases, hydraulic fluids, oils.* |
| *HIGH TEMPERATURE SILICONE* | *Excellent chemical and mechanical strenght to steam and superhheated water (150°C).*<br>*Operating temperature (°C): -25 / +160.* | *Air or hot inert gas (Temperature limits (°C): +180), food industry, water, steam.* |
| *PTFE ON EPDM* | *Excellent chemical strenght to solvents and corrosive products. Unsuitable for abrasive fluids, alkaline metals (potassium, sodium), gaseous fluorine.*<br>*Operating temperature (°C): -25 / +150 (only transient use over (°C) +135).* | *Very corrosive products for chemical industry and food industry.* |

***NOTE:*** *The table above lists typical features and applications of all "Omal" products. Nevertheless, if unusual situations occur (i.e. special applications, contacts with particular fluids, extraordinary pressure or temperature conditions, ...) the elements which determine corrosion and abrasion might change and, as a consequence, metal performances might change, too. It is always the customer who has to choose the right material; however, our sales department is willing to meet all customers requests.*

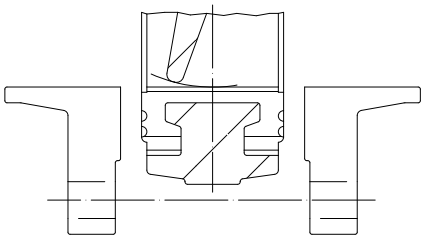
## DIAGRAMMA PERDITA DI CARICO-PORTATA *PRESSURE LOSS-FLOW DIAGRAM*

**Esempio:** ricerca della perdita di carico e della velocità per una portata d'acqua pari a 0,1 $m^3$/sec. in una valvola di diametro 6" (DN 150) con un angolo di apertura di 90°.
1) Determinare il punto di incontro delle linee di portata e diametro della valvola.
2) Da questo punto, salire con la verticale fino ad incontrare la retta dei 90° e dal nuovo punto trovato tracciare una linea orizzontale fino alla scala della perdita di carico, trovando così il valore richiesto (0,038 bar).
3) Dal punto 1, scendendo in verticale sulla scala della velocità, possiamo leggere il valore della velocità del fluido (5 m/sec.)

***Example*** *of flow-pressure and pressure drop in a 6" (DN. 150) valve with a water flow of 0,1 $m^3$/sec. and a rotation angle of 90°:*
*1) Determine the point where the valve flow and diameter lines meet*
*2) Draw a vertical line from the above-mentioned point to the 90° straight line; then draw a horizontal line from this point to the flow-pressure loss scale, where you'll read the requested value (0,038 bar).*
*3) Starting from point 1 and going down the fluid speed scale, you'll read the fluid speed values (5 m/sec.)*



## ISTRUZIONI PER IL MONTAGGIO *MOUNTING INSTRUCTIONS*

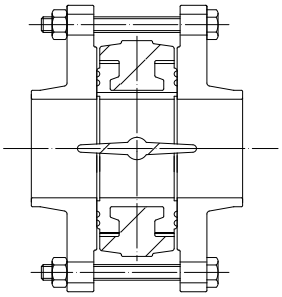


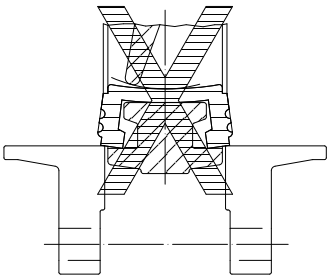
La distanza tra le flange deve permettere l'introduzione della valvola senza che la guarnizione interferisca con le stesse. Durante l'operazione la farfalla deve trovarsi in posizione semichiusa.

*When the valve is being inserted, the flanges must be at such a distance from one another to make inspection possible without any contacts between flanges and sealing. Meanwhile, the butterfly must be kept in "half-closed" position.*

Dopo il posizionamento della valvola tra le flange e prima del serraggio dei bulloni, la farfalla deve essere in posizione aperta. In caso contrario si rischia di danneggiare o deformare in maniera permanente la guarnizione durante la chiusura della valvola

*After inserting the valve between the flanges, but before screwing the bolts up, the butterfly must be switched into the "open" position. Otherwise, you might damage or permanently deform the sealing, while closing the valve.*



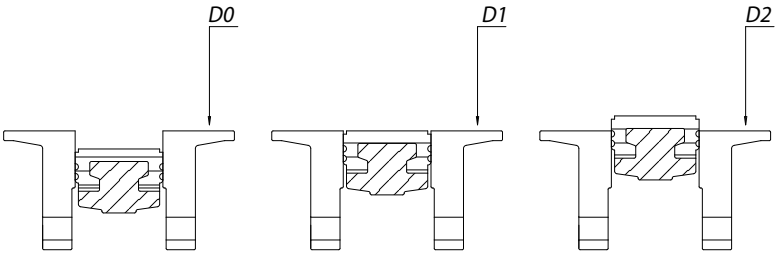


Esempio di montaggio non corretto: le flange non sono sufficientemente aperte, la guarnizione può deteriorarsi.

*Example of wrong mounting: the flanges are not open enough and the sealing might be damaged.*

La valvola a farfalla OMAL si monta tra le flange delle tubazioni senza ulteriori anelli di tenuta e viene centrata dai tiranti e dalle viti di fissaggio. I diametri delle flange devono essere conformi ai valori indicati.
**D0** diametro minimo della flangia per consentire l'alloggiamento della valvola (nel caso di valvola perfettamente centrata)
**D1** diametro massimo della flangia per un'utilizzazione ottimale
**D2** diametro massimo possibile della flangia per un'utilizzazione in pressione ridotta. In questo caso e per ogni necessità contattare il nostro ufficio commerciale per eventuali chiarimenti.

*OMAL butterfly valves are assembled between pipe flanges without other rings and they are centered by means of tie-rods and fixing screws. Their diameter must conform to the following values.*
***D0** minimum flange diameter necessary for the inspection of the valve (with a perfectly centered valve)*
***D1** maximum flange diameter which allows the best possible uses*
***D2** maximum flange diameter which allows uses at low pressure. If you need any other information, please contact our sales department.*




### DIMENSIONI FLANGE *FLANGE SIZE*

| diametro *diameter* / valvola *valve* | | DN 40 | DN 50 | DN 65 | DN 80 | DN 100 | DN 125 | DN 150 | DN 200 | DN 250 | DN 300 | DN 350 | DN 400 | DN 450 | DN 500 | DN 600 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D0 | mm. | 30 | 36 | 51 | 67 | 93 | 119 | 143 | 196 | 247 | 297 | 329 | 376 | 426 | 475 | 573 |
| D1 | mm. | 45 | 57 | 69 | 82 | 107 | 133 | 154 | 206 | 257 | 310 | 338 | 390 | 441 | 492 | 596 |
| D2 | mm. | 51 | 68 | 80 | 93 | 116 | 148 | 170 | 221 | 276 | 327 | 346 | 399 | 450 | 500 | 602 |

# ITEM 375-376-377

## VALVOLA A FARFALLA IN GHISA PER MONTAGGIO TRA FLANGE TIPO "WAFER"
*CAST IRON BUTTERFLY VALVE FOR MOUNTING BETWEEN FLANGES, "WAFER" TYPE*

**ITEM 375**
Corpo: Ghisa
Lente: Ghisa
Guarnizioni: vedere tabella

**ITEM 376**
Corpo: Ghisa
Lente: CF8M (316 S.S.)
Guarnizioni: vedere tabella

**ITEM 377**
Corpo: Ghisa
Lente: Bronzo Alluminio
Guarnizioni: vedere tabella



***ITEM 375***
*Body: Cast iron*
*Butterfly: Cast iron*
*Liner: see table*

***ITEM 376***
*Body: Cast iron*
*Butterfly: CF8M (316 S.S.)*
*Liner: see table*

***ITEM 377***
*Body: Cast iron*
*Butterfly: Bronze aluminium*
*Liner: see table*

**ESECUZIONI STANDARD:**
- Flangiatura standard: PN 10 - PN 16 - ANSI 150 dal DN 40 al DN 300; PN 10 dal DN 350 al DN 600.
- Requisiti generali in accordo a UNI EN593.
- Ingombri da faccia a faccia normalizzati EN 558 serie 20.
- Testa della valvola normalizzata ISO 5211 ( DN40-DN300 ).
- Tenuta secondo EN 12266-1 rate A.
- Altre combinazioni a richiesta.
- Temperatura di utilizzo per le guarnizioni:
  EPDM: da -25°C a +135°C ;
  NBR: da -23°C a +82°C;
  FKM: da -10°C a +190°C (DN40-DN300);
  PTFE (su base EPDM): da -25°C a +150°C (DN40-DN300).
- Pressione di utilizzo tra flange: PN 16 bar per DN 40÷300; PN 10 bar per DN 350÷600.
- Spessore rivestimento epossidico: 160 ÷ 200 µ. RAL: 5015.

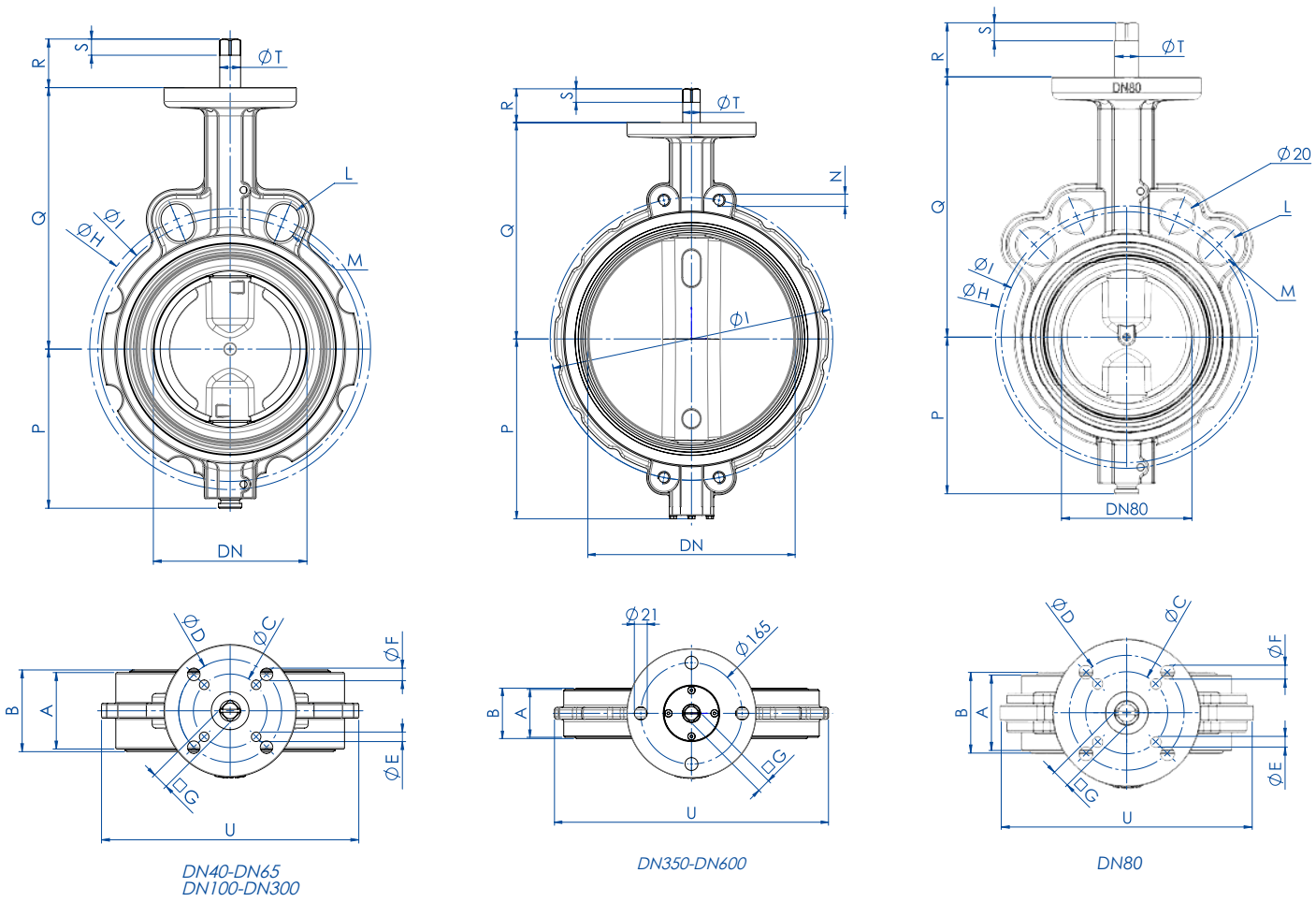
***STANDARD EXECUTIONS:***
- *Standard flanges: PN 10 - PN 16 - ANSI 150 from DN 40 to DN 300; PN 10 from DN 350 to DN 600.*
- *General requirements in accordance with UNI EN593.*
- *Face to face as per EN 558 serie 20.*
- *Valve head as per ISO 5211 ( DN40-DN300 ).*
- *Tightness as per EN 12266-1 rate A .*
- *Other tests on request.*
- *Operating Temperature of liners:*
  *EPDM: from -25°C to +135°C;*
  *NBR: from -23°C to +82°C;*
  *FKM: from -10°C to +190°C (DN40-DN300);*
  *PTFE (on EPDM core): from -25°C to +150°C (DN40-DN300).*
- *Working pressure between flanges: PN 16 bar for DN 40 to DN 300; PN 10 bar for DN 350 to DN 600.*
- *Thickness of epoxy coating: 160 ÷ 200 µ. RAL: 5015.*

**ESECUZIONI A RICHIESTA:**
- Temperatura di utilizzo per guarnizioni speciali:
  SILICONE: da -25°C a +160°C;
  NBR CARBOX: da -10°C a +82°C;
  NBR BIANCO per fluidi alimentari: da -23°C a +82°C;
  HNBR: da -20°C a +120°C.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Working temperature for special liners:*
  *SILICONE: from -25°C to +160°C;*
  NBR CARBOX: *from -10°C to +82°C;*
  NBR WHITE for food: *from -23°C to +82°C;*
  HNBR: *from -20°C to +120°C.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Conforme alla direttiva Europea 2014/68/UE "PED".
- Omologazione DVGW per gas combustibile (V376).
- Omologazione RINA.
- Dichiarazione conformità al D.M.n°174 per l'idoneità al contatto con acqua potabile e fluidi alimentari (V376).
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *According to 2014/68/EU "PED".*
- *DVGW homologation for gas (V376).*
- *RINA homologation.*
- *Conformity to the italian D.M.n°174 suitable with drinking water and alimentary fluid (V376).*
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*




*DN40-DN65*
*DN100-DN300*

*DN350-DN600*

*DN80*

A: Scartamento valvola *Face to face* B: Guarnizioni non compresse *Liner not compressed*

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* DN [mm] | [inch] | A | B | ØC | ØD | ØE | ØF | □G | □G' | ØH | ØI | L | M | N | P | Q | R | R' | S | S' | ØT | U |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 40 | 1"1/2 | 33 | 36 | 50 | 70 | 6,5 | 8,5 | 9 | | 110 | 98,5 | R10 | R9 | | 70 | 125 | 31 | | 9 | | 14,2 | 116 |
| DN 50 | 2" | 43 | 46 | 50 | 70 | 6,5 | 8,5 | 9 | | 125 | 121 | R10 | R10,5 | | 80 | 140 | 31 | | 9 | | 14,2 | 128 |
| DN 65 | 2"1/2 | 46 | 49 | 50 | 70 | 6,5 | 8,5 | 11 | | 145 | 140 | R10 | R10,5 | | 86 | 152 | 33 | | 11 | | 14,2 | 143 |
| DN 80 | 3" | 46 | 49 | 50 | 70 | 6,5 | 8,5 | 11 | | 160 | 153 | R10 | R10,5 | | 95,5 | 159 | 33 | | 11 | | 14,2 | 153 |
| DN 100 | 4" | 52 | 56 | 50 | 70 | 6,5 | 8,5 | 11 | | 191 | 180 | R10,5 | R10 | | 108 | 178 | 33 | | 11 | | 14,2 | 175 |
| DN 125 | 5" | 56 | 59 | 70 | | 8,5 | | 14 | | 216 | 210 | R12,5 | R10 | | 124,5 | 190,5 | 36 | | 14 | | 19 | 197 |
| DN 150 | 6" | 56 | 59 | 70 | | 8,5 | | 14 | | 242 | 240 | R12,5 | R12 | | 137 | 203 | 36 | | 14 | | 19 | 222 |
| DN 200 | 8" | 60 | 64 | 70 | | 8,5 | | 17 | | 299 | 295 | R12,5 | R12 | | 166 | 238 | 39 | | 17 | | 22,2 | 279 |
| DN 250 | 10" | 68 | 72 | 102 | 125 | 11 | 13 | 22 | | 362 | 350 | R14 | R13,5 | | 199 | 268 | 55 | | 22 | | 28,5 | 340 |
| DN 300 | 12" | 78 | 81,5 | 102 | 125 | 11 | 13 | 22 | | 432 | 400 | R14 | R13,5 | | 234 | 306 | 55 | | 22 | | 28,5 | 410 |
| DN 350 | 14" | 78 | 82 | | | | | | 22 | | 460 | | | M20 | 293 | 352 | | 55 | | 22 | 28,5 | 446 |
| DN 400 | 16" | 102 | 105 | | | | | | 27 | | 515 | | | M24 | 325 | 388 | | 60 | | 27 | 36,5 | 508 |
| DN 450 | 18" | 114 | 118 | | | | | | 27 | | 565 | | | M24 | 348 | 415 | | 60 | | 27 | 36,5 | 543 |
| DN 500 | 20" | 127 | 130,5 | | | | | | 36 | | 620 | | | M24 | 386,5 | 441 | | 70 | | 36 | 48,5 | 600 |
| DN 600 | 24" | 154 | 158 | | | | | | 36 | | 725 | | | M27 | 447,5 | 505 | | 70 | | 36 | 48,5 | 718 |

**N.B. : G', R', S' QUOTE RIFERITE A VALVOLE ΔP max 10 bar** ***DIMENSIONS REFERRED TO* ΔP max 10 bar *VALVES***

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| **Misura** *Size* | **DN 40 1"1/2** | **DN 50 2"** | **DN 65 2"1/2** | **DN 80 3"** | **DN 100 4"** | **DN 125 5"** | **DN 150 6"** | **DN 200 8"** | **DN 250 10"** | **DN 300 12"** | **DN 350 14"** | **DN 400 16"** | **DN 450 18"** | **DN 500 20"** | **DN 600 24"** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PN 10 bar | | | | | | | | 109 | 145 | 218 | 340 | 510 | 680 | 1020 | 1300 |
| PN 16 bar | 18 | 18 | 25 | 27 | 35 | 52 | 72 | 142 | 170 | 250 | | | | | |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 375-376-377
# CORPO IN GHISA *CAST IRON BODY*
# ASSE LIBERO *FREE SHAFT*

## ASSE LIBERO - LENTE IN GHISA *FREE SHAFT - CAST IRON BUTTERFLY*

| MISURA *SIZE* | | TENUTA *LINER* | | |
|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | NBR CARBOX |
| DN 40 | 1"1/2 | V375XE68 | V375XN68 | V375XC68 |
| DN 50 | 2" | V375XE69 | V375XN69 | V375XC69 |
| DN 65 | 2"1/2 | V375XE70 | V375XN70 | V375XC70 |
| DN 80 | 3" | V375XE71 | V375XN71 | V375XC71 |
| DN 100 | 4" | V375XE72 | V375XN72 | V375XC72 |
| DN 125 | 5" | V375XE73 | V375XN73 | V375XC73 |
| DN 150 | 6" | V375XE74 | V375XN74 | V375XC74 |
| DN 200 | 8" | V375XE75 | V375XN75 | V375XC75 |
| DN 250 | 10" | V375XE76 | V375XN76 | V375XC76 |
| DN 300 | 12" | V375XE77 | V375XN77 | V375XC77 |
| DN 350 | 14" | V375KE78 | A richiesta *On request* | - |
| DN 400 | 16" | V375KE79 | A richiesta *On request* | - |
| DN 450 | 18" | V375KE80 | A richiesta *On request* | - |
| DN 500 | 20" | V375KE81 | A richiesta *On request* | - |
| DN 600 | 24" | V375KE82 | A richiesta *On request* | - |

## ASSE LIBERO - LENTE IN CF8M *FREE SHAFT - CF8M BUTTERFLY*

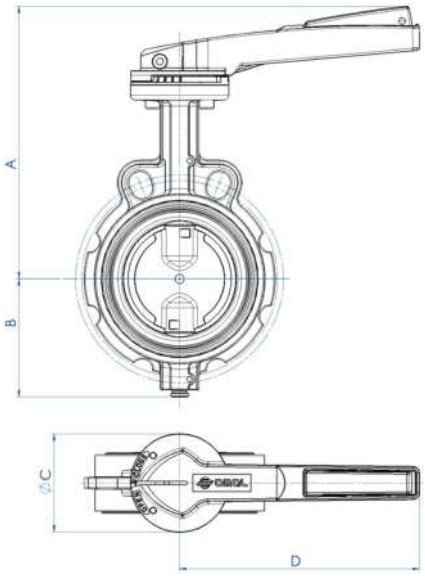
| MISURA *SIZE* | | TENUTA *LINER* | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | FKM | PTFE a richiesta *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* |
| DN 40 | 1"1/2 | V376XE68 | V376XN68 | V376XV68 | V376XT68 | V376XN68GA | V376XB68 | V376XW68NF |
| DN 50 | 2" | V376XE69 | V376XN69 | V376XV69 | V376XT69 | V376XN69GA | V376XB69 | V376XW69NF |
| DN 65 | 2"1/2 | V376XE70 | V376XN70 | V376XV70 | V376XT70 | V376XN70GA | V376XB70 | V376XW70NF |
| DN 80 | 3" | V376XE71 | V376XN71 | V376XV71 | V376XT71 | V376XN71GA | V376XB71 | V376XW71NF |
| DN 100 | 4" | V376XE72 | V376XN72 | V376XV72 | V376XT72 | V376XN72GA | V376XB72 | V376XW72NF |
| DN 125 | 5" | V376XE73 | V376XN73 | V376XV73 | V376XT73 | V376XN73GA | V376XB73 | V376XW73NF |
| DN 150 | 6" | V376XE74 | V376XN74 | V376XV74 | V376XT74 | V376XN74GA | V376XB74 | V376XW74NF |
| DN 200 | 8" | V376XE75 | V376XN75 | V376XV75 | V376XT75 | V376XN75GA | V376XB75 | V376XW75NF |
| DN 250 | 10" | V376XE76 | V376XN76 | V376XV76 | V376XT76 | V376XN76GA | V376XB76 | V376XW76NF |
| DN 300 | 12" | V376XE77 | V376XN77 | V376XV77 | V376XT77 | V376XN77GA | V376XB77 | V376XW77NF |
| DN 350 | 14" | V376KE78 | A richiesta *On request* | - | - | - | - | - |
| DN 400 | 16" | V376KE79 | A richiesta *On request* | - | - | - | - | - |
| DN 450 | 18" | V376KE80 | A richiesta *On request* | - | - | - | - | - |
| DN 500 | 20" | V376KE81 | A richiesta *On request* | - | - | - | - | - |
| DN 600 | 24" | V376KE82 | A richiesta *On request* | - | - | - | - | - |

## ASSE LIBERO - LENTE IN BRONZO ALLUMINIO *FREE SHAFT - BRONZE ALUMINIUM BUTTERFLY*

| MISURA *SIZE* | | TENUTA *LINER* | |
|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR |
| DN 40 | 1"1/2 | V377XE68 | V377XN68 |
| DN 50 | 2" | V377XE69 | V377XN69 |
| DN 65 | 2"1/2 | V377XE70 | V377XN70 |
| DN 80 | 3" | V377XE71 | V377XN71 |
| DN 100 | 4" | V377XE72 | V377XN72 |
| DN 125 | 5" | V377XE73 | V377XN73 |
| DN 150 | 6" | V377XE74 | V377XN74 |
| DN 200 | 8" | V377XE75 | V377XN75 |
| DN 250 | 10" | V377XE76 | V377XN76 |
| DN 300 | 12" | V377XE77 | V377XN77 |
| DN 350 | 14" | A richiesta *On request* | A richiesta *On request* |
| DN 400 | 16" | A richiesta *On request* | A richiesta *On request* |
| DN 450 | 18" | A richiesta *On request* | A richiesta *On request* |
| DN 500 | 20" | A richiesta *On request* | A richiesta *On request* |
| DN 600 | 24" | A richiesta *On request* | A richiesta *On request* |

**ATEX**: Per la versione ATEX aggiungere"YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 375-376-377
## CORPO IN GHISA *CAST IRON BODY*
## CON LEVA *WITH LEVER*




### DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | øC | D | Kg |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | |
| DN 40 | 1"1/2 | 188 | 70 | 90 | 160 | 2,2 |
| DN 50 | 2" | 203 | 80 | 90 | 160 | 3,0 |
| DN 65 | 2"1/2 | 225 | 86 | 90 | 220 | 3,8 |
| DN 80 | 3" | 230 | 95,5 | 90 | 220 | 4,0 |
| DN 100 | 4" | 250 | 108 | 90 | 220 | 5,1 |
| DN 125 | 5" | 277 | 124,5 | 90 | 350 | 7,8 |
| DN 150 | 6" | 290 | 137 | 90 | 350 | 9,2 |
| DN 200 | 8" | 325 | 166 | 90 | 350 | 13,3 |
| DN 250 | 10" | 395 | 199 | 175 | 500 | 25,1 |
| DN 300 | 12" | 432 | 234 | 175 | 500 | 34,5 |

### CARATTERISTICHE DELLA LEVA

Leva con regolazione dentellata a 10 posizioni:
Materiale: alluminio;
Trattamento esterno: verniciata (poliestere);
Peso: da 0,3 a 0,9 Kg.
Lucchettabile in ogni posizione.

### *LEVER FEATURES*

*10-position lever; lockable in each position*
*Material: Aluminium;*
*Surface coating: polyester*
*Weight: from 0,3 to 0,9 Kg.*

### CON LEVA - LENTE IN GHISA *WITH LEVER - CAST IRON DISC*

| MISURA *SIZE* | | TENUTA *LINER* | | | LEVA *LEVER* |
|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | NBR CARBOX | |
| DN 40 | 1"1/2 | L375XE68 | L375XN68 | L375XC68 | KLW37569 |
| DN 50 | 2" | L375XE69 | L375XN69 | L375XC69 | KLW37569 |
| DN 65 | 2"1/2 | L375XE70 | L375XN70 | L375XC70 | KLW37570 |
| DN 80 | 3" | L375XE71 | L375XN71 | L375XC71 | KLW37570 |
| DN 100 | 4" | L375XE72 | L375XN72 | L375XC72 | KLW37570 |
| DN 125 | 5" | L375XE73 | L375XN73 | L375XC73 | KLW37573 |
| DN 150 | 6" | L375XE74 | L375XN74 | L375XC74 | KLW37573 |
| DN 200 | 8" | L375XE75 | L375XN75 | L375XC75 | KLW37575 |
| DN 250 | 10" | L375XE76 | L375XN76 | L375XC76 | KLW37576 |
| DN 300 | 12" | L375XE77 | L375XN77 | L375XC77 | KLW37576 |

### CON LEVA - LENTE IN CF8M *WITH LEVER - CF8M DISC*

| MISURA *SIZE* | | TENUTA *LINER* | | | | | | | LEVA *LEVER* |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | FKM | PTFE a richiesta *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | |
| DN 40 | 1"1/2 | L376XE68 | L376XN68 | L376XV68 | L376XT68 | L376XN68GA | L376XB68 | L376XW68NF | KLW37569* |
| DN 50 | 2" | L376XE69 | L376XN69 | L376XV69 | L376XT69 | L376XN69GA | L376XB69 | L376XW69NF | KLW37569* |
| DN 65 | 2"1/2 | L376XE70 | L376XN70 | L376XV70 | L376XT70 | L376XN70GA | L376XB70 | L376XW70NF | KLW37570* |
| DN 80 | 3" | L376XE71 | L376XN71 | L376XV71 | L376XT71 | L376XN71GA | L376XB71 | L376XW71NF | KLW37570* |
| DN 100 | 4" | L376XE72 | L376XN72 | L376XV72 | L376XT72 | L376XN72GA | L376XB72 | L376XW72NF | KLW37570* |
| DN 125 | 5" | L376XE73 | L376XN73 | L376XV73 | L376XT73 | L376XN73GA | L376XB73 | L376XW73NF | KLW37573* |
| DN 150 | 6" | L376XE74 | L376XN74 | L376XV74 | L376XT74 | L376XN74GA | L376XB74 | L376XW74NF | KLW37573* |
| DN 200 | 8" | L376XE75 | L376XN75 | L376XV75 | L376XT75 | L376XN75GA | L376XB75 | L376XW75NF | KLW37575* |
| DN 250 | 10" | L376XE76 | L376XN76 | L376XV76 | L376XT76 | L376XN76GA | L376XB76 | L376XW76NF | KLW37576* |
| DN 300 | 12" | L376XE77 | L376XN77 | L376XV77 | L376XT77 | L376XN77GA | L376XB77 | L376XW77NF | KLW37576* |

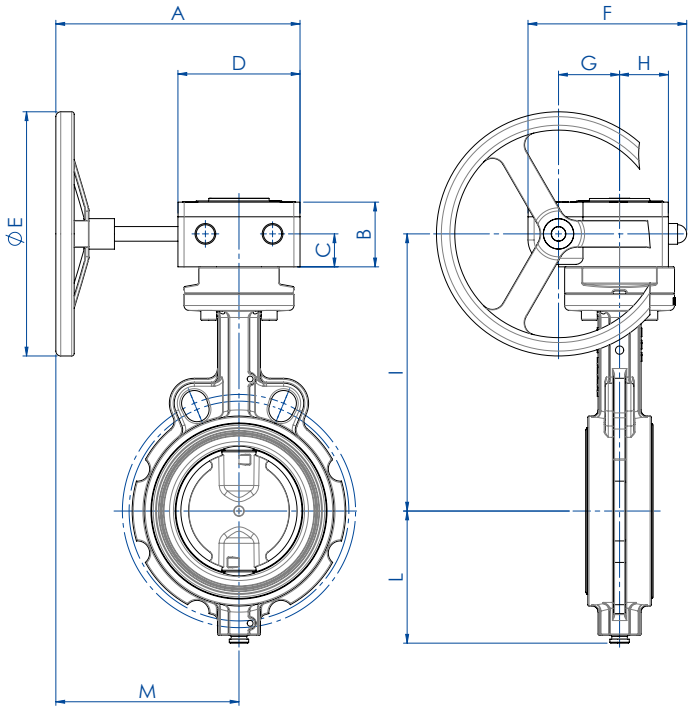
*Per la versione DVGW aggiungere "GI" alla fine del codice **Please add "GI" at the end of the code for the DVGW version*

### CON LEVA - LENTE IN BRONZO ALLUMINIO *WITH LEVER - BRONZE ALUMINIUM DISC*

| MISURA *SIZE* | | TENUTA *LINER* | | LEVA *LEVER* |
|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | |
| DN 40 | 1"1/2 | L377XE68 | L377XN68 | KLW37569 |
| DN 50 | 2" | L377XE69 | L377XN69 | KLW37569 |
| DN 65 | 2"1/2 | L377XE70 | L377XN70 | KLW37570 |
| DN 80 | 3" | L377XE71 | L377XN71 | KLW37570 |
| DN 100 | 4" | L377XE72 | L377XN72 | KLW37570 |
| DN 125 | 5" | L377XE73 | L377XN73 | KLW37573 |
| DN 150 | 6" | L377XE74 | L377XN74 | KLW37573 |
| DN 200 | 8" | L377XE75 | L377XN75 | KLW37575 |
| DN 250 | 10" | L377XE76 | L377XN76 | KLW37576 |
| DN 300 | 12" | L377XE77 | L377XN77 | KLW37576 |

**ATEX**: Per la versione ATEX aggiungere"YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 375-376-377
# CORPO IN GHISA *CAST IRON BODY*
# CON RIDUTTORE *WITH GEAR BOX*




## CARATTERISTICHE DEL RIDUTTORE

Meccanismo di concezione sperimentata, funzionante tramite pignone dentato e vite senza fine.
Un indicatore visivo dà la posizione della valvola.
Carter in lega di alluminio per i riduttori "RF0", in ghisa per i riduttori "RRM...".
Pignone dentato in ghisa.
Vite senza fine in acciaio trattato.
Volantino in acciaio.
Esterno trattato con vernice epossidica.

## *GEAR BOX FEATURES*

*Designed tested mechanism, working through pinion and worm.*
*Visual indicator gives the position of the valve*
*Aluminium alloy carter for the gear box "RF0 " type, cast iron for the gear box "RRM..." Type*
*Cast iron pinion.*
*Worm gear in hardened steel.*
*Steel wheel.*
*Epoxy painted external surface.*

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | C | D | øE | F | G | H | I | L | M | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | |
| DN 40 | 1"1/2 | 200 | 49 | 24 | 80 | 140 | 115 | 42 | 35 | 171,2 | 70 | 160 | 3,3 |
| DN 50 | 2" | 200 | 49 | 24 | 80 | 140 | 115 | 42 | 35 | 185,9 | 80 | 160 | 4,1 |
| DN 65 | 2"1/2 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 201,6 | 86 | 150 | 5,7 |
| DN 80 | 3" | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 208 | 95,5 | 150 | 6 |
| DN 100 | 4" | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 227 | 108 | 150 | 7 |
| DN 125 | 5" | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 239,7 | 124,5 | 150 | 9,4 |
| DN 150 | 6" | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 252,4 | 137 | 150 | 10,7 |
| DN 200 | 8" | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 300,7 | 166 | 180 | 17,4 |
| DN 250 | 10" | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 342 | 199 | 180 | 28 |
| DN 300 | 12" | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 380 | 234 | 180 | 37,5 |
| DN 350 | 14" | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 425,5 | 293 | 180 | 56 |
| DN 400 | 16" | 421 | 102 | 48 | 220 | 300 | 258 | 105 | 75 | 461 | 325 | 301 | 95 |
| DN 450 | 18" | 421 | 102 | 48 | 220 | 300 | 258 | 105 | 75 | 488 | 348 | 301 | 112 |
| DN 500 | 20" | 456 | 102 | 48 | 220 | 500 | 258 | 105 | 75 | 514 | 386,5 | 346 | 141 |
| DN 600 | 24" | 456 | 102 | 48 | 220 | 600 | 258 | 105 | 75 | 578 | 447,5 | 346 | 205 |

# ITEM 375-376-377
## CORPO IN GHISA *CAST IRON BODY*
## CON RIDUTTORE *WITH GEAR BOX*

### CON RIDUTTORE - LENTE IN GHISA *WITH GEAR BOX - CAST IRON BUTTERFLY*

| MISURA *SIZE* | | TENUTA *LINER* | | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | NBR CARBOX | | |
| DN 40 | 1"1/2 | R375XE68 | R375XN68 | R375XC68 | RF01070900 | KCF052898 |
| DN 50 | 2" | R375XE69 | R375XN69 | R375XC69 | RF01070900 | KCF052898 |
| DN 65 | 2"1/2 | R375XE70 | R375XN70 | R375XC70 | RF02071400 | KCF074035 |
| DN 80 | 3" | R375XE71 | R375XN71 | R375XC71 | RF02071400 | KCF074035 |
| DN 100 | 4" | R375XE72 | R375XN72 | R375XC72 | RF02071400 | KCF074035 |
| DN 125 | 5" | R375XE73 | R375XN73 | R375XC73 | RF02071400 | KCF052898 |
| DN 150 | 6" | R375XE74 | R375XN74 | R375XC74 | RF02071400 | KCF052898 |
| DN 200 | 8" | R375XE75 | R375XN75 | R375XC75 | RF04122200 | KCF124037 |
| DN 250 | 10" | R375XE76 | R375XN76 | R375XC76 | RF04122200 | KCF124038 |
| DN 300 | 12" | R375XE77 | R375XN77 | R375XC77 | RF04122200 | KCF124038 |
| DN 350 | 14" | R375KE78 | A richiesta *On request* | --- | RF04122200 | KCF123213 |
| DN 400 | 16" | R375KE79 | A richiesta *On request* | --- | RRM011G00Q36161004 | KCF145715 |
| DN 450 | 18" | R375KE80 | A richiesta *On request* | --- | RRM011G00Q36161004 | KCF145715 |
| DN 500 | 20" | R375KE81 | A richiesta *On request* | --- | RRM011G00Q36351004 | KCF143215 |
| DN 600 | 24" | R375KE82 | A richiesta *On request* | --- | RRM011G00Q36381004 | KCF143215 |

### CON RIDUTTORE - LENTE IN CF8M *WITH GEAR BOX - CF8M BUTTERFLY*

| MISURA *SIZE* | | TENUTA *LINER* | | | | | | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | FKM | PTFE a richiesta *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | |
| DN 40 | 1"1/2 | R376XE68 | R376XN68 | R376XV68 | R376XT68 | R376XN68GA | R376XB68 | R376XW68NF | RF01070900 | KCF052898 |
| DN 50 | 2" | R376XE69 | R376XN69 | R376XV69 | R376XT69 | R376XN69GA | R376XB69 | R376XW69NF | RF01070900 | KCF052898 |
| DN 65 | 2"1/2 | R376XE70 | R376XN70 | R376XV70 | R376XT70 | R376XN70GA | R376XB70 | R376XW70NF | RF02071400 | KCF074035 |
| DN 80 | 3" | R376XE71 | R376XN71 | R376XV71 | R376XT71 | R376XN71GA | R376XB71 | R376XW71NF | RF02071400 | KCF074035 |
| DN 100 | 4" | R376XE72 | R376XN72 | R376XV72 | R376XT72 | R376XN72GA | R376XB72 | R376XW72NF | RF02071400 | KCF074035 |
| DN 125 | 5" | R376XE73 | R376XN73 | R376XV73 | R376XT73 | R376XN73GA | R376XB73 | R376XW73NF | RF02071400 | KCF052898 |
| DN 150 | 6" | R376XE74 | R376XN74 | R376XV74 | R376XT74 | R376XN74GA | R376XB74 | R376XW74NF | RF02071400 | KCF052898 |
| DN 200 | 8" | R376XE75 | R376XN75 | R376XV75 | R376XT75 | R376XN75GA | R376XB75 | R376XW75NF | RF04122200 | KCF124037 |
| DN 250 | 10" | R376XE76 | R376XN76 | R376XV76 | R376XT76 | R376XN76GA | R376XB76 | R376XW76NF | RF04122200 | KCF124038 |
| DN 300 | 12" | R376XE77 | R376XN77 | R376XV77 | R376XT77 | R376XN77GA | R376XB77 | R376XW77NF | RF04122200 | KCF124038 |
| DN 350 | 14" | R376KE78 | *On request* | - | - | - | - | - | RF04122200 | KCF123213 |
| DN 400 | 16" | R376KE79 | *On request* | - | - | - | - | - | RRM011G00Q36161004 | KCF145715 |
| DN 450 | 18" | R376KE80 | *On request* | - | - | - | - | - | RRM011G00Q36161004 | KCF145715 |
| DN 500 | 20" | R376KE81 | *On request* | - | - | - | - | - | RRM011G00Q36351004 | KCF143215 |
| DN 600 | 24" | R376KE82 | *On request* | - | - | - | - | - | RRM011G00Q36381004 | KCF143215 |

### CON RIDUTTORE - LENTE IN BRONZO ALLUMINIO *WITH GEAR BOX - BRONZE ALUMINIUM BUTTERFLY*

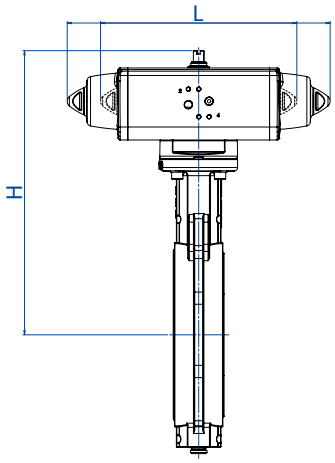
| MISURA *SIZE* | | TENUTA *LINER* | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|
| DN [mm] | [inch] | EPDM | NBR | | |
| DN 40 | 1"1/2 | R377XE68 | R377XN68 | RF01070900 | KCF052898 |
| DN 50 | 2" | R377XE69 | R377XN69 | RF01070900 | KCF052898 |
| DN 65 | 2"1/2 | R377XE70 | R377XN70 | RF02071400 | KCF074035 |
| DN 80 | 3" | R377XE71 | R377XN71 | RF02071400 | KCF074035 |
| DN 100 | 4" | R377XE72 | R377XN72 | RF02071400 | KCF074035 |
| DN 125 | 5" | R377XE73 | R377XN73 | RF02071400 | KCF052898 |
| DN 150 | 6" | R377XE74 | R377XN74 | RF02071400 | KCF052898 |
| DN 200 | 8" | R377XE75 | R377XN75 | RF04122200 | KCF124037 |
| DN 250 | 10" | R377XE76 | R377XN76 | RF04122200 | KCF124038 |
| DN 300 | 12" | R377XE77 | R377XN77 | RF04122200 | KCF124038 |
| DN 350 | 14" | A richiesta *On request* | A richiesta *On request* | RF04122200 | KCF123213 |
| DN 400 | 16" | A richiesta *On request* | A richiesta *On request* | RRM011G00Q36161004 | KCF145715 |
| DN 450 | 18" | A richiesta *On request* | A richiesta *On request* | RRM011G00Q36161004 | KCF145715 |
| DN 500 | 20" | A richiesta *On request* | A richiesta *On request* | RRM011G00Q36351004 | KCF143215 |
| DN 600 | 24" | A richiesta *On request* | A richiesta *On request* | RRM011G00Q36381004 | KCF143215 |

**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 375
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN GHISA
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - CAST IRON DISC*

| MISURA *SIZE* | | ΔP max [bar] | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1"1/2 | 16 | DG375XE68 | DG375XN68 | DG375XC68 | DAN0030411S | 174,2 | 226,4 | 3,2 |
| DN 50 | 2" | 16 | DG375XE69 | DG375XN69 | DG375XC69 | DAN0030411S | 174,2 | 241,4 | 4 |
| DN 65 | 2"1/2 | 16 | DG375XE70 | DG375XN70 | DG375XC70 | DAN0045412S | 188,5 | 258,7 | 5 |
| DN 80 | 3" | 16 | DG375XE71 | DG375XN71 | DG375XC71 | DAN0045412S | 188,5 | 265,7 | 5,2 |
| DN 100 | 4" | 16 | DG375XE72 | DG375XN72 | DG375XC72 | DAN0060412S | 198 | 290,4 | 6,7 |
| DN 125 | 5" | 16 | DG375XE73 | DG375XN73 | DG375XC73 | DAN0106411S | 237 | 316 | 10,3 |
| DN 150 | 6" | 16 | DG375XE74 | DG375XN74 | DG375XC74 | DAN0120411S | 244,1 | 332,2 | 11,8 |
| DN 200 | 8" | 16 | DG375XE75 | DG375XN75 | DG375XC75 | DAN0240411S | 313,6 | 401,3 | 18,7 |
| DN 250 | 10" | 16 | DG375XE76 | DG375XN76 | DG375XC76 | DAN0360411S | 339,3 | 449,2 | 31,6 |
| DN 300 | 12" | 16 | DG375XE77 | DG375XN77 | DG375XC77 | DAN0480411S | 387,6 | 504,1 | 44,1 |
| DN 200 | 8" | 10 | DG375KE75 | DG375KN75 | - | DAN0180411S | 289,9 | 397,7 | 17,9 |
| DN 250 | 10" | 10 | DG375KE76 | DG375KN76 | - | DAN0240411S | 313,6 | 442,3 | 30,5 |
| DN 300 | 12" | 10 | DG375KE77 | DG375KN77 | - | DAN0360411S | 339,3 | 487,2 | 41 |
| DN 350 | 14" | 10 | DG375KE78 | A richiesta *On request* | - | DAN0480411S | 387,6 | 549,9 | 64 |
| DN 400 | 16" | 10 | DG375KE79 | A richiesta *On request* | - | DAN0720411S | 433,1 | 599 | 91,4 |
| DN 450 | 18" | 10 | DG375KE80 | A richiesta *On request* | - | DAN0960411S | 479,3 | 646 | 111,8 |
| DN 500 | 20" | 10 | DG375KE81 | A richiesta *On request* | - | DAN1440411S | 567,1 | 690 | 145,8 |
| DN 600 | 24" | 10 | DG375KE82 | A richiesta *On request* | - | DAN1920411S | 601 | 775,7 | 216,4 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN GHISA
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - CAST IRON DISC*

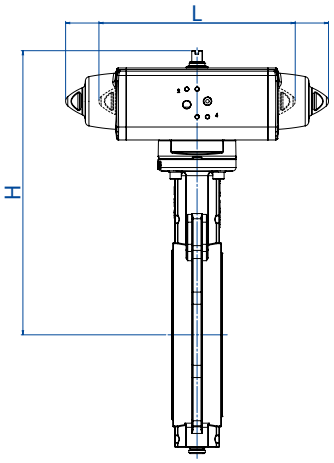
| MISURA *SIZE* | | ΔP max [bar] | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1"1/2 | 16 | SG375XE68 | SG375XN68 | SG375XC68 | SRN0030402S | 258,8 | 237,6 | 4,2 |
| DN 50 | 2" | 16 | SG375XE69 | SG375XN69 | SG375XC69 | SRN0030402S | 258,8 | 252,6 | 5 |
| DN 65 | 2"1/2 | 16 | SG375XE70 | SG375XN70 | SG375XC70 | SRN0053401S | 304,2 | 277,5 | 6,8 |
| DN 80 | 3" | 16 | SG375XE71 | SG375XN71 | SG375XC71 | SRN0053401S | 304,2 | 284,5 | 7 |
| DN 100 | 4" | 16 | SG375XE72 | SG375XN72 | SG375XC72 | SRN0060401S | 338,5 | 307,2 | 8,45 |
| DN 125 | 5" | 16 | SG375XE73 | SG375XN73 | SG375XC73 | SRN0090401S | 393,7 | 350,2 | 13,7 |
| DN 150 | 6" | 16 | SG375XE74 | SG375XN74 | SG375XC74 | SRN0120401S | 409,6 | 366,3 | 16 |
| DN 200 | 8" | 16 | SG375XE75 | SG375XN75 | SG375XC75 | SRN0240401S | 520,4 | 425,2 | 25,1 |
| DN 250 | 10" | 16 | SG375XE76 | SG375XN76 | SG375XC76 | SRN0360401S | 613 | 479,2 | 41,6 |
| DN 300 | 12" | 16 | SG375XE77 | SG375XN77 | SG375XC77 | SRN0480401S | 648,2 | 537,2 | 57,2 |
| DN 200 | 8" | 10 | SG375KE75 | SG375KN75 | - | SRN0180401S | 474 | 408,2 | 22,2 |
| DN 250 | 10" | 10 | SG375KE76 | SG375KN76 | - | SRN0240401S | 520,5 | 466,2 | 36,9 |
| DN 300 | 12" | 10 | SG375KE77 | SG375KN77 | - | SRN0360401S | 613 | 517,2 | 51 |
| DN 350 | 14" | 10 | SG375KE78 | A richiesta *On request* | - | SRN0480401S | 648,2 | 583 | 77,1 |
| DN 400 | 16" | 10 | SG375KE79 | A richiesta *On request* | - | SRN0720401S | 798 | 637 | 112,4 |
| DN 450 | 18" | 10 | SG375KE80 | A richiesta *On request* | - | SRN0960401S | 828 | 685,7 | 136,4 |
| DN 500 | 20" | 10 | S375KE81 | A richiesta *On request* | - | SR1920E1608A | 1001 | 788,5 | 189,4 |
| DN 600 | 24" | 10 | S375KE82 | A richiesta *On request* | - | SR1920E1608A | 1001 | 852,5 | 251,4 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*
**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 376
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN CF8M
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - CF8M DISC*

| MISURA *SIZE* | | ΔP | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | max [bar] | EPDM | NBR | FKM | PTFE *On request* | DVGW | NBR BIANCO *WHITE NBR* | NBR ACQUA *NBR WATER* | | [mm] | [mm] | |
| DN 40 | 1"1/2 | 16 | DG376XE68 | DG376XN68 | DG376XV68 | DG376XT68 | DG376XN68GA | DG376XB68 | DG376XW68NF | DAN0030411S | 174 | 226 | 3,2 |
| DN 50 | 2" | 16 | DG376XE69 | DG376XN69 | DG376XV69 | DG376XT69 | DG376XN69GA | DG376XB69 | DG376XW69NF | DAN0030411S | 174 | 241 | 4 |
| DN 65 | 2"1/2 | 16 | DG376XE70 | DG376XN70 | DG376XV70 | DG376XT70 | DG376XN70GA | DG376XB70 | DG376XW70NF | DAN0045412S | 189 | 259 | 5 |
| DN 80 | 3" | 16 | DG376XE71 | DG376XN71 | DG376XV71 | DG376XT71 | DG376XN71GA | DG376XB71 | DG376XW71NF | DAN0045412S | 189 | 266 | 5,2 |
| DN 100 | 4" | 16 | DG376XE72 | DG376XN72 | DG376XV72 | DG376XT72 | DG376XN72GA | DG376XB72 | DG376XW72NF | DAN0060412S | 198 | 290 | 6,7 |
| DN 125 | 5" | 16 | DG376XE73 | DG376XN73 | DG376XV73 | DG376XT73 | DG376XN73GA | DG376XB73 | DG376XW73NF | DAN0106411S | 237 | 316 | 10,3 |
| DN 150 | 6" | 16 | DG376XE74 | DG376XN74 | DG376XV74 | DG376XT74 | DG376XN74GA | DG376XB74 | DG376XW74NF | DAN0120411S | 244 | 332 | 11,8 |
| DN 200 | 8" | 16 | DG376XE75 | DG376XN75 | DG376XV75 | DG376XT75 | DG376XN75GA | DG376XB75 | DG376XW75NF | DAN0240411S | 314 | 401 | 18,7 |
| DN 250 | 10" | 16 | DG376XE76 | DG376XN76 | DG376XV76 | DG376XT76 | DG376XN76GA | DG376XB76 | DG376XW76NF | DAN0360411S | 339 | 449 | 31,6 |
| DN 300 | 12" | 16 | DG376XE77 | DG376XN77 | DG376XV77 | DG376XT77 | DG376XN77GA | DG376XB77 | DG376XW77NF | DAN0480411S | 388 | 504 | 44,1 |
| DN 200 | 8" | 10 | DG376KE75 | DG376KN75 | DG376KV75 | - | - | - | - | DAN0180411S | 290 | 398 | 17,9 |
| DN 250 | 10" | 10 | DG376KE76 | DG376KN76 | DG376KV76 | - | - | - | - | DAN0240411S | 314 | 442 | 30,5 |
| DN 300 | 12" | 10 | DG376KE77 | DG376KN77 | DG376KV77 | - | - | - | - | DAN0360411S | 339 | 487 | 41 |
| DN 350 | 14" | 10 | DG376KE78 | *On request* | - | - | - | - | - | DAN0480411S | 388 | 550 | 64 |
| DN 400 | 16" | 10 | DG376KE79 | *On request* | - | - | - | - | - | DAN0720411S | 433 | 599 | 91,4 |
| DN 450 | 18" | 10 | DG376KE80 | *On request* | - | - | - | - | - | DAN0960411S | 479 | 646 | 111,8 |
| DN 500 | 20" | 10 | DG376KE81 | *On request* | - | - | - | - | - | DAN1440411S | 567 | 690 | 145,8 |
| DN 600 | 24" | 10 | DG376KE82 | *On request* | - | - | - | - | - | DAN1920411S | 601 | 776 | 216,4 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN CF8M
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - CF8M DISC*

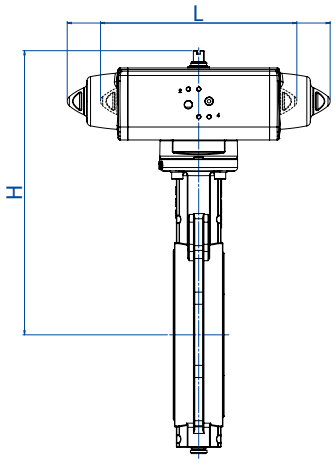
| MISURA *SIZE* | | ΔP | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | max [bar] | EPDM | NBR | FKM | PTFE *On request* | DVGW | NBR BIANCO *WHITE NBR* | NBR ACQUA *NBR WATER* | | [mm] | [mm] | |
| DN 40 | 1"1/2 | 16 | SG376XE68 | SG376XN68 | SG376XV68 | SG376XT68 | SG376XN68GA | SG376XB68 | SG376XW68NF | SRN0030402S | 259 | 238 | 4,2 |
| DN 50 | 2" | 16 | SG376XE69 | SG376XN69 | SG376XV69 | SG376XT69 | SG376XN69GA | SG376XB69 | SG376XW69NF | SRN0030402S | 259 | 253 | 5 |
| DN 65 | 2"1/2 | 16 | SG376XE70 | SG376XN70 | SG376XV70 | SG376XT70 | SG376XN70GA | SG376XB70 | SG376XW70NF | SRN0053401S | 304 | 278 | 6,8 |
| DN 80 | 3" | 16 | SG376XE71 | SG376XN71 | SG376XV71 | SG376XT71 | SG376XN71GA | SG376XB71 | SG376XW71NF | SRN0053401S | 304 | 285 | 7 |
| DN 100 | 4" | 16 | SG376XE72 | SG376XN72 | SG376XV72 | SG376XT72 | SG376XN72GA | SG376XB72 | SG376XW72NF | SRN0060401S | 339 | 307 | 8,45 |
| DN 125 | 5" | 16 | SG376XE73 | SG376XN73 | SG376XV73 | SG376XT73 | SG376XN73GA | SG376XB73 | SG376XW73NF | SRN0090401S | 394 | 350 | 13,7 |
| DN 150 | 6" | 16 | SG376XE74 | SG376XN74 | SG376XV74 | SG376XT74 | SG376XN74GA | SG376XB74 | SG376XW74NF | SRN0120401S | 410 | 366 | 16 |
| DN 200 | 8" | 16 | SG376XE75 | SG376XN75 | SG376XV75 | SG376XT75 | SG376XN75GA | SG376XB75 | SG376XW75NF | SRN0240401S | 520 | 425 | 25,1 |
| DN 250 | 10" | 16 | SG376XE76 | SG376XN76 | SG376XV76 | SG376XT76 | SG376XN76GA | SG376XB76 | SG376XW76NF | SRN0360401S | 613 | 479 | 41,6 |
| DN 300 | 12" | 16 | SG376XE77 | SG376XN77 | SG376XV77 | SG376XT77 | SG376XN77GA | SG376XB77 | SG376XW77NF | SRN0480401S | 648 | 537 | 57,2 |
| DN 200 | 8" | 10 | SG376KE75 | SG376KN75 | SG376KV75 | - | - | - | - | SRN0180401S | 474 | 408 | 22,2 |
| DN 250 | 10" | 10 | SG376KE76 | SG376KN76 | SG376KV76 | - | - | - | - | SRN0240401S | 521 | 466 | 36,9 |
| DN 300 | 12" | 10 | SG376KE77 | SG376KN77 | SG376KV77 | - | - | - | - | SRN0360401S | 613 | 517 | 51 |
| DN 350 | 14" | 10 | SG376KE78 | *On request* | - | - | - | - | - | SRN0480401S | 648 | 583 | 77,1 |
| DN 400 | 16" | 10 | SG376KE79 | *On request* | - | - | - | - | - | SRN0720401S | 798 | 637 | 112,4 |
| DN 450 | 18" | 10 | SG376KE80 | *On request* | - | - | - | - | - | SRN0960401S | 828 | 686 | 136,4 |
| DN 500 | 20" | 10 | S376KE81 | *On request* | - | - | - | - | - | SR1920E1608A | 1001 | 789 | 189,4 |
| DN 600 | 24" | 10 | S376KE82 | *On request* | - | - | - | - | - | SR1920E1608A | 1001 | 853 | 251,4 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*
**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 377
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN BRONZO ALLUMINIO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - BRONZE ALUMINIUM DISC*

| MISURA *SIZE* | | ΔP max [bar] | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | | | | |
| DN 40 | 1"1/2 | 16 | DG377XE68 | DG377XN68 | DAN0030411S | 174,2 | 226,4 | 3,2 |
| DN 50 | 2" | 16 | DG377XE69 | DG377XN69 | DAN0030411S | 174,2 | 241,4 | 4 |
| DN 65 | 2"1/2 | 16 | DG377XE70 | DG377XN70 | DAN0045412S | 188,5 | 258,7 | 5 |
| DN 80 | 3" | 16 | DG377XE71 | DG377XN71 | DAN0045412S | 188,5 | 265,7 | 5,2 |
| DN 100 | 4" | 16 | DG377XE72 | DG377XN72 | DAN0060412S | 198 | 290,4 | 6,7 |
| DN 125 | 5" | 16 | DG377XE73 | DG377XN73 | DAN0106411S | 237 | 316 | 10,3 |
| DN 150 | 6" | 16 | DG377XE74 | DG377XN74 | DAN0120411S | 244,1 | 332,2 | 11,8 |
| DN 200 | 8" | 16 | DG377XE75 | DG377XN75 | DAN0240411S | 313,6 | 401,3 | 18,7 |
| DN 250 | 10" | 16 | DG377XE76 | DG377XN76 | DAN0360411S | 339,3 | 449,2 | 31,6 |
| DN 300 | 12" | 16 | DG377XE77 | DG377XN77 | DAN0480411S | 387,6 | 504,1 | 44,1 |
| DN 200 | 8" | 10 | DG377KE75 | DG377KN75 | DAN0180411S | 289,9 | 397,7 | 17,9 |
| DN 250 | 10" | 10 | DG377KE76 | DG377KN76 | DAN0240411S | 313,6 | 442,3 | 30,5 |
| DN 300 | 12" | 10 | DG377KE77 | DG377KN77 | DAN0360411S | 339,3 | 487,2 | 41 |
| DN 350 | 14" | 10 | A richiesta *On request* | A richiesta *On request* | DAN0480411S | 387,6 | 549,9 | 64 |
| DN 400 | 16" | 10 | A richiesta *On request* | A richiesta *On request* | DAN0720411S | 433,1 | 599 | 91,4 |
| DN 450 | 18" | 10 | A richiesta *On request* | A richiesta *On request* | DAN0960412S | 479,3 | 646 | 111,8 |
| DN 500 | 20" | 10 | A richiesta *On request* | A richiesta *On request* | DAN1440411S | 567,1 | 690 | 145,8 |
| DN 600 | 24" | 10 | A richiesta *On request* | A richiesta *On request* | DAN1920411S | 601 | 775,7 | 216,4 |

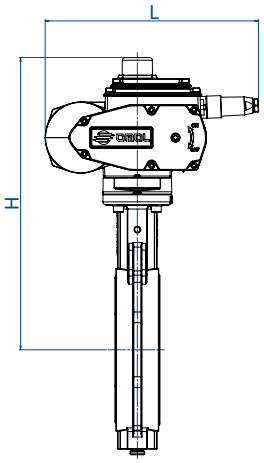
### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN BRONZO ALLUMINIO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - BRONZE ALUMINIUM DISC*

| MISURA *SIZE* | | ΔP max [bar] | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | | | | |
| DN 40 | 1"1/2 | 16 | SG377XE68 | SG377XN68 | SRN0030402S | 258,8 | 237,6 | 4,2 |
| DN 50 | 2" | 16 | SG377XE69 | SG377XN69 | SRN0030402S | 258,8 | 252,6 | 5 |
| DN 65 | 2"1/2 | 16 | SG377XE70 | SG377XN70 | SRN0053401S | 304,2 | 277,5 | 6,8 |
| DN 80 | 3" | 16 | SG377XE71 | SG377XN71 | SRN0053401S | 304,2 | 284,5 | 7 |
| DN 100 | 4" | 16 | SG377XE72 | SG377XN72 | SRN0060401S | 338,5 | 307,2 | 8,45 |
| DN 125 | 5" | 16 | SG377XE73 | SG377XN73 | SRN0090401S | 393,7 | 350,2 | 13,7 |
| DN 150 | 6" | 16 | SG377XE74 | SG377XN74 | SRN0120401S | 409,6 | 366,3 | 16 |
| DN 200 | 8" | 16 | SG377XE75 | SG377XN75 | SRN0240401S | 520,4 | 425,2 | 25,1 |
| DN 250 | 10" | 16 | SG377XE76 | SG377XN76 | SRN0360401S | 613 | 479,2 | 41,6 |
| DN 300 | 12" | 16 | SG377XE77 | SG377XN77 | SRN0480401S | 648,2 | 537,2 | 57,2 |
| DN 200 | 8" | 10 | SG377KE75 | SG377KN75 | SRN0180401S | 474 | 408,2 | 22,2 |
| DN 250 | 10" | 10 | SG377KE76 | SG377KN76 | SRN0240401S | 520,5 | 466,2 | 36,9 |
| DN 300 | 12" | 10 | SG377KE77 | SG377KN77 | SRN0360401S | 613 | 517,2 | 51 |
| DN 350 | 14" | 10 | A richiesta *On request* | A richiesta *On request* | SRN0480401S | 648,2 | 583 | 77,1 |
| DN 400 | 16" | 10 | A richiesta *On request* | A richiesta *On request* | SRN0720401S | 798 | 637 | 112,4 |
| DN 450 | 18" | 10 | A richiesta *On request* | A richiesta *On request* | SRN0960401S | 828 | 685,7 | 136,4 |
| DN 500 | 20" | 10 | A richiesta *On request* | A richiesta *On request* | SR1920E1608A | 1001 | 788,5 | 189,4 |
| DN 600 | 24" | 10 | A richiesta *On request* | A richiesta *On request* | SR1920E1608A | 1001 | 852,5 | 251,4 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*
**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 375
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN GHISA
### *WITH ON-OFF ELECTRIC ACTUATOR - CAST IRON DISC*

| MISURA *SIZE* | | ΔP max | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | [bar] | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1" 1/2 | 16 | C375EA5E68 | C375NA5E68 | C375CA5E68 | EA0035A5C000 | 250 | 284 | 5,8 |
| DN 50 | 2" | 16 | C375EA5E69 | C375NA5E69 | C375CA5E69 | EA0035A5C000 | 250 | 299 | 6,6 |
| DN 65 | 2" 1/2 | 16 | C375EA5E70 | C375NA5E70 | C375CA5E70 | EA0035A5C000 | 250 | 311 | 7,4 |
| DN 80 | 3" | 16 | C375EA5E71 | C375NA5E71 | C375CA5E71 | EA0035A5C000 | 250 | 318 | 7,6 |
| DN 100 | 4" | 16 | C375EA5G72 | C375NA5G72 | C375CA5G72 | EA0070A5C000 | 250 | 337 | 8,9 |
| DN 125 | 5" | 16 | C375EA5I73 | C375NA5I73 | C375CA5I73 | EA0130A5C000 | 280 | 370 | 15 |
| DN 150 | 6" | 16 | C375EA5I74 | C375NA5I74 | C375CA5I74 | EA0130A5C000 | 280 | 383 | 16,4 |
| DN 200 | 8" | 16 | C375EA5K75 | C375NA5K75 | C375CA5K75 | EA0240A5C000 | 280 | 418 | 20,8 |
| DN 250 | 10" | 16 | E375E16N76 | E375N16N76 | E375C16N76 | AE160040 | 256 | 486 | 34,1 |
| DN 300 | 12" | 16 | E375E16R77 | E375N16R77 | E375C16R77 | AE160060 | 381 | 573 | 55 |
| DN 250 | 10" | 10 | C375EA5K76 | C375NA5K76 | C375CA5K76 | EA0240A5C000 | 280 | 457 | 32,6 |
| DN 300 | 12" | 10 | E375E16N77 | E375N16N77 | E375C16N77 | AE160040 | 256 | 524 | 43,5 |
| DN 350 | 14" | 10 | E375E16T78 | A richiesta *On request* | - | AE160100 | 381 | 619 | 75,9 |
| DN 400 | 16" | 10 | E375E16T79 | A richiesta *On request* | - | AE160100 | 381 | 655 | 100,9 |
| DN 450 | 18" | 10 | E375E16T80 | A richiesta *On request* | - | AE160100 | 381 | 682 | 115,9 |
| DN 500 | 20" | 10 | E375E16V81 | A richiesta *On request* | - | AE160150 | 381 | 708 | 147,4 |
| DN 600 | 24" | 10 | E375E16X82 | A richiesta *On request* | - | AE160200 | 381 | 772 | 209,4 |

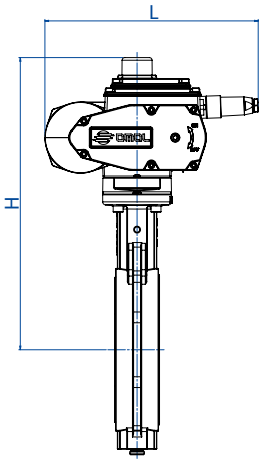
### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN GHISA
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - CAST IRON DISC*

| MISURA *SIZE* | | ΔP max | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | [bar] | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1" 1/2 | 16 | M375E16F68 | M375N16F68 | M375C16F68 | AM160005 | 208 | 311 | 6,7 |
| DN 50 | 2" | 16 | M375E16F69 | M375N16F69 | M375C16F69 | AM160005 | 208 | 326 | 7,5 |
| DN 65 | 2" 1/2 | 16 | M375E16F70 | M375N16F70 | M375C16F70 | AM160005 | 208 | 338 | 8,3 |
| DN 80 | 3" | 16 | M375E16F71 | M375N16F71 | M375C16F71 | AM160005 | 208 | 345 | 8,5 |
| DN 100 | 4" | 16 | M375E16H72 | M375N16H72 | M375C16H72 | AM160010 | 208 | 364 | 9,6 |
| DN 125 | 5" | 16 | M375E16H73 | M375N16H73 | M375C16H73 | AM160010 | 208 | 376 | 12,3 |
| DN 150 | 6" | 16 | M375E16L74 | M375N16L74 | M375C16L74 | AM160020 | 257 | 410 | 17,9 |
| DN 200 | 8" | 16 | M375E16L75 | M375N16L75 | M375C16L75 | AM160020 | 257 | 445 | 22 |
| DN 250 | 10" | 16 | M375E16N76 | M375N16N76 | M375C16N76 | AM160040 | 257 | 486 | 33,8 |
| DN 300 | 12" | 16 | M375E16P77 | M375N16P77 | M375C16P77 | AM160050 | 381 | 573 | 57,3 |
| DN 300 | 12" | 10 | M375E16N77 | M375N16N77 | M375C16N77 | AM160040 | 257 | 524 | 43,2 |
| DN 350 | 14" | 10 | M375E16T78 | A richiesta *On request* | - | AM160100 | 381 | 619 | 77,2 |
| DN 400 | 16" | 10 | M375E16T79 | A richiesta *On request* | - | AM160100 | 381 | 655 | 102,2 |
| DN 450 | 18" | 10 | M375E16T80 | A richiesta *On request* | - | AM160100 | 381 | 682 | 117,2 |
| DN 500 | 20" | 10 | M375E16V81 | A richiesta *On request* | - | AM160150 | 381 | 708 | 147,7 |
| DN 600 | 24" | 10 | M375E16X82 | A richiesta *On request* | - | AM160200 | 381 | 772 | 209,7 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 376
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN CF8M
### *WITH ON-OFF ELECTRIC ACTUATOR - CF8M DISC*

| MISURA *SIZE* | | ΔP | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | max [bar] | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | [mm] | [mm] | |
| DN 40 | 1" 1/2 | 16 | C376EA5E68 | C376NA5E68 | C376VA5E68 | C376TA5E68 | C376NA5E68GA | C376BA5E68 | C376WA5E68NF | EA0035A5C000 | 250 | 284 | 5,8 |
| DN 50 | 2" | 16 | C376EA5E69 | C376NA5E69 | C376VA5E69 | C376TA5E69 | C376NA5E69GA | C376BA5E69 | C376WA5E69NF | EA0035A5C000 | 250 | 299 | 6,6 |
| DN 65 | 2" 1/2 | 16 | C376EA5E70 | C376NA5E70 | C376VA5E70 | C376TA5E70 | C376NA5E70GA | C376BA5E70 | C376WA5E70NF | EA0035A5C000 | 250 | 311 | 7,4 |
| DN 80 | 3" | 16 | C376EA5E71 | C376NA5E71 | C376VA5E71 | C376TA5E71 | C376NA5E71GA | C376BA5E71 | C376WA5E71NF | EA0035A5C000 | 250 | 318 | 7,6 |
| DN 100 | 4" | 16 | C376EA5G72 | C376NA5G72 | C376VA5G72 | C376TA5G72 | C376NA5G72GA | C376BA5G72 | C376WA5G72NF | EA0070A5C000 | 250 | 337 | 8,9 |
| DN 125 | 5" | 16 | C376EA5I73 | C376NA5I73 | C376VA5I73 | C376TA5I73 | C376NA5I73GA | C376BA5I73 | C376WA5I73NF | EA0130A5C000 | 280 | 370 | 15 |
| DN 150 | 6" | 16 | C376EA5I74 | C376NA5I74 | C376VA5I74 | C376TA5I74 | C376NA5I74GA | C376BA5I74 | C376WA5I74NF | EA0130A5C000 | 280 | 383 | 16,4 |
| DN 200 | 8" | 16 | C376EA5K75 | C376NA5K75 | C376VA5K75 | C376TA5K75 | C376NA5K75GA | C376BA5K75 | C376WA5K75NF | EA0240A5C000 | 280 | 418 | 20,8 |
| DN 250 | 10" | 16 | E376E16N76 | E376N16N76 | E376V16N76 | E376T16N76 | E376N16N76GA | E376B16N76 | E376W16N76NF | AE160040 | 256 | 486 | 34,1 |
| DN 300 | 12" | 16 | E376E16R77 | E376N16R77 | E376V16R77 | E376T16R77 | E376N16R77GA | E376B16R77 | E376W16R77NF | AE160060 | 381 | 573 | 55 |
| DN 250 | 10" | 10 | C376EA5K76 | C376NA5K76 | C376VA5K76 | - | C376NA5K76GA | C376BA5K76 | C376WA5K76NF | EA0240A5C000 | 280 | 457 | 32,6 |
| DN 300 | 12" | 10 | E376E16N77 | E376N16N77 | E376V16N77 | - | E376N16N77GA | E376B16N77 | E376W16N77NF | AE160040 | 256 | 524 | 43,5 |
| DN 350 | 14" | 10 | E376E16T78 | On request | - | - | - | - | - | AE160100 | 381 | 619 | 75,9 |
| DN 400 | 16" | 10 | E376E16T79 | On request | - | - | - | - | - | AE160100 | 381 | 655 | 100,9 |
| DN 450 | 18" | 10 | E376E16T80 | On request | - | - | - | - | - | AE160100 | 381 | 682 | 115,9 |
| DN 500 | 20" | 10 | E376E16V81 | On request | - | - | - | - | - | AE160150 | 381 | 708 | 147,4 |
| DN 600 | 24" | 10 | E376E16X82 | On request | - | - | - | - | - | AE160200 | 381 | 772 | 209,4 |

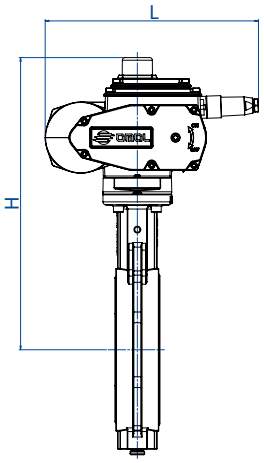
### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN CF8M
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - CF8M DISC*

| MISURA *SIZE* | | ΔP | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L | H | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | max [bar] | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | [mm] | [mm] | |
| DN 40 | 1" 1/2 | 16 | M376E16F68 | M376N16F68 | M376V16F68 | M376T16F68 | M376N16F68GA | M376B16F68 | M376W16F68NF | AM160005 | 208 | 311 | 6,7 |
| DN 50 | 2" | 16 | M376E16F69 | M376N16F69 | M376V16F69 | M376T16F69 | M376N16F69GA | M376B16F69 | M376W16F69NF | AM160005 | 208 | 326 | 7,5 |
| DN 65 | 2" 1/2 | 16 | M376E16F70 | M376N16F70 | M376V16F70 | M376T16F70 | M376N16F70GA | M376B16F70 | M376W16F70NF | AM160005 | 208 | 338 | 8,3 |
| DN 80 | 3" | 16 | M376E16F71 | M376N16F71 | M376V16F71 | M376T16F71 | M376N16F71GA | M376B16F71 | M376W16F71NF | AM160005 | 208 | 345 | 8,5 |
| DN 100 | 4" | 16 | M376E16H72 | M376N16H72 | M376V16H72 | M376T16H72 | M376N16H72GA | M376B16H72 | M376W16H72NF | AM160010 | 208 | 364 | 9,6 |
| DN 125 | 5" | 16 | M376E16H73 | M376N16H73 | M376V16H73 | M376T16H73 | M376N16H73GA | M376B16H73 | M376W16H73NF | AM160010 | 208 | 376 | 12,3 |
| DN 150 | 6" | 16 | M376E16L74 | M376N16L74 | M376V16L74 | M376T16L74 | M376N16L74GA | M376B16L74 | M376W16L74NF | AM160020 | 257 | 410 | 17,9 |
| DN 200 | 8" | 16 | M376E16L75 | M376N16L75 | M376V16L75 | M376T16L75 | M376N16L75GA | M376B16L75 | M376W16L75NF | AM160020 | 257 | 445 | 22 |
| DN 250 | 10" | 16 | M376E16N76 | M376N16N76 | M376V16N76 | M376T16N76 | M376N16N76GA | M376B16N76 | M376W16N76NF | AM160040 | 257 | 486 | 33,8 |
| DN 300 | 12" | 16 | M376E16P77 | M376N16P77 | M376V16P77 | M376T16P77 | M376N16P77GA | M376B16P77 | M376W16P77NF | AM160050 | 381 | 573 | 57,3 |
| DN 300 | 12" | 10 | M376E16N77 | M376N16N77 | M376V16N77 | - | M376N16N77GA | M376B16N77 | M376W16N77NF | AM160040 | 257 | 524 | 43,2 |
| DN 350 | 14" | 10 | M376E16T78 | *On request* | - | - | - | - | - | AM160100 | 381 | 619 | 77,2 |
| DN 400 | 16" | 10 | M376E16T79 | *On request* | - | - | - | - | - | AM160100 | 381 | 655 | 102,2 |
| DN 450 | 18" | 10 | M376E16T80 | *On request* | - | - | - | - | - | AM160100 | 381 | 682 | 117,2 |
| DN 500 | 20" | 10 | M376E16V81 | *On request* | - | - | - | - | - | AM160150 | 381 | 708 | 147,7 |
| DN 600 | 24" | 10 | M376E16X82 | *On request* | - | - | - | - | - | AM160200 | 381 | 772 | 209,7 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 377
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN BRONZO ALLUMINIO
### *WITH ON-OFF ELECTRIC ACTUATOR - BRONZE ALUMINIUM DISC*

| MISURA *SIZE* | | ΔP max | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | [bar] | EPDM | NBR | | | | |
| DN 40 | 1" 1/2 | 16 | C377EA5E68 | C377NA5E68 | EA0035A5C000 | 250 | 284 | 5,8 |
| DN 50 | 2" | 16 | C377EA5E69 | C377NA5E69 | EA0035A5C000 | 250 | 299 | 6,6 |
| DN 65 | 2" 1/2 | 16 | C377EA5E70 | C377NA5E70 | EA0035A5C000 | 250 | 311 | 7,4 |
| DN 80 | 3" | 16 | C377EA5E71 | C377NA5E71 | EA0035A5C000 | 250 | 318 | 7,6 |
| DN 100 | 4" | 16 | C377EA5G72 | C377NA5G72 | EA0070A5C000 | 250 | 337 | 8,9 |
| DN 125 | 5" | 16 | C377EA5I73 | C377NA5I73 | EA0130A5C000 | 280 | 370 | 15 |
| DN 150 | 6" | 16 | C377EA5I74 | C377NA5I74 | EA0130A5C000 | 280 | 383 | 16,4 |
| DN 200 | 8" | 16 | C377EA5K75 | C377NA5K75 | EA0240A5C000 | 280 | 418 | 20,8 |
| DN 250 | 10" | 16 | E377E16N76 | E377N16N76 | AE160040 | 256 | 486 | 34,1 |
| DN 300 | 12" | 16 | E377E16R77 | E377N16R77 | AE160060 | 381 | 573 | 55 |
| DN 250 | 10" | 10 | C377EA5K76 | C377NA5K76 | EA0240A5C000 | 280 | 457 | 32,6 |
| DN 300 | 12" | 10 | E377E16N77 | E377N16N77 | AE160040 | 256 | 524 | 43,5 |
| DN 350 | 14" | 10 | A richiesta *On request* | A richiesta *On request* | AE160100 | 381 | 619 | 75,9 |
| DN 400 | 16" | 10 | A richiesta *On request* | A richiesta *On request* | AE160100 | 381 | 655 | 100,9 |
| DN 450 | 18" | 10 | A richiesta *On request* | A richiesta *On request* | AE160100 | 381 | 682 | 115,9 |
| DN 500 | 20" | 10 | A richiesta *On request* | A richiesta *On request* | AE160150 | 381 | 708 | 147,4 |
| DN 600 | 24" | 10 | A richiesta *On request* | A richiesta *On request* | AE160200 | 381 | 772 | 209,4 |

### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN BRONZO ALLUMINIO
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - BRONZE ALUMINIUM DISC*

| MISURA *SIZE* | | ΔP max | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | [bar] | EPDM | NBR | | | | |
| DN 40 | 1" 1/2 | 16 | M377E16F68 | M377N16F68 | AM160005 | 208 | 311 | 6,7 |
| DN 50 | 2" | 16 | M377E16F69 | M377N16F69 | AM160005 | 208 | 326 | 7,5 |
| DN 65 | 2" 1/2 | 16 | M377E16F70 | M377N16F70 | AM160005 | 208 | 338 | 8,3 |
| DN 80 | 3" | 16 | M377E16F71 | M377N16F71 | AM160005 | 208 | 345 | 8,5 |
| DN 100 | 4" | 16 | M377E16H72 | M377N16H72 | AM160010 | 208 | 364 | 9,6 |
| DN 125 | 5" | 16 | M377E16H73 | M377N16H73 | AM160010 | 208 | 376 | 12,3 |
| DN 150 | 6" | 16 | M377E16L74 | M377N16L74 | AM160020 | 257 | 410 | 17,9 |
| DN 200 | 8" | 16 | M377E16L75 | M377N16L75 | AM160020 | 257 | 445 | 22 |
| DN 250 | 10" | 16 | M377E16N76 | M377N16N76 | AM160040 | 257 | 486 | 33,8 |
| DN 300 | 12" | 16 | M377E16P77 | M377N16P77 | AM160050 | 381 | 573 | 57,3 |
| DN 300 | 12" | 10 | M377E16N77 | M377N16N77 | AM160040 | 257 | 524 | 43,2 |
| DN 350 | 14" | 10 | A richiesta *On request* | A richiesta On request | AM160100 | 381 | 619 | 77,2 |
| DN 400 | 16" | 10 | A richiesta *On request* | A richiesta On request | AM160100 | 381 | 655 | 102,2 |
| DN 450 | 18" | 10 | A richiesta *On request* | A richiesta On request | AM160100 | 381 | 682 | 117,2 |
| DN 500 | 20" | 10 | A richiesta *On request* | A richiesta On request | AM160150 | 381 | 708 | 147,7 |
| DN 600 | 24" | 10 | A richiesta *On request* | A richiesta On request | AM160200 | 381 | 772 | 209,7 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 375-376-377
# KIT GUARNIZIONI *SEALS KIT*

| KIT GUARNIZIONI LENTE IN GHISA - ACCIAIO INOX - BRONZO ALLUMINIO<br>*SEALS KIT CAST IRON - STAINLESS STEEL AND BRONZE ALUMINIUM BUTTERFLY* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **TENUTA** *LINER* | | | | | |
| **DN [mm]** | **[inch]** | **EPDM** | **NBR** | **FKM** | **NBR BIANCO** *WHITE NBR* | **NBR CARBOX** | **DVGW** |
| DN 40 | 1" 1/2 | KGFE0068 | KGFN0068 | KGFV0068 | KGFA0068 | KGFC0068 | KGFG0068 |
| DN 50 | 2" | KGFE0069 | KGFN0069 | KGFV0069 | KGFA0069 | KGFC0069 | KGFG0069 |
| DN 65 | 2" 1/2 | KGFE0070 | KGFN0070 | KGFV0070 | KGFA0070 | KGFC0070 | KGFG0070 |
| DN 80 | 3" | KGFE0071 | KGFN0071 | KGFV0071 | KGFA0071 | KGFC0071 | KGFG0071 |
| DN 100 | 4" | KGFE0072 | KGFN0072 | KGFV0072 | KGFA0072 | KGFC0072 | KGFG0072 |
| DN 125 | 5" | KGFE0073 | KGFN0073 | KGFV0073 | KGFA0073 | KGFC0073 | KGFG0073 |
| DN 150 | 6" | KGFE0074 | KGFN0074 | KGFV0074 | KGFA0074 | KGFC0074 | KGFG0074 |
| DN 200 | 8" | KGFE0075 | KGFN0075 | KGFV0075 | KGFA0075 | KGFC0075 | KGFG0075 |
| DN 250 | 10" | KGFE0076 | KGFN0076 | KGFV0076 | KGFA0076 | KGFC0076 | KGFG0076 |
| DN 300 | 12" | KGFE0077 | KGFN0077 | KGFV0077 | KGFA0077 | KGFC0077 | KGFG0077 |
| DN 350 | 14" | KGFE0078 | KGFN0078 | - | - | - | - |
| DN 400 | 16" | KGFE0079 | KGFN0079 | - | - | - | - |
| DN 450 | 18" | KGFE0080 | KGFN0080 | - | - | - | - |
| DN 500 | 20" | KGFE0081 | KGFN0081 | - | - | - | - |
| DN 600 | 24" | KGFE0082 | KGFN0082 | - | - | - | - |

# ITEM 375-376-377
# KIT CONNESSIONE VALVOLA-ATTUATORE *VALVE-ACTUATOR CONNECTION KIT*

## KIT DI CONNESSIONE VALVOLA-ATTUATORE *VALVE-ACTUATOR CONNECTION KIT*

| MISURA *SIZE* | | ΔP max 10 bar | | ΔP max 16 bar | | |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | ATTUATORE *ACTUATOR* | KIT DI CONNESSIONE *CONNECTION KIT* | ATTUATORE *ACTUATOR* | KIT DI CONNESSIONE *CONNECTION KIT* | KIT DI CONNESSIONE valvola con TENUTA IN PTFE *CONNECTION KIT valve with PTFE LINER* |
| DN 40 | 1" 1/2 | - | - | DAN0030411S | KCF042895 | KCF045003 |
| | | - | - | SRN0030402S | KCF052925 | KCF055004 |
| | | - | - | EA0035A5C000 | KCF052925 | KCF052925 |
| | | - | - | AM160005 | KCE282926 | KCE282926 |
| DN 50 | 2" | - | - | DAN0030411S | KCF042895 | KCF045003 |
| | | - | - | SRN0030402S | KCF052925 | KCF055004 |
| | | - | - | EA0035A5C000 | KCF052925 | KCF052925 |
| | | - | - | AM160005 | KCE282926 | KCE282926 |
| DN 65 | 2" 1/2 | - | - | DAN0045412S | KCF042896 | KCF044988 |
| | | - | - | SRN0053401S | KCF072949 | KCF055005 |
| | | - | - | EA0035A5C000 | KCF052897 | KCF052897 |
| | | - | - | AM160005 | KCE282927 | KCE282927 |
| DN 80 | 3" | - | - | DAN0045412S | KCF042896 | KCF042896 |
| | | - | - | SRN0053401S | KCF072949 | KCF055005 |
| | | - | - | EA0035A5C000 | KCF052897 | KCF052897 |
| | | - | - | AM160005 | KCE282927 | KCE282927 |
| DN 100 | 4" | - | - | DAN0060412S | KCF052897 | KCF054991 |
| | | - | - | SRN0060401S | KCF072949 | KCF055005 |
| | | - | - | EA0070A5C000 | KCF052897 | KCF052897 |
| | | - | - | AM160010 | KCE282927 | KCE282927 |
| DN 125 | 5" | - | - | DAN0106411S | KCF072899 | KCF074994 |
| | | - | - | SRN0090401S | KCF105415 | KCF105006 |
| | | - | - | EA0130A5C000 | KCF072899 | KCF072899 |
| | | - | - | AM160010 | KCE282928 | KCE282928 |
| DN 150 | 6" | - | - | DAN0120411S | KCF072899 | KCF074994 |
| | | - | - | SRN0120401S | KCF105415 | KCF105006 |
| | | - | - | EA0130A5C000 | KCF072899 | KCF072899 |
| | | - | - | AM160020 | KCE362929 | KCE362929 |
| DN 200 | 8" | DAN0180411S | KCF102900 | DAN0240411S | KCF102900 | KCF104998 |
| | | SRN0180401S | KCF102900 | SRN0240401S | KCF123367 | KCF125532 |
| | | EA0240A5C000 | KCF102900 | EA0240A5C000 | KCF102900 | KCF102900 |
| | | AM160020 | KCE362930 | AM160020 | KCE362930 | KCE362930 |
| DN 250 | 10" | DAN0240411S | KCF102901 | DAN0360411S | KCF102901 | KCF104995 |
| | | SRN0240401S | KCF122902 | SRN0360401S | KCF122902 | KCF124997 |
| | | EA0240A5C000 | KCF102901 | AE160040 | KCE362931 | KCE362931 |
| | | AM160040 | KCE362931 | AM160040 | KCE362931 | KCE362931 |
| DN 300 | 12" | DAN0360411S | KCF102901 | DAN0480411S | KCF122902 | KCF124997 |
| | | SRN0360401S | KCF122902 | SRN0480401S | KCF145417 | KCF125533 |
| | | AE160040 | KCE362931 | AE160060 | KCE562932 | KCE562932 |
| | | AM160040 | KCE362931 | AM160050 | KCE562932 | KCE562932 |
| DN 350 | 14" | DAN0480411S | KCF123212 | - | - | - |
| | | SRN0480401S | KCF144262 | - | - | - |
| | | AE160100 | KCE563395 | - | - | - |
| | | AM160100 | KCE563395 | - | - | - |
| DN 400 | 16" | DAN0720411S | KCF123213 | - | - | - |
| | | SRN0720401S | KCF143214 | - | - | - |
| | | AE160100 | KCE563350 | - | - | - |
| | | AM160100 | KCE563350 | - | - | - |
| DN 450 | 18" | DAN0960411S | KCF144263 | - | - | - |
| | | SRN0960401S | KCF164264 | - | - | - |
| | | AE160100 | KCE563350 | - | - | - |
| | | AM160100 | KCE563350 | - | - | - |
| DN 500 | 20" | DAN1440411S | KCF143215 | - | - | - |
| | | SR1920E1608A | KCF163216 | - | - | - |
| | | AE160150 | KCE563390 | - | - | - |
| | | AM160150 | KCE563390 | - | - | - |
| DN 600 | 24" | DAN1920411S | KCF164265 | - | - | - |
| | | SR1920E1608A | KCF163216 | - | - | - |
| | | AE160200 | KCE563390 | - | - | - |
| | | AM160200 | KCE563390 | - | - | - |

# ITEM 385-386-387

## VALVOLA A FARFALLA IN GHISA PER MONTAGGIO TRA FLANGE TIPO "LUG"
*CAST IRON BUTTERFLY VALVE FOR MOUNTING BETWEEN FLANGES, "LUG" TYPE*

**ITEM 385**
Corpo: Ghisa
Lente: Ghisa
Guarnizioni: vedere tabella

**ITEM 386**
Corpo: Ghisa
Lente: CF8M (316 S.S.)
Guarnizioni: vedere tabella

**ITEM 387**
Corpo: Ghisa
Lente: Bronzo Alluminio
Guarnizioni: vedere tabella



***ITEM 385***
*Body: Cast iron*
*Butterfly: Cast iron*
*Liner: see table*

***ITEM 386***
*Body: Cast iron*
*Butterfly: CF8M (316 S.S.)*
*Liner: see table*

***ITEM 387***
*Body: Cast iron*
*Butterfly: Bronze aluminium*
*Liner: see table*

**ESECUZIONI STANDARD:**
- Gamma disponibile: dal DN 40 al DN 300 PN 10 - PN 16.
- Flangiatura standard: PN 10=PN 16 dal DN 40 al DN 150;
  PN 10 o PN 16 dal DN 200 al DN 300.
- A richiesta PN 16 dal DN 200 al DN 300.
- Requisiti generali in accordo a UNI EN593.
- Ingombri da faccia a faccia normalizzati EN 558 serie 20.
- Testa della valvola normalizzata ISO 5211.
- Tenuta secondo EN 12266-1 rate A.
- Altre combinazioni a richiesta.
- Temperatura di utilizzo per le guarnizioni:
  EPDM: da -25°C a +135°C;
  NBR: da -23°C a +82°C;
  FKM: da -10°C a +190°C;
  PTFE (su base EPDM): da -25°C a +150°C.
- Pressione di utilizzo tra flange: PN 16 bar dal DN 40 al DN 150;
  PN 10 o PN 16 bar dal DN 200 al DN 300.
- Spessore rivestimento epossidico: 160 ÷ 200 µ. RAL: 5015.

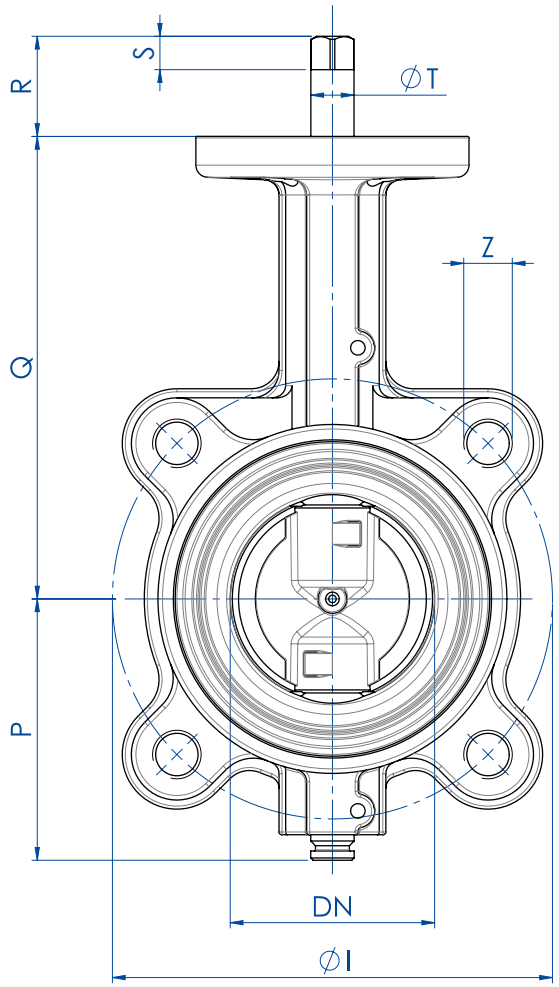
***STANDARD EXECUTIONS:***
- *Available range: from DN 40 to DN 300 PN 10 - PN 16.*
- *Standard flanges: PN 10=PN 16 - from DN 40 to DN 150;*
  *PN 10 or PN 16 from DN 200 to DN 300.*
- *On request PN 16 from DN 200 to DN 300.*
- *General requirements in accordance with UNI EN593.*
- *Face to face as per EN 558 serie 20.*
- *Valve head as per ISO 5211.*
- *Tightness as per EN 12266-1 rate A.*
- *Other tests on request.*
- *Operating temperature of liners:*
  *EPDM: from -25°C to +135°C;*
  *NBR: from -23°C to +82°C;*
  *FKM: from -10°C to +190°C;*
  *PTFE (on EPDM core): from -25°C to +150°C.*
- *Working pressure between flanges: PN 16 bar for DN 40 to DN 150;*
  *PN 10 or PN 16 bar for DN 200 to DN 300.*
- *Thickness of epoxy coating: 160 ÷ 200 µ. RAL: 5015.*

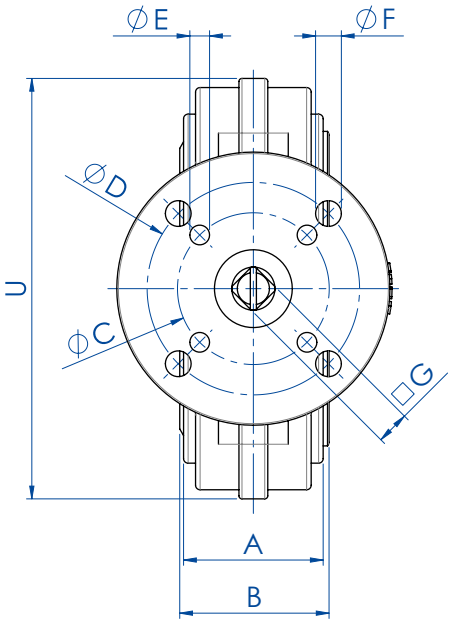
**ESECUZIONI A RICHIESTA:**
- Temperatura di utilizzo per guarnizioni speciali:
  SILICONE: da -25°C a +160°C;
  NBR CARBOX: da -10°C a +82°C;
  NBR BIANCO per fluidi alimentari: da -23°C a +82°C;
  HNBR: da -20°C a +120°C.
- Per altre applicazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Working temperature for special liners:*
  *SILICONE: from -50°C to +160°C;*
  NBR CARBOX: *from -10°C to +82°C;*
  NBR WHITE for food: *from -23°C to +82°C;*
  HNBR: *from -20°C to +120°C.*
- *For other applications, please contact our sales department.*

**CERTIFICAZIONI:**
- Conforme alla direttiva Europea 2014/68/UE "PED".
- Omologazione DVGW per gas combustibile (V386).
- Omologazione RINA.
- Dichiarazione conformità al D.M.n°174; Idoneita al contatto con acqua e fluidi alimentari (V386).
- Versione ATEX in conformità alla Direttiva Europea 2014/34/UE.
- Certificato ATEX a richiesta.

***CERTIFICATIONS:***
- *According to 2014/68/EU "PED".*
- *DVGW homologation for gas (V386).*
- *RINA homologation.*
- *Conformity to the italian D.M.n°174 suitable with drinking water and alimentary fluid (V386).*
- *ATEX version in conformity with European Directive 2014/34/EU.*
- *ATEX certificate on request.*




*A: Scartamento valvola*
*Face to face*

*B: Guarnizioni non compresse*
*Liner not compressed*



## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* DN [mm] | [inch] | PN | A | B | ØC | ØD | ØE | ØF | □G | ØI | P | Q | R | S | ØT | U | ØZ | Fori *Holes* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN 40 | 1"1/2 | 10-16 | 33 | 36 | 50 | 70 | 6,5 | 8,5 | 9 | 110 | 70 | 125 | 31 | 9 | 14,2 | 118 | M16 | 4 |
| DN 50 | 2" | 10-16 | 43 | 46 | 50 | 70 | 6,5 | 8,5 | 9 | 125 | 80 | 140 | 31 | 9 | 14,2 | 125 | M16 | 4 |
| DN 65 | 2"1/2 | 10-16 | 46 | 49 | 50 | 70 | 6,5 | 8,5 | 11 | 145 | 86 | 152 | 33 | 11 | 14,2 | 139 | M16 | 4 |
| DN 80 | 3" | 10-16 | 46 | 49 | 50 | 70 | 6,5 | 8,5 | 11 | 160 | 95,5 | 159 | 33 | 11 | 14,2 | 184 | M16 | 8 |
| DN 100 | 4" | 10-16 | 52 | 56 | 50 | 70 | 6,5 | 8,5 | 11 | 180 | 108 | 178 | 33 | 11 | 14,2 | 204 | M16 | 8 |
| DN 125 | 5" | 10-16 | 56 | 59 | 70 | | 8,5 | | 14 | 210 | 124,5 | 190,5 | 36 | 14 | 19 | 230 | M16 | 8 |
| DN 150 | 6" | 10-16 | 56 | 59 | 70 | | 8,5 | | 14 | 240 | 137 | 203 | 36 | 14 | 19 | 266 | M20 | 8 |
| DN 200 | 8" | 10 | 60 | 64 | 70 | | 8,5 | | 17 | 295 | 166 | 238 | 39 | 17 | 22,2 | 318 | M20 | 8 |
| DN 250 | 10" | 10 | 68 | 72 | 102 | 125 | 11 | 13 | 17 | 350 | 199 | 268 | 50 | 17 | 28,5 | 395 | M20 | 12 |
| DN 300 | 12" | 10 | 78 | 81,5 | 102 | 125 | 11 | 13 | 22 | 400 | 234 | 306 | 55 | 22 | 28,5 | 448 | M20 | 12 |
| DN 200 | 8" | 16 | 60 | 64 | 70 | | 8,5 | | 17 | 295 | 166 | 238 | 39 | 17 | 22,2 | 329 | M20 | 12 |
| DN 250 | 10" | 16 | 68 | 72 | 102 | 125 | 11 | 13 | 22 | 355 | 199 | 268 | 55 | 22 | 28,5 | 395 | M24 | 12 |
| DN 300 | 12" | 16 | 78 | 81,5 | 102 | 125 | 11 | 13 | 22 | 410 | 234 | 306 | 55 | 22 | 28,5 | 448 | M24 | 12 |

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| MISURA *SIZE* | DN 40 1"1/2 | DN 50 2" | DN 65 2"1/2 | DN 80 3" | DN 100 4" | DN 125 5" | DN 150 6" | DN 200 8" | DN 250 10" | DN 300 12" |
|---|---|---|---|---|---|---|---|---|---|---|
| PN 10 bar | 15 | 15 | 17 | 19 | 27 | 36 | 54 | 109 | 145 | 218 |
| PN 16 bar | 18 | 18 | 25 | 27 | 35 | 52 | 72 | 142 | 170 | 250 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

# ITEM 385-386-387
# CORPO IN GHISA *CAST IRON BODY*
# ASSE LIBERO *FREE SHAFT*

## ASSE LIBERO - LENTE IN GHISA *FREE SHAFT - CAST IRON DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | |
|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX |
| | DN 40 | 1" 1/2 | 10-16 | V385XE68 | V385XN68 | V385XC68 |
| | DN 50 | 2" | 10-16 | V385XE69 | V385XN69 | V385XC69 |
| | DN 65 | 2" 1/2 | 10-16 | V385XE70 | V385XN70 | V385XC70 |
| | DN 80 | 3" | 10-16 | V385XE71 | V385XN71 | V385XC71 |
| | DN 100 | 4" | 10-16 | V385XE72 | V385XN72 | V385XC72 |
| | DN 125 | 5" | 10-16 | V385XE73 | V385XN73 | V385XC73 |
| | DN 150 | 6" | 10-16 | V385XE74 | V385XN74 | V385XC74 |
| | DN 200 | 8" | 10 | V385KE75 | V385KN75 | V385KC75 |
| | DN 250 | 10" | 10 | V385KE76 | V385KN76 | V385KC76 |
| | DN 300 | 12" | 10 | V385KE77 | V385KN77 | V385KC77 |
| A richiesta *On request* | DN 200 | 8" | 16 | V385FE75 | V385FN75 | V385FC75 |
| A richiesta *On request* | DN 250 | 10" | 16 | V385FE76 | V385FN76 | V385FC76 |
| A richiesta *On request* | DN 300 | 12" | 16 | V385FE77 | V385FN77 | V385FC77 |

## ASSE LIBERO - LENTE IN CF8M *FREE SHAFT - CF8M DISC*

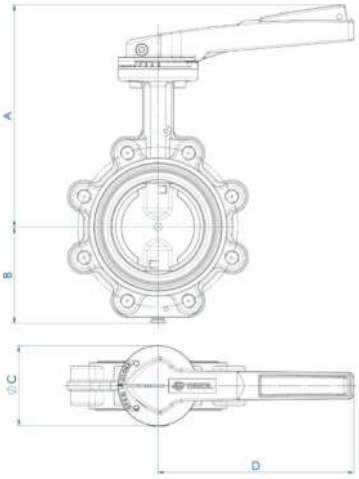
| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* |
| | DN 40 | 1" 1/2 | 10-16 | V386XE68 | V386XN68 | V386XV68 | V386XT68 | V386XN68GA | V386XB68 | V386XW68NF |
| | DN 50 | 2" | 10-16 | V386XE69 | V386XN69 | V386XV69 | V386XT69 | V386XN69GA | V386XB69 | V386XW69NF |
| | DN 65 | 2" 1/2 | 10-16 | V386XE70 | V386XN70 | V386XV70 | V386XT70 | V386XN70GA | V386XB70 | V386XW70NF |
| | DN 80 | 3" | 10-16 | V386XE71 | V386XN71 | V386XV71 | V386XT71 | V386XN71GA | V386XB71 | V386XW71NF |
| | DN 100 | 4" | 10-16 | V386XE72 | V386XN72 | V386XV72 | V386XT72 | V386XN72GA | V386XB72 | V386XW72NF |
| | DN 125 | 5" | 10-16 | V386XE73 | V386XN73 | V386XV73 | V386XT73 | V386XN73GA | V386XB73 | V386XW73NF |
| | DN 150 | 6" | 10-16 | V386XE74 | V386XN74 | V386XV74 | V386XT74 | V386XN74GA | V386XB74 | V386XW74NF |
| | DN 200 | 8" | 10 | V386KE75 | V386KN75 | V386KV75 | V386KT75 | V386KN75GA | V386KB75 | V386KW75NF |
| | DN 250 | 10" | 10 | V386KE76 | V386KN76 | V386KV76 | V386KT76 | V386KN76GA | V386KB76 | V386KW76NF |
| | DN 300 | 12" | 10 | V386KE77 | V386KN77 | V386KV77 | V386KT77 | V386KN77GA | V386KB77 | V386KW77NF |
| A richiesta *On request* | DN 200 | 8" | 16 | V386FE75 | V386FN75 | V386FV75 | V386FT75 | V386FN75GA | V386FB75 | V386FW75NF |
| A richiesta *On request* | DN 250 | 10" | 16 | V386FE76 | V386FN76 | V386FV76 | V386FT76 | V386FN76GA | V386FB76 | V386FW76NF |
| A richiesta *On request* | DN 300 | 12" | 16 | V386FE77 | V386FN77 | V386FV77 | V386FT77 | V386FN77GA | V386FB77 | V386FW77NF |

## ASSE LIBERO - LENTE IN BRONZO ALLUMINIO *FREE SHAFT - BRONZE ALUMINIUM DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | |
|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR |
| | DN 40 | 1" 1/2 | 10-16 | V387XE68 | V387XN68 |
| | DN 50 | 2" | 10-16 | V387XE69 | V387XN69 |
| | DN 65 | 2" 1/2 | 10-16 | V387XE70 | V387XN70 |
| | DN 80 | 3" | 10-16 | V387XE71 | V387XN71 |
| | DN 100 | 4" | 10-16 | V387XE72 | V387XN72 |
| | DN 125 | 5" | 10-16 | V387XE73 | V387XN73 |
| | DN 150 | 6" | 10-16 | V387XE74 | V387XN74 |
| | DN 200 | 8" | 10 | V387KE75 | V387KN75 |
| | DN 250 | 10" | 10 | V387KE76 | V387KN76 |
| | DN 300 | 12" | 10 | V387KE77 | V387KN77 |
| A richiesta *On request* | DN 200 | 8" | 16 | V387FE75 | V387FN75 |
| A richiesta *On request* | DN 250 | 10" | 16 | V387FE76 | V387FN76 |
| A richiesta *On request* | DN 300 | 12" | 16 | V387FE77 | V387FN77 |

**ATEX:** Per la versione ATEX aggiungere"YX" alla fine del codice. ***ATEX:** Please add "YX" at the end of the code for the ATEX version.*

# ITEM 385-386-387
## CORPO IN GHISA *CAST IRON BODY*
## CON LEVA *WITH LEVER*



### DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | A | B | øC | D | Kg |
|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | |
| DN 40 | 1" 1/2 | 188 | 70 | 90 | 160 | 2,5 |
| DN 50 | 2" | 203 | 80 | 90 | 160 | 3,4 |
| DN 65 | 2" 1/2 | 225 | 86 | 90 | 220 | 4,3 |
| DN 80 | 3" | 230 | 95,5 | 90 | 220 | 5,5 |
| DN 100 | 4" | 250 | 108 | 90 | 220 | 6,6 |
| DN 125 | 5" | 277 | 124,5 | 90 | 350 | 9 |
| DN 150 | 6" | 290 | 137 | 90 | 350 | 11,4 |
| DN 200 | 8" | 325 | 166 | 90 | 350 | 17,5 |
| DN 250 | 10" | 395 | 199 | 175 | 500 | 26,8 |
| DN 300 | 12" | 432 | 234 | 175 | 500 | 41,8 |

### CARATTERISTICHE DELLA LEVA

Leva con regolazione dentellata a 10 posizioni:
Materiale: alluminio;
Trattamento esterno: verniciata (poliestere);
Peso: da 0,3 a 0,9 Kg.
Lucchettabile in ogni posizione.

### *LEVER FEATURES*

*10-position lever; lockable in each position*
*Material: Aluminium;*
*Surface coating: polyester*
*Weight: from 0,3 to 0,9 Kg.*

### CON LEVA - LENTE IN GHISA *WITH LEVER - CAST IRON DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | LEVA *LEVER* |
|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | |
| | DN 40 | 1" 1/2 | 10-16 | L385XE68 | L385XN68 | L385XC68 | KLW37569 |
| | DN 50 | 2" | 10-16 | L385XE69 | L385XN69 | L385XC69 | KLW37569 |
| | DN 65 | 2" 1/2 | 10-16 | L385XE70 | L385XN70 | L385XC70 | KLW37570 |
| | DN 80 | 3" | 10-16 | L385XE71 | L385XN71 | L385XC71 | KLW37570 |
| | DN 100 | 4" | 10-16 | L385XE72 | L385XN72 | L385XC72 | KLW37570 |
| | DN 125 | 5" | 10-16 | L385XE73 | L385XN73 | L385XC73 | KLW37573 |
| | DN 150 | 6" | 10-16 | L385XE74 | L385XN74 | L385XC74 | KLW37573 |
| | DN 200 | 8" | 10 | L385KE75 | L385KN75 | L385KC75 | KLW37575 |
| | DN 250 | 10" | 10 | L385KE76 | L385KN76 | L385KC76 | KLW37576 |
| | DN 300 | 12" | 10 | L385KE77 | L385KN77 | L385KC77 | KLW37576 |
| A richiesta *On request* | DN 200 | 8" | 16 | L385FE75 | L385FN75 | L385FC75 | KLW37575 |
| A richiesta *On request* | DN 250 | 10" | 16 | L385FE76 | L385FN76 | L385FC76 | KLW37576 |
| A richiesta *On request* | DN 300 | 12" | 16 | L385FE77 | L385FN77 | L385FC77 | KLW37576 |

### CON LEVA - LENTE IN CF8M *WITH LEVER - CF8M DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | LEVA *LEVER* |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | |
| | DN 40 | 1" 1/2 | 10-16 | L386XE68 | L386XN68 | L386XV68 | L386XT68 | L386XN68GA | L386XB68 | L386XW68NF | KLW37569* |
| | DN 50 | 2" | 10-16 | L386XE69 | L386XN69 | L386XV69 | L386XT69 | L386XN69GA | L386XB69 | L386XW69NF | KLW37569* |
| | DN 65 | 2" 1/2 | 10-16 | L386XE70 | L386XN70 | L386XV70 | L386XT70 | L386XN70GA | L386XB70 | L386XW70NF | KLW37570* |
| | DN 80 | 3" | 10-16 | L386XE71 | L386XN71 | L386XV71 | L386XT71 | L386XN71GA | L386XB71 | L386XW71NF | KLW37570* |
| | DN 100 | 4" | 10-16 | L386XE72 | L386XN72 | L386XV72 | L386XT72 | L386XN72GA | L386XB72 | L386XW72NF | KLW37570* |
| | DN 125 | 5" | 10-16 | L386XE73 | L386XN73 | L386XV73 | L386XT73 | L386XN73GA | L386XB73 | L386XW73NF | KLW37573* |
| | DN 150 | 6" | 10-16 | L386XE74 | L386XN74 | L386XV74 | L386XT74 | L386XN74GA | L386XB74 | L386XW74NF | KLW37573* |
| | DN 200 | 8" | 10 | L386KE75 | L386KN75 | L386KV75 | L386KT75 | L386KN75GA | L386KB75 | L386KW75NF | KLW37575* |
| | DN 250 | 10" | 10 | L386KE76 | L386KN76 | L386KV76 | L386KT76 | L386KN76GA | L386KB76 | L386KW76NF | KLW37576* |
| | DN 300 | 12" | 10 | L386KE77 | L386KN77 | L386KV77 | L386KT77 | L386KN77GA | L386KB77 | L386KW77NF | KLW37576* |
| A richiesta *On request* | DN 200 | 8" | 16 | L386FE75 | L386FN75 | L386FV75 | L386FT75 | L386FN75GA | L386FB75 | L386FW75NF | KLW37575* |
| A richiesta *On request* | DN 250 | 10" | 16 | L386FE76 | L386FN76 | L386FV76 | L386FT76 | L386FN76GA | L386FB76 | L386FW76NF | KLW37576* |
| A richiesta *On request* | DN 300 | 12" | 16 | L386FE77 | L386FN77 | L386FV77 | L386FT77 | L386FN77GA | L386FB77 | L386FW77NF | KLW37576* |

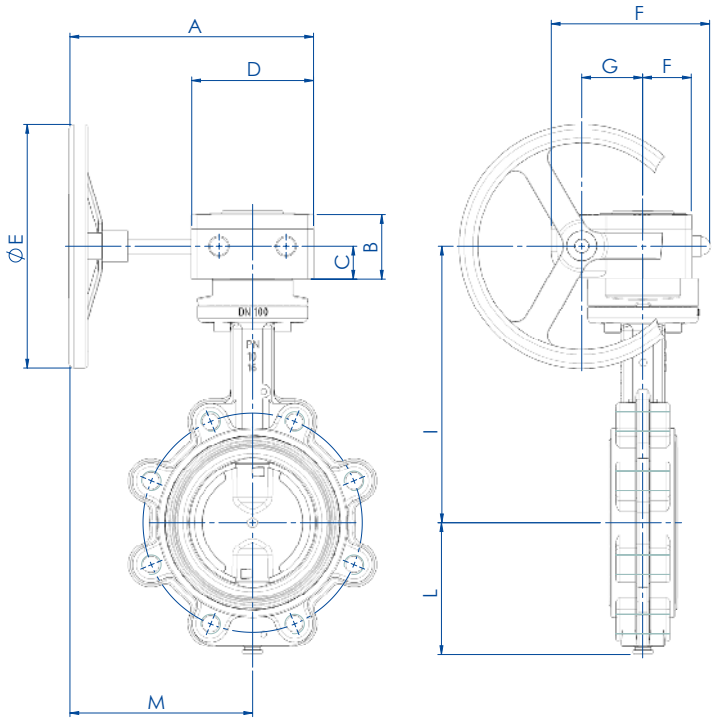
*Per la versione DVGW aggiungere "GI" alla fine del codice **Please add "GI" at the end of the code for the DVGW version*

### CON LEVA - LENTE IN BRONZO ALLUMINIO *WITH LEVER - BRONZE ALUMINIUM DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | LEVA *LEVER* |
|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | |
| | DN 40 | 1" 1/2 | 10-16 | L387XE68 | L387XN68 | KLW37569 |
| | DN 50 | 2" | 10-16 | L387XE69 | L387XN69 | KLW37569 |
| | DN 65 | 2" 1/2 | 10-16 | L387XE70 | L387XN70 | KLW37570 |
| | DN 80 | 3" | 10-16 | L387XE71 | L387XN71 | KLW37570 |
| | DN 100 | 4" | 10-16 | L387XE72 | L387XN72 | KLW37570 |
| | DN 125 | 5" | 10-16 | L387XE73 | L387XN73 | KLW37573 |
| | DN 150 | 6" | 10-16 | L387XE74 | L387XN74 | KLW37573 |
| | DN 200 | 8" | 10 | L387KE75 | L387KN75 | KLW37575 |
| | DN 250 | 10" | 10 | L387KE76 | L387KN76 | KLW37576 |
| | DN 300 | 12" | 10 | L387KE77 | L387KN77 | KLW37576 |
| A richiesta *On request* | DN 200 | 8" | 16 | L387FE75 | L387FN75 | KLW37575 |
| A richiesta *On request* | DN 250 | 10" | 16 | L387FE76 | L387FN76 | KLW37576 |
| A richiesta *On request* | DN 300 | 12" | 16 | L387FE77 | L387FN77 | KLW37576 |

**ATEX**: Per la versione ATEX aggiungere"YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 385-386-387
# CORPO IN GHISA *CAST IRON BODY*
# CON RIDUTTORE *WITH GEAR BOX*




## CARATTERISTICHE DEL RIDUTTORE

Meccanismo di concezione sperimentata, funzionante tramite pignone dentato e vite senza fine.
Un indicatore visivo dà la posizione della valvola.
Carter in lega di alluminio per i riduttori "RF0", in ghisa per i riduttori "RRM...".
Pignone dentato in ghisa.
Vite senza fine in acciaio trattato.
Volantino in acciaio.
Esterno trattato con vernice epossidica.

## *GEAR BOX FEATURES*

*Designed tested mechanism, working through pinion and worm.*
*Visual indicator gives the position of the valve*
*Aluminium alloy carter for the gear box "RF0 " type, cast iron for the gear box "RRM..." Type*
*Cast iron pinion.*
*Worm gear in hardened steel.*
*Steel wheel.*
*Epoxy painted external surface.*

## DIMENSIONI *DIMENSIONS*

| MISURA *SIZE* | | PN | A | B | C | D | ØE | F | G | H | I | L | M | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | | | | | | |
| DN 40 | 1"1/2 | 10-16 | 200 | 49 | 24 | 80 | 140 | 115 | 42 | 35 | 171,2 | 70 | 160 | 3,6 |
| DN 50 | 2" | 10-16 | 200 | 49 | 24 | 80 | 140 | 115 | 42 | 35 | 185,9 | 80 | 160 | 4,5 |
| DN 65 | 2"1/2 | 10-16 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 201,6 | 86 | 150 | 5,9 |
| DN 80 | 3" | 10-16 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 208 | 95,5 | 150 | 7,1 |
| DN 100 | 4" | 10-16 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 227 | 108 | 150 | 8,2 |
| DN 125 | 5" | 10-16 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 239,7 | 124,5 | 150 | 10,2 |
| DN 150 | 6" | 10-16 | 200 | 54 | 27 | 100 | 200 | 130 | 50 | 40 | 252,4 | 137 | 150 | 12 |
| DN 200 | 8" | 10 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 300,7 | 166 | 180 | 21,6 |
| DN 250 | 10" | 10 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 342 | 199 | 180 | 29,8 |
| DN 300 | 12" | 10 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 380 | 234 | 180 | 45,1 |
| DN 200 | 8" | 16 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 300,7 | 166 | 180 | 21,6 |
| DN 250 | 10" | 16 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 342 | 199 | 180 | 29,8 |
| DN 300 | 12" | 16 | 250 | 70,5 | 40,5 | 140 | 300 | 175 | 60 | 60 | 380 | 234 | 180 | 45,1 |

# ITEM 385-386-387
# CORPO IN GHISA *CAST IRON BODY*
# CON RIDUTTORE *WITH GEAR BOX*

## CON RIDUTTORE - LENTE IN GHISA *WITH GEAR BOX - CAST IRON DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | |
| | DN 40 | 1" 1/2 | 10-16 | R385XE68 | R385XN68 | R385XC68 | RF01070900 | KCF052898 |
| | DN 50 | 2" | 10-16 | R385XE69 | R385XN69 | R385XC69 | RF01070900 | KCF052898 |
| | DN 65 | 2" 1/2 | 10-16 | R385XE70 | R385XN70 | R385XC70 | RF02071400 | KCF074035 |
| | DN 80 | 3" | 10-16 | R385XE71 | R385XN71 | R385XC71 | RF02071400 | KCF074035 |
| | DN 100 | 4" | 10-16 | R385XE72 | R385XN72 | R385XC72 | RF02071400 | KCF074035 |
| | DN 125 | 5" | 10-16 | R385XE73 | R385XN73 | R385XC73 | RF02071400 | KCF052898 |
| | DN 150 | 6" | 10-16 | R385XE74 | R385XN74 | R385XC74 | RF02071400 | KCF052898 |
| | DN 200 | 8" | 10 | R385KE75 | R385KN75 | R385KC75 | RF04122200 | KCF124037 |
| | DN 250 | 10" | 10 | R385KE76 | R385KN76 | R385KC76 | RF04122200 | KCF124039 |
| | DN 300 | 12" | 10 | R385KE77 | R385KN77 | R385KC77 | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 200 | 8" | 16 | R385FE75 | R385FN75 | R385FC75 | RF04122200 | KCF124037 |
| A richiesta *On request* | DN 250 | 10" | 16 | R385FE76 | R385FN76 | R385FC76 | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 300 | 12" | 16 | R385FE77 | R385FN77 | R385FC77 | RF04122200 | KCF124038 |

## CON RIDUTTORE - LENTE IN CF8M *WITH GEAR BOX - CF8M DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE a richiesta *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | |
| | DN 40 | 1" 1/2 | 10-16 | R386XE68 | R386XN68 | R386XV68 | R386XT68 | R386XN68GA | R386XB68 | R386XW68NF | RF01070900 | KCF052898 |
| | DN 50 | 2" | 10-16 | R386XE69 | R386XN69 | R386XV69 | R386XT69 | R386XN69GA | R386XB69 | R386XW69NF | RF01070900 | KCF052898 |
| | DN 65 | 2" 1/2 | 10-16 | R386XE70 | R386XN70 | R386XV70 | R386XT70 | R386XN70GA | R386XB70 | R386XW70NF | RF02071400 | KCF074035 |
| | DN 80 | 3" | 10-16 | R386XE71 | R386XN71 | R386XV71 | R386XT71 | R386XN71GA | R386XB71 | R386XW71NF | RF02071400 | KCF074035 |
| | DN 100 | 4" | 10-16 | R386XE72 | R386XN72 | R386XV72 | R386XT72 | R386XN72GA | R386XB72 | R386XW72NF | RF02071400 | KCF074035 |
| | DN 125 | 5" | 10-16 | R386XE73 | R386XN73 | R386XV73 | R386XT73 | R386XN73GA | R386XB73 | R386XW73NF | RF02071400 | KCF052898 |
| | DN 150 | 6" | 10-16 | R386XE74 | R386XN74 | R386XV74 | R386XT74 | R386XN74GA | R386XB74 | R386XW74NF | RF02071400 | KCF052898 |
| | DN 200 | 8" | 10 | R386KE75 | R386KN75 | R386KV75 | R386KT75 | R386KN75GA | R386KB75 | R386KW75NF | RF04122200 | KCF124037 |
| | DN 250 | 10" | 10 | R386KE76 | R386KN76 | R386KV76 | R386KT76 | R386KN76GA | R386KB76 | R386KW76NF | RF04122200 | KCF124039 |
| | DN 300 | 12" | 10 | R386KE77 | R386KN77 | R376KV77 | R386KT77 | R386KN77GA | R386KB77 | R386KW77NF | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 200 | 8" | 16 | R386FE75 | R386FN75 | R386FV75 | R386FT75 | R386FN75GA | R386FB75 | R386FW75NF | RF04122200 | KCF124037 |
| A richiesta *On request* | DN 250 | 10" | 16 | R386FE76 | R386FN76 | R386FV76 | R386FT76 | R386FN76GA | R386FB76 | R386FW76NF | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 300 | 12" | 16 | R386FE77 | R386FN77 | R386FV77 | R386FT77 | R386FN77GA | R386FB77 | R386FW77NF | RF04122200 | KCF124038 |

## CON RIDUTTORE - LENTE IN BRONZO ALLUMINIO *WITH GEAR BOX - BRONZE ALUMINIUM DISC*

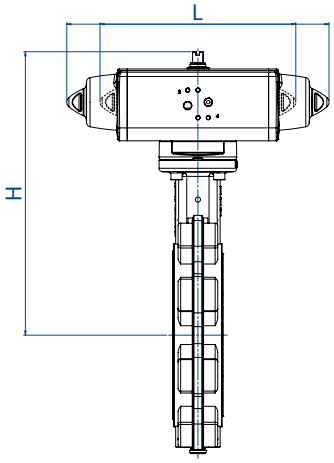
| | MISURA *SIZE* | | PN | TENUTA *LINER* | | RIDUTTORE *GEAR-BOX* | KIT VALVOLA-RIDUTTORE *KIT VALVE-GEAR BOX* |
|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | | |
| | DN 40 | 1" 1/2 | 10-16 | R387XE68 | R387XN68 | RF01070900 | KCF052898 |
| | DN 50 | 2" | 10-16 | R387XE69 | R387XN69 | RF01070900 | KCF052898 |
| | DN 65 | 2" 1/2 | 10-16 | R387XE70 | R387XN70 | RF02071400 | KCF074035 |
| | DN 80 | 3" | 10-16 | R387XE71 | R387XN71 | RF02071400 | KCF074035 |
| | DN 100 | 4" | 10-16 | R387XE72 | R387XN72 | RF02071400 | KCF074035 |
| | DN 125 | 5" | 10-16 | R387XE73 | R387XN73 | RF02071400 | KCF052898 |
| | DN 150 | 6" | 10-16 | R387XE74 | R387XN74 | RF02071400 | KCF052898 |
| | DN 200 | 8" | 10 | R387KE75 | R387KN75 | RF04122200 | KCF124037 |
| | DN 250 | 10" | 10 | R387KE76 | R387KN76 | RF04122200 | KCF124039 |
| | DN 300 | 12" | 10 | R387KE77 | R387KN77 | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 200 | 8" | 16 | R387FE75 | R387FN75 | RF04122200 | KCF124037 |
| A richiesta *On request* | DN 250 | 10" | 16 | R387FE76 | R387FN76 | RF04122200 | KCF124038 |
| A richiesta *On request* | DN 300 | 12" | 16 | R387FE77 | R387FN77 | RF04122200 | KCF124038 |

**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 385
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN GHISA
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - CAST IRON DISC*

| MISURA *SIZE* | | PN | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1" 1/2 | 10-16 | DG385XE68 | DG385XN68 | DG385XC68 | DAN0030411S | 174,2 | 226,4 | 3,3 |
| DN 50 | 2" | 10-16 | DG385XE69 | DG385XN69 | DG385XC69 | DAN0030411S | 174,2 | 241,4 | 4,2 |
| DN 65 | 2" 1/2 | 10-16 | DG385XE70 | DG385XN70 | DG385XC70 | DAN0045412S | 188,5 | 258,7 | 5,0 |
| DN 80 | 3" | 10-16 | DG385XE71 | DG385XN71 | DG385XC71 | DAN0045412S | 188,5 | 265,5 | 6,2 |
| DN 100 | 4" | 10-16 | DG385XE72 | DG385XN72 | DG385XC72 | DAN0060412S | 198 | 290,6 | 7,6 |
| DN 125 | 5" | 10-16 | DG385XE73 | DG385XN73 | DG385XC73 | DAN0106411S | 237 | 316 | 10,6 |
| DN 150 | 6" | 10-16 | DG385XE74 | DG385XN74 | DG385XC74 | DAN0120411S | 244,1 | 332,2 | 12,4 |
| DN 200 | 8" | 10 | DG385KE75 | DG385KN75 | DG385KC75 | DAN0180411S | 289,9 | 397,7 | 21,5 |
| DN 250 | 10" | 10 | DG385KE76 | DG385KN76 | DG385KC76 | DAN0240411S | 313,6 | 442,3 | 30,5 |
| DN 300 | 12" | 10 | DG385KE77 | DG385KN77 | DG385KC77 | DAN0360411S | 339,3 | 487,2 | 46,9 |
| DN 200 | 8" | 16 | DG385FE75 | DG385FN75 | DG385FC75 | DAN0240411S | 313,6 | 401,3 | 22,3 |
| DN 250 | 10" | 16 | DG385FE76 | DG385FN76 | DG385FC76 | DAN0360411S | 339,3 | 449,2 | 31,6 |
| DN 300 | 12" | 16 | DG385FE77 | DG385FN77 | DG385FC77 | DAN0480411S | 387,6 | 504,1 | 50,0 |

A richiesta *On request*

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN GHISA
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - CAST IRON DISC*

| MISURA *SIZE* | | PN | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| DN 40 | 1" 1/2 | 10-16 | SG385XE68 | SG385XN68 | SG385XC68 | SRN0030402S | 258,8 | 237,6 | 4,3 |
| DN 50 | 2" | 10-16 | SG385XE69 | SG385XN69 | SG385XC69 | SRN0030402S | 258,8 | 252,6 | 5,2 |
| DN 65 | 2" 1/2 | 10-16 | SG385XE70 | SG385XN70 | SG385XC70 | SRN0053401S | 304,2 | 277,5 | 6,6 |
| DN 80 | 3" | 10-16 | SG385XE71 | SG385XN71 | SG385XC71 | SRN0053401S | 304,2 | 284,5 | 7,8 |
| DN 100 | 4" | 10-16 | SG385XE72 | SG385XN72 | SG385XC72 | SRN0060401S | 338,5 | 307,2 | 8,6 |
| DN 125 | 5" | 10-16 | SG385XE73 | SG385XN73 | SG385XC73 | SRN0090401S | 393,7 | 350,2 | 13,2 |
| DN 150 | 6" | 10-16 | SG385XE74 | SG385XN74 | SG385XC74 | SRN0120401S | 409,6 | 366,3 | 15,5 |
| DN 200 | 8" | 10 | SG385KE75 | SG385KN75 | SG385KC75 | SRN0180401S | 474 | 408,2 | 25,8 |
| DN 250 | 10" | 10 | SG385KE76 | SG385KN76 | SG385KC76 | SRN0240401S | 520,5 | 466,2 | 36,9 |
| DN 300 | 12" | 10 | SG385KE77 | SG385KN77 | SG385KC77 | SRN0360401S | 613 | 517,2 | 56,9 |
| DN 200 | 8" | 16 | SG385FE75 | SG385FN75 | SG385FC75 | SRN0240401S | 520,4 | 425,2 | 28,7 |
| DN 250 | 10" | 16 | SG385FE76 | SG385FN76 | SG385FC76 | SRN0360401S | 613 | 479,2 | 41,6 |
| DN 300 | 12" | 16 | SG385FE77 | SG385FN77 | SG385FC77 | SRN0480401S | 648,2 | 537,2 | 63,1 |

A richiesta *On request*

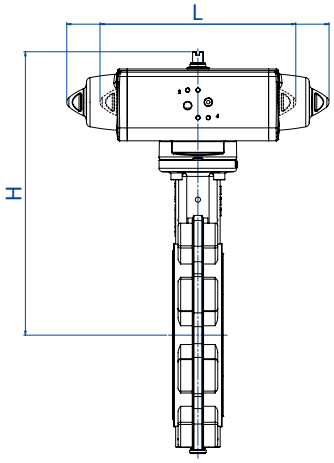
Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice.
***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 386
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN CF8M
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - CF8M DISC*

| MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | | | |
| DN 40 | 1" 1/2 | 10-16 | DG386XE68 | DG386XN68 | DG386XV68 | DG386XT68 | DG386XN68GA | DG386XB68 | DG386XW68NF | DAN0030411S | 174,2 | 226,4 | 3,3 |
| DN 50 | 2" | 10-16 | DG386XE69 | DG386XN69 | DG386XV69 | DG386XT69 | DG386XN69GA | DG386XB69 | DG386XW69NF | DAN0030411S | 174,2 | 241,4 | 4,2 |
| DN 65 | 2" 1/2 | 10-16 | DG386XE70 | DG386XN70 | DG386XV70 | DG386XT70 | DG386XN70GA | DG386XB70 | DG386XW70NF | DAN0045412S | 188,5 | 258,7 | 5,0 |
| DN 80 | 3" | 10-16 | DG386XE71 | DG386XN71 | DG386XV71 | DG386XT71 | DG386XN71GA | DG386XB71 | DG386XW71NF | DAN0045412S | 188,5 | 265,5 | 6,2 |
| DN 100 | 4" | 10-16 | DG386XE72 | DG386XN72 | DG386XV72 | DG386XT72 | DG386XN72GA | DG386XB72 | DG386XW72NF | DAN0060412S | 198 | 290,6 | 7,6 |
| DN 125 | 5" | 10-16 | DG386XE73 | DG386XN73 | DG386XV73 | DG386XT73 | DG386XN73GA | DG386XB73 | DG386XW73NF | DAN0106411S | 237 | 316 | 10,6 |
| DN 150 | 6" | 10-16 | DG386XE74 | DG386XN74 | DG386XV74 | DG386XT74 | DG386XN74GA | DG386XB74 | DG386XW74NF | DAN0120411S | 244,1 | 332,2 | 12,4 |
| DN 200 | 8" | 10 | DG386KE75 | DG386KN75 | DG386KV75 | DG386KT75* | DG386KN75GA | DG386KB75 | DG386KW75NF | DAN0180411S | 289,9 | 397,7 | 21,5 |
| DN 250 | 10" | 10 | DG386KE76 | DG386KN76 | DG386KV76 | DG386KT76* | DG386KN76GA | DG386KB76 | DG386KW76NF | DAN0240411S | 313,6 | 442,3 | 30,5 |
| DN 300 | 12" | 10 | DG386KE77 | DG386KN77 | DG386KV77 | DG386KT77* | DG386KN77GA | DG386KB77 | DG386KW77NF | DAN0360411S | 339,3 | 487,2 | 46,9 |
| DN 200 | 8" | 16 | DG386FE75 | DG386FN75 | DG386FV75 | DG386FT75 | DG386FN75GA | DG386FB75 | DG386FW75NF | DAN0240411S | 313,6 | 401,3 | 22,3 |
| DN 250 | 10" | 16 | DG386FE76 | DG386FN76 | DG386FV76 | DG386FT76 | DG386FN76GA | DG386FB76 | DG386FW76NF | DAN0360411S | 339,3 | 449,2 | 31,6 |
| DN 300 | 12" | 16 | DG386FE77 | DG386FN77 | DG386FV77 | DG386FT77 | DG386FN77GA | DG386FB77 | DG386FW77NF | DAN0480411S | 387,6 | 504,1 | 50,0 |

*A richiesta On request*

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN CF8M
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - CF8M DISC*

| MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | | | |
| DN 40 | 1" 1/2 | 10-16 | SG386XE68 | SG386XN68 | SG386XV68 | SG386XT68 | SG386XN68GA | SG386XB68 | SG386XW68NF | SRN0030402S | 258,8 | 237,6 | 4,3 |
| DN 50 | 2" | 10-16 | SG386XE69 | SG386XN69 | SG386XV69 | SG386XT69 | SG386XN69GA | SG386XB69 | SG386XW69NF | SRN0030402S | 258,8 | 252,6 | 5,2 |
| DN 65 | 2" 1/2 | 10-16 | SG386XE70 | SG386XN70 | SG386XV70 | SG386XT70 | SG386XN70GA | SG386XB70 | SG386XW70NF | SRN0053401S | 304,2 | 277,5 | 6,6 |
| DN 80 | 3" | 10-16 | SG386XE71 | SG386XN71 | SG386XV71 | SG386XT71 | SG386XN71GA | SG386XB71 | SG386XW71NF | SRN0053401S | 304,2 | 284,5 | 7,8 |
| DN 100 | 4" | 10-16 | SG386XE72 | SG386XN72 | SG386XV72 | SG386XT72 | SG386XN72GA | SG386XB72 | SG386XW72NF | SRN0060401S | 338,5 | 307,2 | 8,6 |
| DN 125 | 5" | 10-16 | SG386XE73 | SG386XN73 | SG386XV73 | SG386XT73 | SG386XN73GA | SG386XB73 | SG386XW73NF | SRN0090401S | 393,7 | 350,2 | 13,2 |
| DN 150 | 6" | 10-16 | SG386XE74 | SG386XN74 | SG386XV74 | SG386XT74 | SG386XN74GA | SG386XB74 | SG386XW74NF | SRN0120401S | 409,6 | 366,3 | 15,5 |
| DN 200 | 8" | 10 | SG386KE75 | SG386KN75 | SG386KV75 | SG386KT75* | SG386KN75GA | SG386KB75 | SG386KW75NF | SRN0180401S | 474 | 408,2 | 25,8 |
| DN 250 | 10" | 10 | SG386KE76 | SG386KN76 | SG386KV76 | SG386KT76* | SG386KN76GA | SG386KB76 | SG386KW76NF | SRN0240401S | 520,5 | 466,2 | 36,9 |
| DN 300 | 12" | 10 | SG386KE77 | SG386KN77 | SG386KV77 | SG386KT77* | SG386KN77GA | SG386KB77 | SG386KW77NF | SRN0360401S | 613 | 517,2 | 56,9 |
| DN 200 | 8" | 16 | SG386FE75 | SG386FN75 | SG386FV75 | SG386FT75 | SG386FN75GA | SG386FB75 | SG386FW75NF | SRN0240401S | 520,4 | 425,2 | 28,7 |
| DN 250 | 10" | 16 | SG386FE76 | SG386FN76 | SG386FV76 | SG386FT76 | SG386FN76GA | SG386FB76 | SG386FW76NF | SRN0360401S | 613 | 479,2 | 41,6 |
| DN 300 | 12" | 16 | SG386FE77 | SG386FN77 | SG386FV77 | SG386FT77 | SG386FN77GA | SG386FB77 | SG386FW77NF | SRN0480401S | 648,2 | 537,2 | 63,1 |

*A richiesta On request*

(*) : Gli attuatori per queste valvole sono i medesimi delle valvole versione PN16. *(*) The actuators for these valves are the same as the PN16 version.*

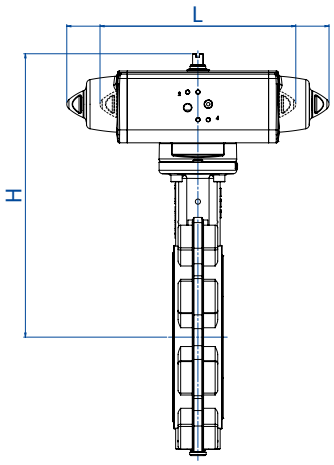
Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice. ***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 387
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE PNEUMATICO *WITH PNEUMATIC ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO - LENTE IN BRONZO ALLUMINIO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR - BRONZE ALUMINIUM DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | | | | |
| | DN 40 | 1" 1/2 | 10-16 | DG387XE68 | DG387XN68 | DAN0030411S | 174,2 | 226,4 | 3,3 |
| | DN 50 | 2" | 10-16 | DG387XE69 | DG387XN69 | DAN0030411S | 174,2 | 241,4 | 4,2 |
| | DN 65 | 2" 1/2 | 10-16 | DG387XE70 | DG387XN70 | DAN0045412S | 188,5 | 258,7 | 5,0 |
| | DN 80 | 3" | 10-16 | DG387XE71 | DG387XN71 | DAN0045412S | 188,5 | 265,5 | 6,2 |
| | DN 100 | 4" | 10-16 | DG387XE72 | DG387XN72 | DAN0060412S | 198 | 290,6 | 7,6 |
| | DN 125 | 5" | 10-16 | DG387XE73 | DG387XN73 | DAN0106411S | 237 | 316 | 10,6 |
| | DN 150 | 6" | 10-16 | DG387XE74 | DG387XN74 | DAN0120411S | 244,1 | 332,2 | 12,4 |
| | DN 200 | 8" | 10 | DG387KE75 | DG387KN75 | DAN0180411S | 289,9 | 397,7 | 21,5 |
| | DN 250 | 10" | 10 | DG387KE76 | DG387KN76 | DAN0240411S | 313,6 | 442,3 | 30,5 |
| | DN 300 | 12" | 10 | DG387KE77 | DG387KN77 | DAN0360411S | 339,3 | 487,2 | 46,9 |
| A richiesta *On request* | DN 200 | 8" | 16 | DG387FE75 | DG387FN75 | DAN0240411S | 313,6 | 401,3 | 22,3 |
| A richiesta *On request* | DN 250 | 10" | 16 | DG387FE76 | DG387FN76 | DAN0360411S | 339,3 | 449,2 | 31,6 |
| A richiesta *On request* | DN 300 | 12" | 16 | DG387FE77 | DG387FN77 | DAN0480411S | 387,6 | 504,1 | 50,0 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO - LENTE IN BRONZO ALLUMINIO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR - BRONZE ALUMINIUM DISC*

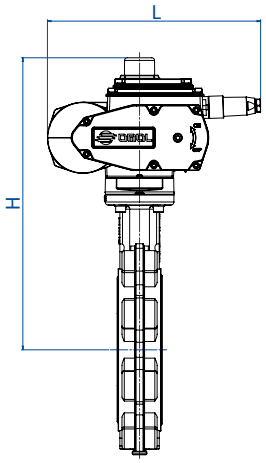
| | MISURA *SIZE* | | PN | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | | | | |
| | DN 40 | 1" 1/2 | 10-16 | SG387XE68 | SG387XN68 | SRN0030402S | 258,8 | 237,6 | 4,3 |
| | DN 50 | 2" | 10-16 | SG387XE69 | SG387XN69 | SRN0030402S | 258,8 | 252,6 | 5,2 |
| | DN 65 | 2" 1/2 | 10-16 | SG387XE70 | SG387XN70 | SRN0053401S | 304,2 | 277,5 | 6,6 |
| | DN 80 | 3" | 10-16 | SG387XE71 | SG387XN71 | SRN0053401S | 304,2 | 284,5 | 7,8 |
| | DN 100 | 4" | 10-16 | SG387XE72 | SG387XN72 | SRN0060401S | 338,5 | 307,2 | 8,6 |
| | DN 125 | 5" | 10-16 | SG387XE73 | SG387XN73 | SRN0090401S | 393,7 | 350,2 | 13,2 |
| | DN 150 | 6" | 10-16 | SG387XE74 | SG387XN74 | SRN0120401S | 409,6 | 366,3 | 15,5 |
| | DN 200 | 8" | 10 | SG387KE75 | SG387KN75 | SRN0180401S | 474 | 408,2 | 25,8 |
| | DN 250 | 10" | 10 | SG387KE76 | SG387KN76 | SRN0240401S | 520,5 | 466,2 | 36,9 |
| | DN 300 | 12" | 10 | SG387KE77 | SG387KN77 | SRN0360401S | 613 | 517,2 | 56,9 |
| A richiesta *On request* | DN 200 | 8" | 16 | SG387FE75 | SG387FN75 | SRN0240401S | 520,4 | 425,2 | 28,7 |
| A richiesta *On request* | DN 250 | 10" | 16 | SG387FE76 | SG387FN76 | SRN0360401S | 613 | 479,2 | 41,6 |
| A richiesta *On request* | DN 300 | 12" | 16 | SG387FE77 | SG387FN77 | SRN0480401S | 648,2 | 537,2 | 63,1 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg.
*Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

**ATEX**: Per la versione ATEX aggiungere "YX" alla fine del codice.
***ATEX**: Please add "YX" at the end of the code for the ATEX version.*

# ITEM 385
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN GHISA
### *WITH ON-OFF ELECTRIC ACTUATOR - CAST IRON DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| | DN 40 | 1" 1/2 | 10-16 | C385EA5E68 | C385NA5E68 | C385CA5E68 | EA0035A5C000 | 250 | 284 | 6 |
| | DN 50 | 2" | 10-16 | C385EA5E69 | C385NA5E69 | C385CA5E69 | EA0035A5C000 | 250 | 299 | 6,9 |
| | DN 65 | 2" 1/2 | 10-16 | C385EA5E70 | C385NA5E70 | C385CA5E70 | EA0035A5C000 | 250 | 311 | 7,6 |
| | DN 80 | 3" | 10-16 | C385EA5E71 | C385NA5E71 | C385CA5E71 | EA0035A5C000 | 250 | 318 | 8,8 |
| | DN 100 | 4" | 10-16 | C385EA5G72 | C385NA5G72 | C385CA5G72 | EA0070A5C000 | 250 | 337 | 10,2 |
| | DN 125 | 5" | 10-16 | C385EA5I73 | C385NA5I73 | C385CA5I73 | EA0130A5C000 | 280 | 370 | 12,2 |
| | DN 150 | 6" | 10-16 | C385EA5I74 | C385NA5I74 | C385CA5I74 | EA0130A5C000 | 280 | 383 | 18 |
| | DN 200 | 8" | 10 | C385EKA5K75 | C385NKA5K75 | C385CKA5K75 | EA0240A5C000 | 280 | 418 | 24,4 |
| | DN 250 | 10" | 10 | C385EKA5K76 | C385NKA5K76 | C385CKA5K76 | EA0240A5C000 | 280 | 457 | 30,9 |
| | DN 300 | 12" | 10 | E385EK16N77 | E385NK16N77 | E385CK16N77 | AE160040 | 256 | 524 | 42 |
| A richiesta *On request* | DN 200 | 8" | 16 | C385EFA5K75 | C385NFA5K75 | C385CFA5K75 | EA0240A5C000 | 280 | 418 | 24,4 |
| A richiesta *On request* | DN 250 | 10" | 16 | E385EF16N76 | E385NF16N76 | E385CF16N76 | AE160040 | 256 | 486 | 33,2 |
| A richiesta *On request* | DN 300 | 12" | 16 | E385EF16R77 | E385NF16R77 | E385CF16R77 | AE160060 | 381 | 573 | 60,9 |

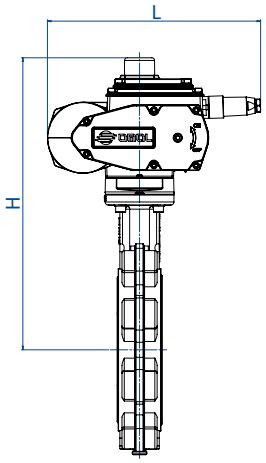
### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN GHISA
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - CAST IRON DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | NBR CARBOX | | | | |
| | DN 40 | 1" 1/2 | 10-16 | M385E16F68 | M385N16F68 | M385C16F68 | AM160005 | 208 | 311 | 6,6 |
| | DN 50 | 2" | 10-16 | M385E16F69 | M385N16F69 | M385C16F69 | AM160005 | 208 | 326 | 7,5 |
| | DN 65 | 2" 1/2 | 10-16 | M385E16F70 | M385N16F70 | M385C16F70 | AM160005 | 208 | 338 | 8,3 |
| | DN 80 | 3" | 10-16 | M385E16F71 | M385N16F71 | M385C16F71 | AM160005 | 208 | 345 | 9,5 |
| | DN 100 | 4" | 10-16 | M385E16H72 | M385N16H72 | M385C16H72 | AM160010 | 208 | 364 | 10,8 |
| | DN 125 | 5" | 10-16 | M385E16H73 | M385N16H73 | M385C16H73 | AM160010 | 208 | 376 | 12,9 |
| | DN 150 | 6" | 10-16 | M385E16L74 | M385N16L74 | M385C16L74 | AM160020 | 257 | 410 | 18,6 |
| | DN 200 | 8" | 10 | M385EK16L75 | M385NK16L75 | M385CK16L75 | AM160020 | 257 | 445 | 25 |
| | DN 250 | 10" | 10 | M385EK16N76 | M385NK16N76 | M385CK16N76 | AM160040 | 257 | 486 | 32 |
| | DN 300 | 12" | 10 | M385EK16N77 | M385NK16N77 | M385CK16N77 | AM160040 | 257 | 524 | 41,6 |
| A richiesta *On request* | DN 200 | 8" | 16 | M385EF16L75 | M385NF16L75 | M385CF16L75 | AM160020 | 257 | 445 | 25 |
| A richiesta *On request* | DN 250 | 10" | 16 | M385EF16N76 | M385NF16N76 | M385CF16N76 | AM160040 | 257 | 486 | 32 |
| A richiesta *On request* | DN 300 | 12" | 16 | M385EF16P77 | M385NF16P77 | M385CF16P77 | AM160050 | 381 | 573 | 63,2 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 386
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN CF8M
### *WITH ON-OFF ELECTRIC ACTUATOR - CF8M DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | | | |
| | DN 40 | 1" 1/2 | 10-16 | C386EA5E68 | C386NA5E68 | C386VA5E68 | C386TA5E68 | C386NA5E68GA | C386BA5E68 | C386WA5E68NF | EA0035A5C000 | 250 | 284 | 6 |
| | DN 50 | 2" | 10-16 | C386EA5E69 | C386NA5E69 | C386VA5E69 | C386TA5E69 | C386NA5E69GA | C386BA5E69 | C386WA5E69NF | EA0035A5C000 | 250 | 299 | 6,9 |
| | DN 65 | 2" 1/2 | 10-16 | C386EA5E70 | C386NA5E70 | C386VA5E70 | C386TA5E70 | C386NA5E70GA | C386BA5E70 | C386WA5E70NF | EA0035A5C000 | 250 | 311 | 7,6 |
| | DN 80 | 3" | 10-16 | C386EA5E71 | C386NA5E71 | C386VA5E71 | C386TA5E71 | C386NA5E71GA | C386BA5E71 | C386WA5E71NF | EA0035A5C000 | 250 | 318 | 8,8 |
| | DN 100 | 4" | 10-16 | C386EA5G72 | C386NA5G72 | C386VA5G72 | C386TA5G72 | C386NA5G72GA | C386BA5G72 | C386WA5G72NF | EA0070A5C000 | 250 | 337 | 10,2 |
| | DN 125 | 5" | 10-16 | C386EA5I73 | C386NA5I73 | C386VA5I73 | C386TA5I73 | C386NA5I73GA | C386BA5I73 | C386WA5I73NF | EA0130A5C000 | 280 | 370 | 12,2 |
| | DN 150 | 6" | 10-16 | C386EA5I74 | C386NA5I74 | C386VA5I74 | C386TA5I74 | C386NA5I74GA | C386BA5I74 | C386WA5I74NF | EA0130A5C000 | 280 | 383 | 18 |
| | DN 200 | 8" | 10 | C386EKA5K75 | C386NKA5K75 | C386VKA5K75 | C386TKA5K75 | C386NKA5K75GA | C386BKA5K75 | C386WKA5K75NF | EA0240A5C000 | 280 | 418 | 24,4 |
| | DN 250 | 10" | 10 | C386EKA5K76 | C386NKA5K76 | C386VKA5K76 | E386TK16N76* | C386NKA5K76GA | C386BKA5K76 | C386WKA5K76NF | EA0240A5C000 | 280 | 457 | 30,9 |
| | DN 300 | 12" | 10 | E386EK16N77 | E386NK16N77 | E386VK16N77 | E386TK16R77* | E386NK16N77GA | E386BK16N77 | E386WK16N77NF | AE160040 | 256 | 524 | 42 |
| A richiesta *On request* | DN 200 | 8" | 16 | C386EFA5K75 | C386NFA5K75 | C386VFA5K75 | C386TFA5K75 | C386NFA5K75GA | C386BFA5K75 | C386WFA5K75NF | EA0240A5C000 | 280 | 418 | 24,4 |
| A richiesta *On request* | DN 250 | 10" | 16 | E386EF16N76 | E386NF16N76 | E386VF16N76 | E386TF16N76 | E386NF16N76GA | E386BF16N76 | E386WF16N76NF | AE160040 | 256 | 486 | 33,2 |
| A richiesta *On request* | DN 300 | 12" | 16 | E386EF16R77 | E386NF16R77 | E386VF16R77 | E386TF16R77 | E386NF16R77GA | E386BF16R77 | E386WF16R77NF | AE160060 | 381 | 573 | 60,9 |

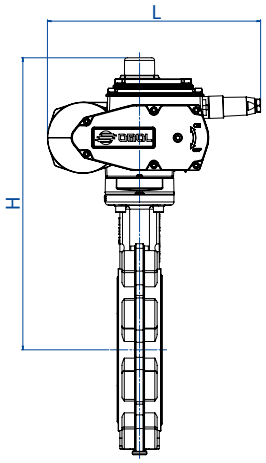
### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN CF8M
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - CF8M DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | | | | | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | FKM | PTFE *on request* | DVGW | NBR BIANCO *WHITE NBR* | NBR PER ACQUA *NBR WATER* | | | | |
| | DN 40 | 1" 1/2 | 10-16 | M386E16F68 | M386N16F68 | M386V16F68 | M386T16F68 | M386N16F68GA | M386B16F68 | M386W16F68NF | AM160005 | 208 | 311 | 6,6 |
| | DN 50 | 2" | 10-16 | M386E16F69 | M386N16F69 | M386V16F69 | M386T16F69 | M386N16F69GA | M386B16F69 | M386W16F69NF | AM160005 | 208 | 326 | 7,5 |
| | DN 65 | 2" 1/2 | 10-16 | M386E16F70 | M386N16F70 | M386V16F70 | M386T16F70 | M386N16F70GA | M386B16F70 | M386W16F70NF | AM160005 | 208 | 338 | 8,3 |
| | DN 80 | 3" | 10-16 | M386E16F71 | M386N16F71 | M386V16F71 | M386T16F71 | M386N16F71GA | M386B16F71 | M386W16F71NF | AM160005 | 208 | 345 | 9,5 |
| | DN 100 | 4" | 10-16 | M386E16H72 | M386N16H72 | M386V16H72 | M386T16H72 | M386N16H72GA | M386B16H72 | M386W16H72NF | AM160010 | 208 | 364 | 10,8 |
| | DN 125 | 5" | 10-16 | M386E16H73 | M386N16H73 | M386V16H73 | M386T16H73 | M386N16H73GA | M386B16H73 | M386W16H73NF | AM160010 | 208 | 376 | 12,9 |
| | DN 150 | 6" | 10-16 | M386E16L74 | M386N16L74 | M386V16L74 | M386T16L74 | M386N16L74GA | M386B16L74 | M386W16L74NF | AM160020 | 257 | 410 | 18,6 |
| | DN 200 | 8" | 10 | M386EK16L75 | M386NK16L75 | M386VK16L75 | M386TK16L75 | M386NK16L75GA | M386BK16L75 | M386WK16L75NF | AM160020 | 257 | 445 | 25 |
| | DN 250 | 10" | 10 | M386EK16N76 | M386NK16N76 | M386VK16N76 | M386TK16N76 | M386NK16N76GA | M386BK16N76 | M386WK16N76NF | AM160040 | 257 | 486 | 32 |
| | DN 300 | 12" | 10 | M386EK16N77 | M386NK16N77 | M386VK16N77 | M386TK16P77* | M386NK16N77GA | M386BK16N77 | M386WK16N77NF | AM160040 | 257 | 524 | 41,6 |
| A richiesta *On request* | DN 200 | 8" | 16 | M386EF16L75 | M386NF16L75 | M386VF16L75 | M386TF16L75 | M386NF16L75GA | M386BF16L75 | M386WF16L75NF | AM160020 | 257 | 445 | 25 |
| A richiesta *On request* | DN 250 | 10" | 16 | M386EF16N76 | M386NF16N76 | M386VF16N76 | M386TF16N76 | M386NF16N76GA | M386BF16N76 | M386WF16N76NF | AM160040 | 257 | 486 | 32 |
| A richiesta *On request* | DN 300 | 12" | 16 | M386EF16P77 | M386NF16P77 | M386VF16P77 | M386TF16P77 | M386NF16P77GA | M386BF16P77 | M386WF16P77NF | AM160050 | 381 | 573 | 63,2 |

(*) : Gli attuatori per queste valvole sono i medesimi delle valvole versione PN16. *(*) The actuators for these valves are the same as the PN16 version.*
Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 387
## CORPO IN GHISA *CAST IRON BODY*
## CON ATTUATORE ELETTRICO *WITH ELECTRIC ACTUATOR*






### CON ATTUATORE ELETTRICO ON-OFF - LENTE IN BRONZO ALLUMINIO
### *WITH ON-OFF ELECTRIC ACTUATOR - BRONZE ALUMINIUM DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | | | | |
| | DN 40 | 1" 1/2 | 10-16 | C387EA5E68 | C387NA5E68 | EA0035A5C000 | 250 | 284 | 6 |
| | DN 50 | 2" | 10-16 | C387EA5E69 | C387NA5E69 | EA0035A5C000 | 250 | 299 | 6,9 |
| | DN 65 | 2" 1/2 | 10-16 | C387EA5E70 | C387NA5E70 | EA0035A5C000 | 250 | 311 | 7,6 |
| | DN 80 | 3" | 10-16 | C387EA5E71 | C387NA5E71 | EA0035A5C000 | 250 | 318 | 8,8 |
| | DN 100 | 4" | 10-16 | C387EA5G72 | C387NA5G72 | EA0070A5C000 | 250 | 337 | 10,2 |
| | DN 125 | 5" | 10-16 | C387EA5I73 | C387NA5I73 | EA0130A5C000 | 280 | 370 | 12,2 |
| | DN 150 | 6" | 10-16 | C387EA5I74 | C387NA5I74 | EA0130A5C000 | 280 | 383 | 18 |
| | DN 200 | 8" | 10 | C387EKA5K75 | C387NKA5K75 | EA0240A5C000 | 280 | 418 | 24,4 |
| | DN 250 | 10" | 10 | C387EKA5K76 | C387NKA5K76 | EA0240A5C000 | 280 | 457 | 30,9 |
| | DN 300 | 12" | 10 | E387EK16N77 | E387NK16N77 | AE160040 | 256 | 524 | 42 |
| A richiesta *On request* | DN 200 | 8" | 16 | C387EFA5K75 | C387NFA5K75 | EA0240A5C000 | 280 | 418 | 24,4 |
| A richiesta *On request* | DN 250 | 10" | 16 | E387EF16N76 | E387NF16N76 | AE160040 | 256 | 486 | 33,2 |
| A richiesta *On request* | DN 300 | 12" | 16 | E387EF16R77 | E387NF16R77 | AE160060 | 381 | 573 | 60,9 |

### CON ATTUATORE ELETTRICO MODULANTE - LENTE IN BRONZO ALLUMINIO
### *WITH ROTARY MODULAR TYPE ELECTRIC ACTUATOR - BRONZE ALUMINIUM DISC*

| | MISURA *SIZE* | | PN | TENUTA *LINER* | | ATTUATORE *ACTUATOR* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| | DN [mm] | [inch] | | EPDM | NBR | | | | |
| | DN 40 | 1" 1/2 | 10-16 | M387E16F68 | M387N16F68 | AM160005 | 208 | 311 | 6,6 |
| | DN 50 | 2" | 10-16 | M387E16F69 | M387N16F69 | AM160005 | 208 | 326 | 7,5 |
| | DN 65 | 2" 1/2 | 10-16 | M387E16F70 | M387N16F70 | AM160005 | 208 | 338 | 8,3 |
| | DN 80 | 3" | 10-16 | M387E16F71 | M387N16F71 | AM160005 | 208 | 345 | 9,5 |
| | DN 100 | 4" | 10-16 | M387E16H72 | M387N16H72 | AM160010 | 208 | 364 | 10,8 |
| | DN 125 | 5" | 10-16 | M387E16H73 | M387N16H73 | AM160010 | 208 | 376 | 12,9 |
| | DN 150 | 6" | 10-16 | M387E16L74 | M387N16L74 | AM160020 | 257 | 410 | 18,6 |
| | DN 200 | 8" | 10 | M387EK16L75 | M387NK16L75 | AM160020 | 257 | 445 | 25 |
| | DN 250 | 10" | 10 | M387EK16N76 | M387NK16N76 | AM160040 | 257 | 486 | 32 |
| | DN 300 | 12" | 10 | M387EK16N77 | M387NK16N77 | AM160040 | 257 | 524 | 41,6 |
| A richiesta *On request* | DN 200 | 8" | 16 | M387EF16L75 | M387NF16L75 | AM160020 | 257 | 445 | 25 |
| A richiesta *On request* | DN 250 | 10" | 16 | M387EF16N76 | M387NF16N76 | AM160040 | 257 | 486 | 32 |
| A richiesta *On request* | DN 300 | 12" | 16 | M387EF16P77 | M387NF16P77 | AM160050 | 381 | 573 | 63,2 |

Codici con attuatore elettrico 230 Vac. *Items with electric actuator 230 Vac.*

# ITEM 385-386-387
# KIT GUARNIZIONI *SEALS KIT*

| KIT GUARNIZIONI LENTE IN GHISA - ACCIAIO INOX - BRONZO ALLUMINIO<br>*SEALS KIT CAST IRON - STAINLESS STEEL AND BRONZE ALUMINIUM DISC* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **PN** | **TENUTA** *LINER* | | | | | |
| **DN [mm]** | **[inch]** | | **EPDM** | **NBR** | **FKM** | **NBR BIANCO** *WHITE NBR* | **NBR CARBOX** | **DVGW** |
| DN 40 | 1" 1/2 | 10-16 | KGFE0068 | KGFN0068 | KGFV0068 | KGFA0068 | KGFC0068 | KGFG0068 |
| DN 50 | 2" | 10-16 | KGFE0069 | KGFN0069 | KGFV0069 | KGFA0069 | KGFC0069 | KGFG0069 |
| DN 65 | 2" 1/2 | 10-16 | KGFE0070 | KGFN0070 | KGFV0070 | KGFA0070 | KGFC0070 | KGFG0070 |
| DN 80 | 3" | 10-16 | KGFE0071 | KGFN0071 | KGFV0071 | KGFA0071 | KGFC0071 | KGFG0071 |
| DN 100 | 4" | 10-16 | KGFE0072 | KGFN0072 | KGFV0072 | KGFA0072 | KGFC0072 | KGFG0072 |
| DN 125 | 5" | 10-16 | KGFE0073 | KGFN0073 | KGFV0073 | KGFA0073 | KGFC0073 | KGFG0073 |
| DN 150 | 6" | 10-16 | KGFE0074 | KGFN0074 | KGFV0074 | KGFA0074 | KGFC0074 | KGFG0074 |
| DN 200 | 8" | 10 | KGFE0075 | KGFN0075 | KGFV0075 | KGFA0075 | KGFC0075 | KGFG0075 |
| DN 250 | 10" | 10 | KGFE0076 | KGFN0076 | KGFV0076 | KGFA0076 | KGFC0076 | KGFG0076 |
| DN 300 | 12" | 10 | KGFE0077 | KGFN0077 | KGFV0077 | KGFA0077 | KGFC0077 | KGFG0077 |
| DN 200 | 8" | 16 | KGFE0075 | KGFN0075 | KGFV0075 | KGFA0075 | KGFC0075 | KGFG0075 |
| DN 250 | 10" | 16 | KGFE0076 | KGFN0076 | KGFV0076 | KGFA0076 | KGFC0076 | KGFG0076 |
| DN 300 | 12" | 16 | KGFE0077 | KGFN0077 | KGFV0077 | KGFA0077 | KGFC0077 | KGFG0077 |

# ITEM 385-386-387
# KIT CONNESSIONE VALVOLA-ATTUATORE *VALVE-ACTUATOR CONNECTION KIT*

## KIT DI CONNESSIONE VALVOLA-ATTUATORE
## *VALVE-ACTUATOR CONNECTION KIT*

| MISURA *SIZE* DN [mm] | [inch] | PN | ATTUATORE *ACTUATOR* | KIT DI CONNESSIONE *CONNECTION KIT* | KIT DI CONNESSIONE valvola con TENUTA IN PTFE *CONNECTION KIT valve with PTFE LINER* |
|---|---|---|---|---|---|
| DN 40 | 1" 1/2 | 10-16 | DAN0030411S | KCF042895 | KCF045003 |
| | | | SRN0030402S | KCF052925 | KCF055004 |
| | | | EA0035A5C000 | KCF052925 | KCF052925 |
| | | | AM160005 | KCE282926 | KCE282926 |
| DN 50 | 2" | 10-16 | DAN0030411S | KCF042895 | KCF045003 |
| | | | SRN0030402S | KCF052925 | KCF055004 |
| | | | EA0035A5C000 | KCF052925 | KCF052925 |
| | | | AM160005 | KCE282926 | KCE282926 |
| DN 65 | 2" 1/2 | 10-16 | DAN0045412S | KCF042896 | KCF044988 |
| | | | SRN0053401S | KCF072949 | KCF055005 |
| | | | EA0035A5C000 | KCF052897 | KCF052897 |
| | | | AM160005 | KCE282927 | KCE282927 |
| DN 80 | 3" | 10-16 | DAN0045412S | KCF042896 | KCF042896 |
| | | | SRN0053401S | KCF072949 | KCF055005 |
| | | | EA0035A5C000 | KCF052897 | KCF052897 |
| | | | AM160005 | KCE282927 | KCE282927 |
| DN 100 | 4" | 10-16 | DAN0060412S | KCF052897 | KCF054991 |
| | | | SRN0060401S | KCF072949 | KCF055005 |
| | | | EA0070A5C000 | KCF052897 | KCF052897 |
| | | | AM160010 | KCE282927 | KCE282927 |
| DN 125 | 5" | 10-16 | DAN0106411S | KCF072899 | KCF074994 |
| | | | SRN0090401S | KCF105415 | KCF105006 |
| | | | EA0130A5C000 | KCF072899 | KCF072899 |
| | | | AM160010 | KCE282928 | KCE282928 |
| DN 150 | 6" | 10-16 | DAN0120411S | KCF072899 | KCF074994 |
| | | | SRN0120401S | KCF105415 | KCF105006 |
| | | | EA0130A5C000 | KCF072899 | KCF072899 |
| | | | AM160020 | KCE362929 | KCE362929 |

| | | | | | ATTUATORE MAGGIORATO valvola con TENUTA IN PTFE *BIGGER SIZE ACTUATOR valve with PTFE LINER* | KIT DI CONNESSIONE valvola con TENUTA IN PTFE *CONNECTION KIT valve with PTFE LINER* |
|---|---|---|---|---|---|---|
| DN 200 | 8" | 10 | DAN0180411S | KCF102900 | DAN0240411S | KCF104998 |
| | | | SRN0180401S | KCF102900 | SRN0240401S | KCF125532 |
| | | | EA0240A5C000 | KCF102900 | EA0240A5C000 | KCF102900 |
| | | | AM160020 | KCE362930 | AM160020 | KCE362930 |
| DN 250 | 10" | 10 | DAN0240411S | KCF103034 | DAN0360411S | KCF104998 |
| | | | SRN0240401S | KCF125416 | SRN0360401S | KCF125555 |
| | | | EA0240A5C000 | KCF103034 | AE160040 | KCE363035 |
| | | | AM160040 | KCE362930 | AM160040 | KCE363035 |
| DN 300 | 12" | 10 | DAN0360411S | KCF102901 | DAN0480411S | KCF124997 |
| | | | SRN0360401S | KCF122902 | SRN0480401S | KCF125533 |
| | | | AE160040 | KCE362931 | AE160060 | KCE562932 |
| | | | AM160040 | KCE362931 | AM160050 | KCE562932 |

| | | | | | |
|---|---|---|---|---|---|
| DN 200 | 8" | 16 | DAN0240411S | KCF102900 | KCF104998 |
| | | | SRN0240401S | KCF123367 | KCF125532 |
| | | | EA0240A5C000 | KCF102900 | KCF102900 |
| | | | AM160020 | KCE362930 | KCE362930 |
| DN 250 | 10" | 16 | DAN0360411S | KCF102901 | KCF104995 |
| | | | SRN0360401S | KCF122902 | KCF124997 |
| | | | AE160040 | KCE362931 | KCE362931 |
| | | | AM160040 | KCE362931 | KCE362931 |
| DN 300 | 12" | 16 | DAN0480411S | KCF122902 | KCF124997 |
| | | | SRN0480401S | KCF145417 | KCF125533 |
| | | | AE160060 | KCE562932 | KCE562932 |
| | | | AM160050 | KCE562932 | KCE562932 |

# ITEM 270-474

## VALVOLA A FARFALLA "METALLO-METALLO" PER MONTAGGIO TRA FLANGE TIPO "WAFER"

*BUTTERFLY VALVE "METAL-METAL" FOR MOUNTING BETWEEN FLANGES, "WAFER" TYPE*

**ITEM 270**
Corpo: Ghisa
Lente: Ghisa

**ITEM 474**
Corpo: CF8M
Lente: CF8M



***ITEM 270***
*Body: Cast iron*
*Butterfly: Cast iron*

***ITEM 474***
*Body:* CF8M
*Butterfly: CF8M*

**ESECUZIONI STANDARD:**
- **Valvola serie 270: corpo e lente in ghisa.**
- **Valvola serie 474: corpo e lente in CF8M**.
- Gamma disponibile: dal DN 40 al DN 200; PN10 - PN16 - ANSI 150.
- Flangiatura standard: PN10 - PN16 - ANSI 150.
- Ingombri da faccia a faccia normalizzati ISO 5752.
- Testa della valvola normalizzata ISO 5211.
- La valvola con tenuta metallo-metallo é stata studiata per l'intercettazione di fluidi con temperatura di esercizio da -50°C a +100°C.
- Pressione di utilizzo: PN 16 bar per DN 40÷200.
- **La tenuta di questa valvola contiene le perdite entro un valore stimato di 1,5-2%.**

***STANDARD EXECUTIONS:***
- ***Valve type 270: body and butterfly in cast iron.***
- ***Valve type 474: body and butterfly in CF8M.***
- *Available range: from DA 40 to DN 200; PN10 - PN16 - ANSI 150.*
- *Standard flanges: PN10 - PN16 - ANSI 150.*
- *Face to face as per ISO 5752.*
- *Head valve as per ISO 5211.*
- *The metal-metal valve is suitable for fluids at working temperature from -50°C to +100°C.*
- *Working pressure: PN 16 bar for DN 40÷200.*
- ***Valve leakage approximately 1,5-2%.***

**ESECUZIONI A RICHIESTA:**
- Versioni dal DN 40 al DN 400 con temperatura di utilizzo da -50°C a +500°C.
- Per ulteriori informazioni contattare il nostro ufficio commerciale.

***ON REQUEST:***
- *Models from DN 40 to DN 400 with working temperature from -50°C to +500°C, are available on request.*
- *For further information, please contact our sales department.*

**CERTIFICAZIONI:**
- Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.

***CERTIFICATIONS:***
- *2014/34/EU ATEX configuration to request at time of order.*

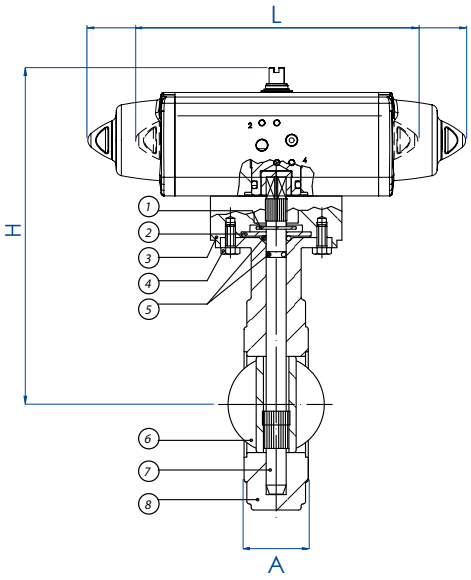
# ITEM 270-474
## ASSE LIBERO - CON LEVA - CON RIDUTTORE *FREE SHAFT - WITH LEVER - WITH GEAR BOX*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | CON LEVA *WITH LEVER* | | | CON RIDUTTORE *WITH GEAR BOX* | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* 270 | Asse libero *Free shaft* 474 | Kg | Con leva *With lever* 270 | Con leva *With lever* 474 | Kg | Con riduttore *With gear box* 270 | Con riduttore *With gear box* 474 | Kg |
| DN 40 | 1"1/2 | V270XM68 | V474XM68 | 2,7 | V270LM68 | V474LM68 | 3 | V270RM68 | V474RM68 | 3,2 |
| DN 50 | 2" | V270XM69 | V474XM69 | 4,2 | V270LM69 | V474LM69 | 4,5 | V270RM69 | V474RM69 | 4,7 |
| DN 65 | 2"1/2 | V270XM70 | V474XM70 | 5,2 | V270LM70 | V474LM70 | 5,5 | V270RM70 | V474RM70 | 5,7 |
| DN 80 | 3" | V270XM71 | V474XM71 | 5,8 | V270LM71 | V474LM71 | 6,3 | V270RM71 | V474RM71 | 6,6 |
| DN 100 | 4" | V270XM72 | V474XM72 | 7,3 | V270LM72 | V474LM72 | 7,8 | V270RM72 | V474RM72 | 8,1 |
| DN 125 | 5" | V270XM73 | V474XM73 | 8,9 | V270LM73 | V474LM73 | 9,4 | V270RM73 | V474RM73 | 9,7 |
| DN 150 | 6" | V270XM74 | V474XM74 | 9,9 | V270LM74 | V474LM74 | 10,4 | V270RM74 | V474RM74 | 10,7 |
| DN 200 | 8" | V270XM75 | V474XM75 | 16 | V270LM75 | V474LM75 | 19,9 | V270RM75 | V474RM75 | 20,3 |

# ITEM 270-474
## CON ATTUATORE *WITH ACTUATOR*








| MISURA *SIZE* | | CON ATTUATORE PNEUMATICO DA *WITH DA PNEUMATIC ACTUATOR* | | | | | | | CON ATTUATORE PNEUMATICO SR *WITH SR PNEUMATIC ACTUATOR* | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | A [mm] | Kg | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | A [mm] | Kg |
| DN 40 | 1" 1/2 | DG*XM68 | DAN0015411S | KCNADDD5438 | 159,0 | 272,2 | 33 | 4,2 | SG*XM68 | SRN0015401S | KCNADDD5438 | 233,2 | 279,2 | 33 | 4,7 |
| DN 50 | 2" | DG*XM69 | DAN0015411S | KCNADDD5438 | 159,0 | 288,2 | 43 | 5,7 | SG*XM69 | SRN0015401S | KCNADDD5438 | 233,2 | 295,2 | 43 | 6,2 |
| DN 65 | 2" 1/2 | DG*XM70 | DAN0015411S | KCNADDD5439 | 159,0 | 293,2 | 46 | 6,7 | SG*XM70 | SRN0015401S | KCNADDD5439 | 233,2 | 300,2 | 46 | 7,2 |
| DN 80 | 3" | DG*XM71 | DAN0030411S | KCNCDDD5440 | 174,2 | 308,2 | 46 | 7,7 | SG*XM71 | SRN0030402S | KCNCDDD5441 | 258,8 | 319,4 | 46 | 8,6 |
| DN 100 | 4" | DG*XM72 | DAN0030411S | KCNCDDD5440 | 174,2 | 326,2 | 52 | 9,2 | SG*XM72 | SRN0030402S | KCNCDDD5441 | 258,8 | 337,4 | 52 | 10,1 |
| DN 125 | 5" | DG*XM73 | DAN0030411S | KCNCDDD5442 | 174,2 | 345,2 | 56 | 10,8 | SG*XM73 | SRN0030402S | KCNCDDD5443 | 258,8 | 356,4 | 56 | 11,7 |
| DN 150 | 6" | DG*XM74 | DAN0030411S | KCNCDDD5442 | 174,2 | 354,2 | 56 | 11,8 | SG*XM74 | SRN0030402S | KCNCDDD5443 | 258,8 | 365,4 | 56 | 12,7 |
| DN 200 | 8" | DG*XM75 | DAN0060412S | KCNDDDD5444 | 198,0 | 405,4 | 60 | 18,7 | SG*XM75 | SRN0060401S | KCNDDDD5445 | 338,5 | 422,0 | 60 | 20,4 |

* = 270 Valvola in ghisa - *Cast iron valve* * = 474 Valvola CF8M - *CF8M valve*

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

| MATERIALI USATI PER LA VALVOLA | |
|---|---|
| 1) Anello elastico di sicurezza | Acciaio nichelato |
| 2) Rosetta premi O-Ring | Acciaio nichelato |
| 3) Adattatore | Alluminio verniciato |
| 4) Viti | Acciaio nichelato |
| 5) O-ring | FKM |
| 6) Lente | Ghisa sferoidale GGG50 - CF8M |
| 7) Albero di comando | 420 S.S. - 303 S.S. |
| 8) Corpo | Ghisa sferoidale GGG50 - CF8M |

| *VALVE MATERIALS* | |
|---|---|
| *1) Safety elastic ring* | *Nickel-plated steel* |
| *2) Washer* | *Nickel-plated steel* |
| *3) Adapter* | *Painted aluminium* |
| *4) Screws* | *Nickel-plated steel* |
| *5) O-ring* | *FKM* |
| *6) Butterfly* | *Spheroidal cast iron GGG50 - CF8M* |
| *7) Driving shaft* | *420 S.S. - 303 S.S.* |
| *8) Body* | *Spheroidal cast iron GGG50 - CF8M* |

# ITEM 490-492-493-494

## VALVOLA A FARFALLA 2 VIE FILETTATA ISO 228/1, DIN 11851, DA SALDARE, CLAMP

*STAINLESS STEEL BUTTERFLY VALVE WITH ISO 228/1 THREADED, BUTT WELDED, DIN 11851 ENDS, CLAMP*

**ITEM 490**
Connessioni: Filettate ISO 228/1, Materiale: 304 S.S.

**ITEM 492**
Connessioni: DIN 11851, Materiale: 304 S.S.

**ITEM 493**
Connessioni: DIN 11850 serie 1, Materiale: 304 S.S.

**ITEM 494**
Connessioni: Clamp BS 4825, Materiale: 316L S.S.



***ITEM 490***
*Connections: Threaded ISO 228/1, Material: 304 S.S.*

***ITEM 492***
*Connections: DIN 11851, Material: 304 S.S.*

***ITEM 493***
*Connections: DIN 11850 serie 1, Material: 304 S.S.*

***ITEM 494***
*Connections: Clamp BS 4825, Material: 316L S.S.*

**ESECUZIONI STANDARD:**
- Valvola interamente costruita in acciaio inox 304 (serie 490-492-493) e in 316L (serie 494).
- La valvola si presta ad utilizzi che richiedono condizioni igieniche particolari.
- Temperatura di utilizzo: da 0°C a + 150°C.
- Pressione di utilizzo: PN 6.
- Fluido intercettato: per usi alimentari.
- Attacchi:-filettati gas a norma DIN/ISO 228/1;
  filettati alimentare a norma DIN 11851;
  da saldare di testa a norma DIN 11850-1;
  Clamp BS 4825 (DIN 32676 serie C).
- Trattamento esterno: lucidata.

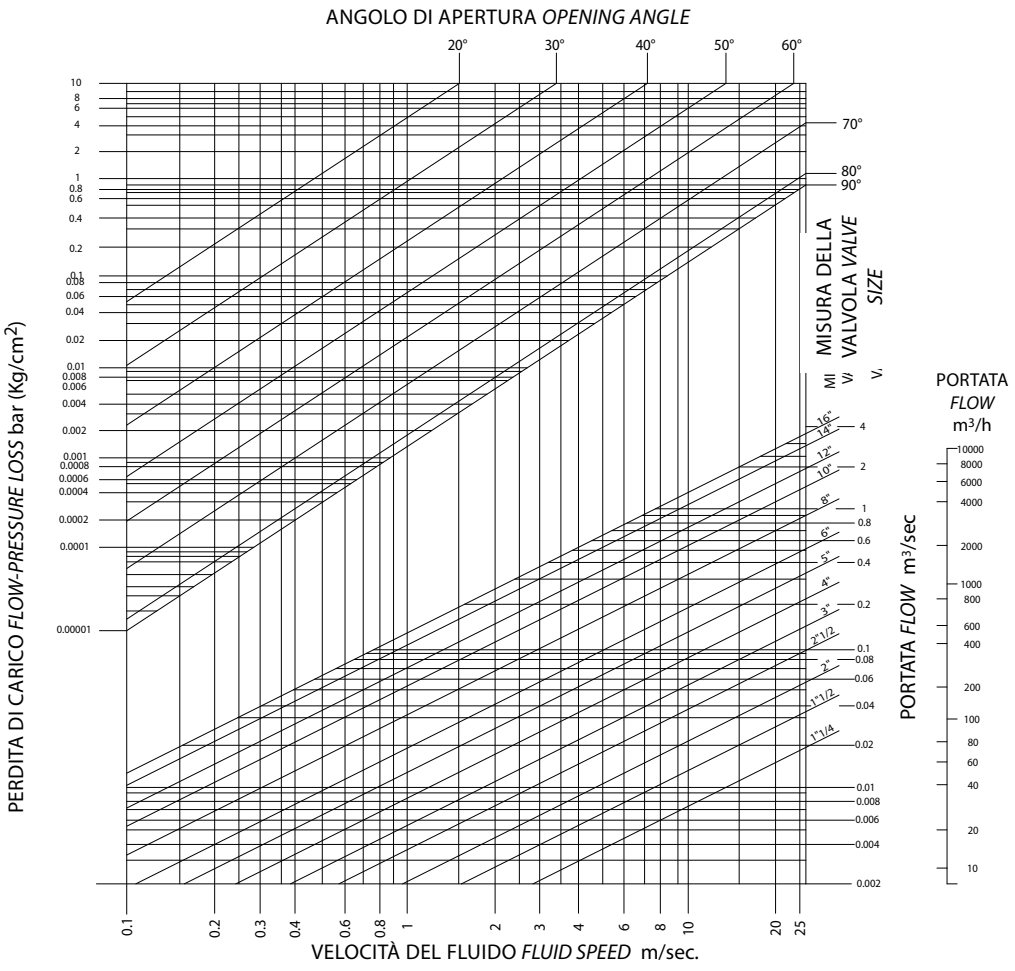
***STANDARD EXECUTIONS:***
- *Valve manufactured in 304 (series 490-492-493) and in 316L (series 494) stainless steel.*
- *The valve it's suitable for food industries.*
- *Working temperature: from 0°C to + 150°C.*
- *Working pressure: PN 6.*
- *Fluid range: food industry.*
- *Connections: GAS threads as per DIN/ISO 228/1;*
  *DIN 11851 threads for food industry;*
  *to be butt-welded as per DIN 11850-1;*
  *Clamp BS 4825 (DIN 32676 C serie).*
- *Surface treatment: polished.*

**ESECUZIONI A RICHIESTA:**
- Filettata SMS 1146.
- Filettata MACON.
- Clamp DIN 32676 serie A.
- Clamp ISO 2852.
- Per altre applicazioni consultare il nostro ufficio commerciale.

***ON REQUEST:***
- *Threaded SMS 1146.*
- *Threaded MACON.*
- *Clamp DIN 32676 A serie.*
- *Clamp ISO 2852.*
- *For other applications, please contact our sales department.*

# ITEM 490-492-493-494
# ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | | | | CON LEVA *WITH LEVER* | | | | | KIT GUARNIZIONI *SEALS KIT* | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | Filettata *Threaded* DIN ISO 228/1 | Filettata *Threaded* DIN 11851 | Saldare di testa *Butt weld* | Clamp BS 4825 | Kg | DIN ISO 228/1 | DIN 11851 | Saldare di testa *Butt weld* | Clamp BS 4825 | Kg | Kit guarnizioni *Seals kit* ITEM 490-492-493 | Kit guarnizioni *Seals kit* ITEM 494 |
| DN 25 | 1" | V490X406 | V492X636 | V493X756 | V494X006 | 0,8 | L490X406 | L492X636 | L493X756 | L494X006 | 0,95 | KGBV7006 | KGBV7206 |
| DN 32 | 1"1/4 | V490X407 | V492X637 | V493X757 | - | 0,9 | L490X407 | L492X637 | L493X757 | - | 1,05 | KGBV7007 | - |
| DN 40 | 1"1/2 | V490X408 | V492X638 | V493X758 | V494X008 | 1,4 | L490X408 | L492X638 | L493X758 | L494X008 | 1,55 | KGBV7008 | KGBV7208 |
| DN 50 | 2" | V490X409 | V492X639 | V493X759 | V494X009 | 1,9 | L490X409 | L492X639 | L493X759 | L494X009 | 2,1 | KGBV7009 | KGBV7209 |
| DN 65 | 2"1/2 | V490X410 | V492X640 | V493X760 | V494X010 | 2,2 | L490X410 | L492X640 | L493X760 | L494X010 | 2,4 | KGBV7010 | KGBV7210 |
| DN 80 | 3" | V490X411 | V492X641 | V493X761 | V494X011 | 2,7 | L490X411 | L492X641 | L493X761 | L494X011 | 2,9 | KGBV7011 | KGBV7211 |
| DN 100 | 4" | V490X412 | V492X642 | V493X762 | V494X012 | 4 | L490X412 | L492X642 | L493X762 | L494X012 | 4,3 | KGBV7012 | KGBV7212 |



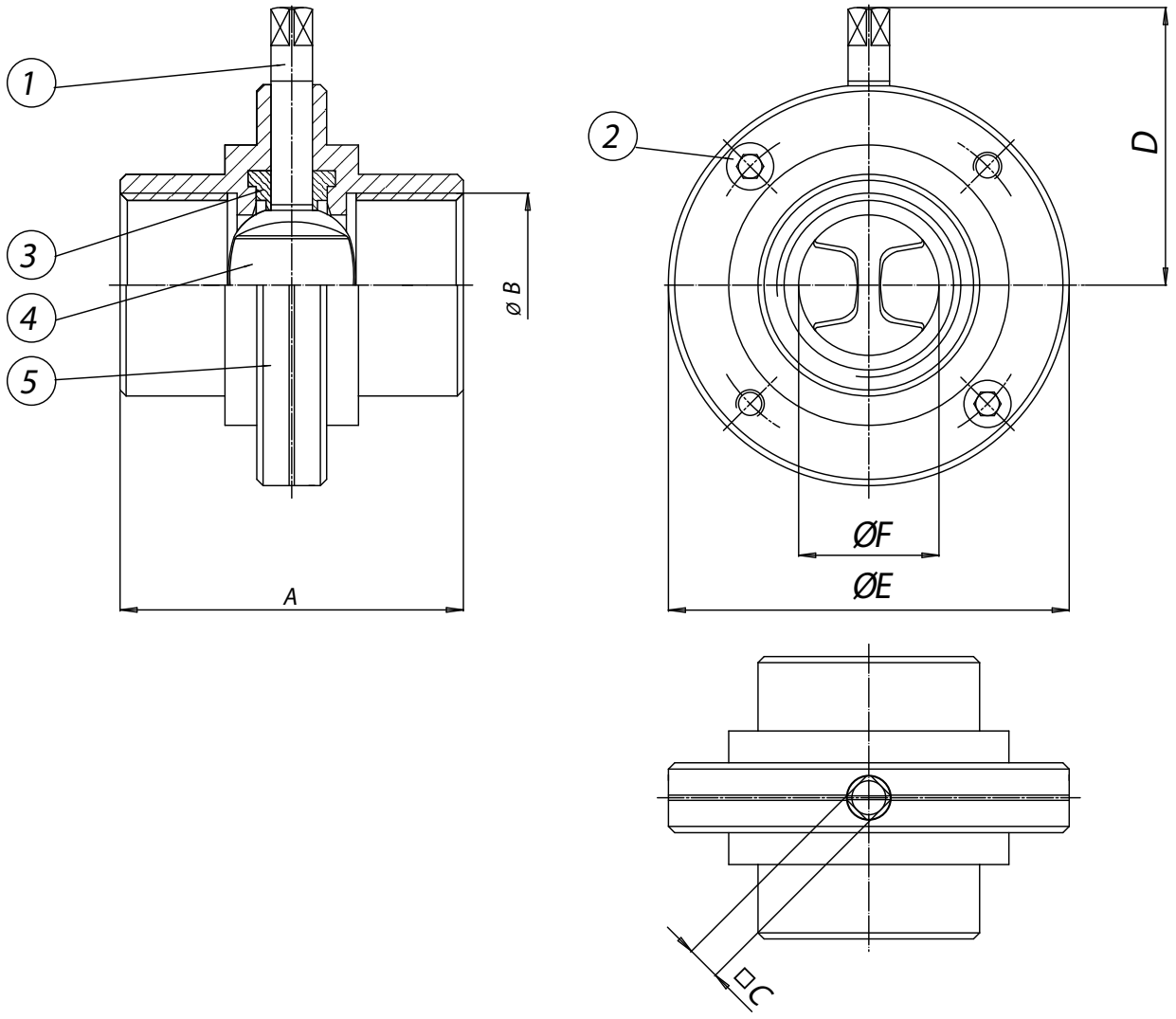

## COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm*

| MISURA *SIZE* | DN 25 1" | DN 32 1"1/4 | DN 40 1"1/2 | DN 50 2" | DN 65 2"1/2 | DN 80 3" | DN 100 4" |
|---|---|---|---|---|---|---|---|
| PN 6 bar | 7 | 9 | 15 | 18 | 29 | 43 | 65 |

I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

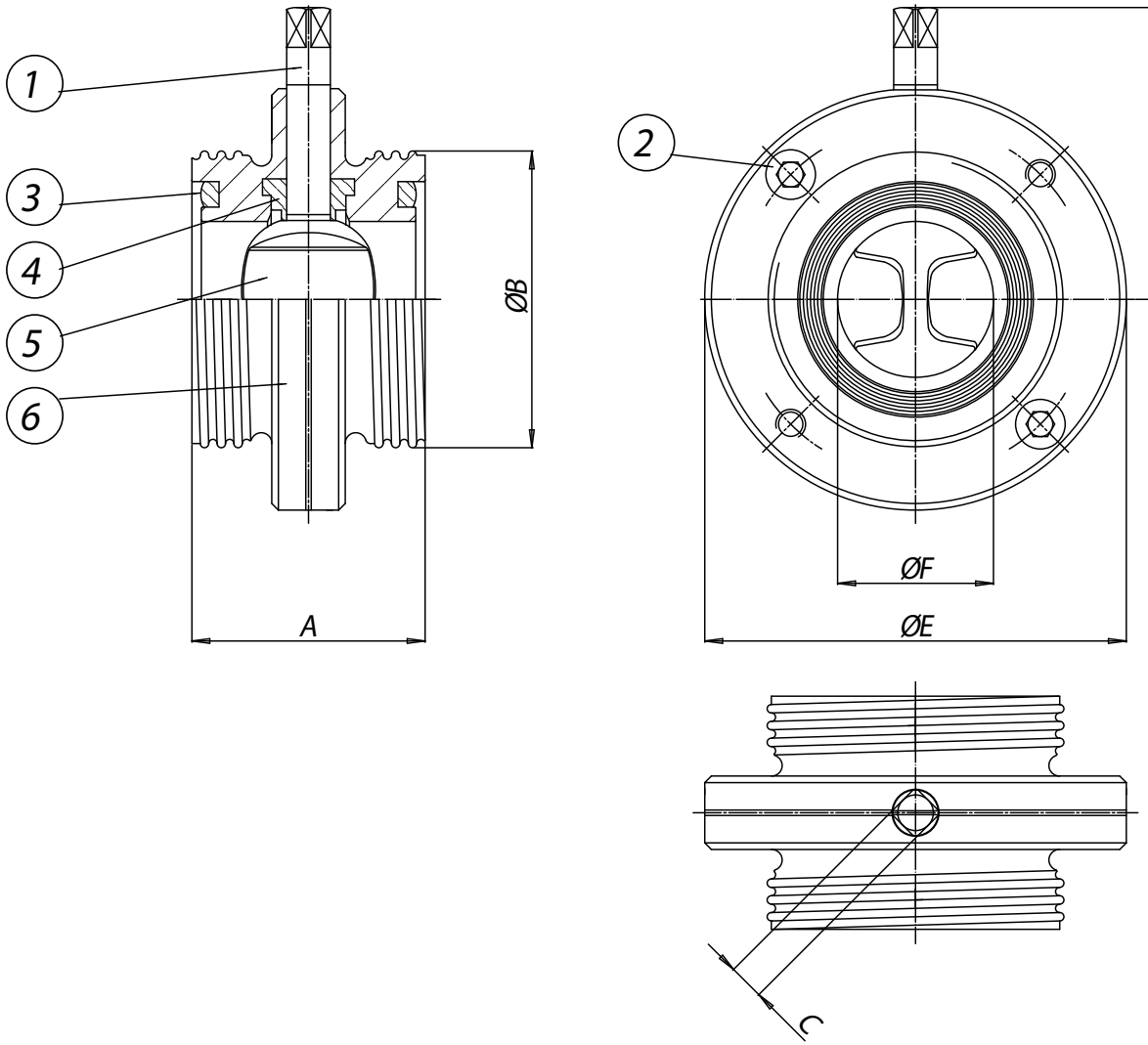
# ITEM 490 ISO 228/1




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 2 | Viti di bloccaggio *Screws* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3* | Guarnizioni di tenuta interne *Internal seals* | Silicone *Silicon* | | |
| 4 | Lente *Disc* | CF8 | 1.4301 | UNI X5CrNi 18 10 |
| 5 | Semicorpi *Ends* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| * Particolari del kit di ricambio *Components of spare part kit* KGBV70... | | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | ØB | □C | D | øE | øF |
| DN [mm] | [inch] | | | | | | |
| DN 25 | 1" | 68 | 1″ | 9 | 58 | 79 | 25 |
| DN 32 | 1" 1/4 | 76 | 1"1/4 | 9 | 63 | 85 | 32 |
| DN 40 | 1" 1/2 | 76 | 1"1/2 | 9 | 65 | 92 | 40 |
| DN 50 | 2" | 80 | 2″ | 9 | 71 | 105 | 50 |
| DN 65 | 2" 1/2 | 82 | 2"1/2 | 9 | 81 | 125 | 65 |
| DN 80 | 3" | 84 | 3″ | 11 | 88 | 137 | 80 |
| DN 100 | 4" | 88 | 4″ | 11 | 100 | 157 | 100 |

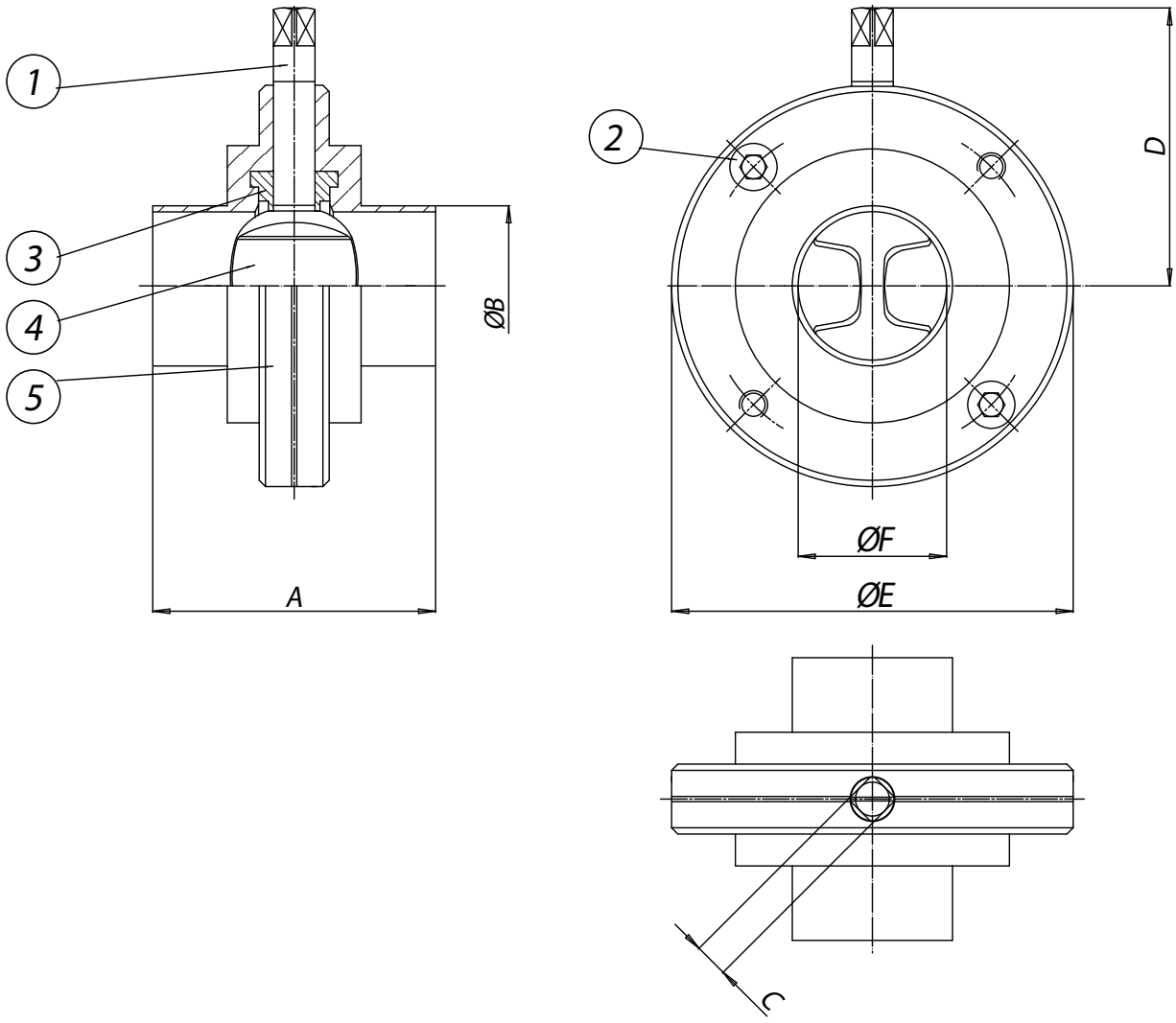
# **ITEM 492** DIN 11851




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 2 | Viti di bloccaggio *Screws* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3 | Guarnizioni di tenuta laterale *Seals* | Silicone *Silicon* | | |
| 4* | Guarnizioni di tenuta interne *Internal seals* | Silicone *Silicon* | | |
| 5 | Lente *Disc* | CF8 | 1.4301 | UNI X5CrNi 18 10 |
| 6 | Semicorpi *Ends* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| * Particolari del kit di ricambio *Components of spare part kit* KGBV70... | | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | A | ØB | □C | D | øE | øF |
| DN [mm] | [inch] | | | | | | |
| DN 25 | 1" | 68 | 52X1/6 | 9 | 58 | 79 | 25 |
| DN 32 | 1" 1/4 | 76 | 58X1/6 | 9 | 63 | 85 | 32 |
| DN 40 | 1" 1/2 | 76 | 65x1/6 | 9 | 65 | 92 | 40 |
| DN 50 | 2" | 80 | 78X1/6 | 9 | 71 | 105 | 50 |
| DN 65 | 2" 1/2 | 82 | 95x1/6 | 9 | 81 | 125 | 65 |
| DN 80 | 3" | 84 | 110X1/4 | 11 | 88 | 137 | 80 |
| DN 100 | 4" | 88 | 130X1/4 | 11 | 100 | 157 | 100 |

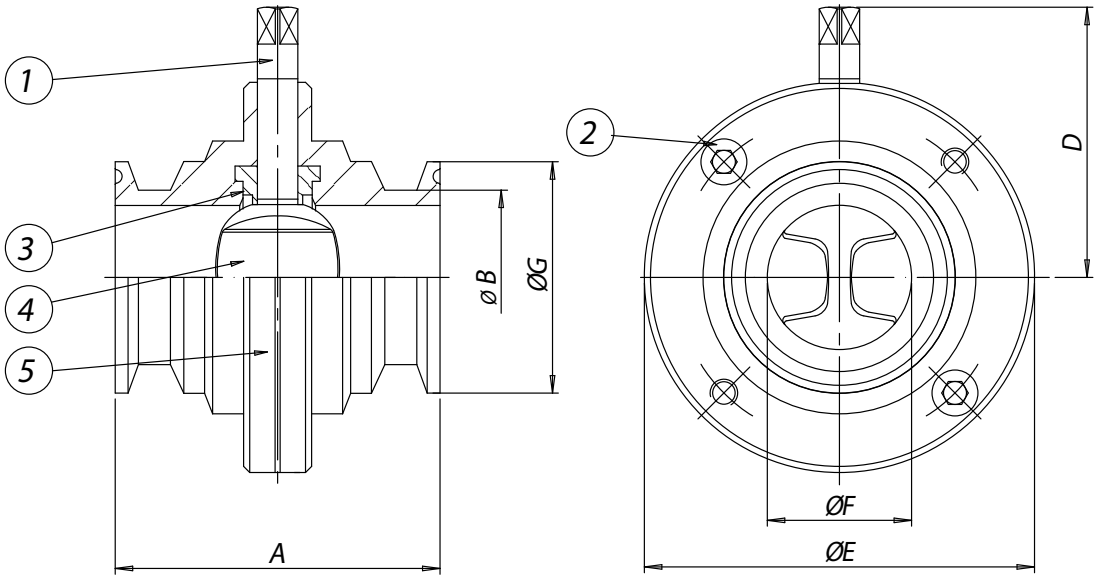
# **ITEM 493** DIN 11850 1 SERIE

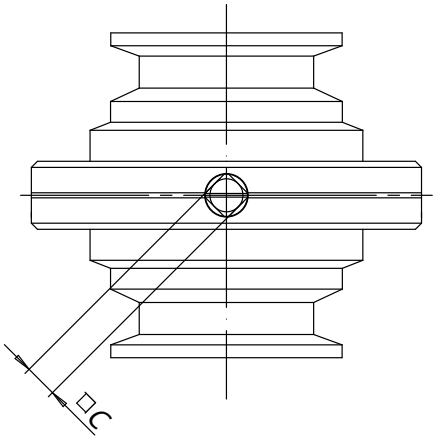



| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 2 | Viti di bloccaggio *Screws* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| 3* | Guarnizioni di tenuta interne *Internal seals* | Silicone *Silicon* | | |
| 4 | Lente *Disc* | CF8 | 1.4301 | UNI X5CrNi 18 10 |
| 5 | Semicorpi *Ends* | 304 S.S. | 1.4301 | UNI X5CrNi 18 10 |
| * Particolari del kit di ricambio *Components of spare part kit* KGBV70... | | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | | **A** | **ØB** | **□C** | **D** | **øE** | **øF** |
| **DN [mm]** | **[inch]** | | | | | | |
| DN 25 | 1" | 68 | 28 | 9 | 58 | 79 | 25 |
| DN 32 | 1" 1/4 | 76 | 34 | 9 | 63 | 85 | 31 |
| DN 40 | 1" 1/2 | 76 | 40 | 9 | 65 | 92 | 37 |
| DN 50 | 2" | 80 | 52 | 9 | 71 | 105 | 49 |
| DN 65 | 2" 1/2 | 82 | 70 | 9 | 81 | 125 | 66 |
| DN 80 | 3" | 84 | 85 | 11 | 88 | 137 | 81 |
| DN 100 | 4" | 88 | 104 | 11 | 100 | 157 | 100 |

# **ITEM 494** CLAMP BS 4825 (DIN 32676 C SERIE)



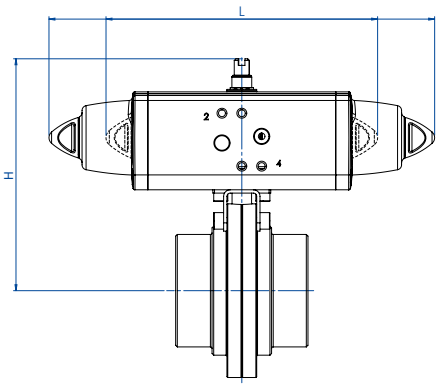

| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| 1 | Stelo *Shaft* | 316L S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 2 | Viti di bloccaggio *Screws* | 316L S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| 3* | Guarnizioni di tenuta interne *Internal seals* | Silicone *Silicon* | | |
| 4 | Lente *Disc* | CF3M | 1.4401 | UNI X5CrNiMo 17 12 |
| 5 | Semicorpi *Ends* | 316L S.S. | 1.4401 | UNI X5CrNiMo 17 12 |
| * Particolari del kit di ricambio *Components of spare part kit* KGBV72... | | | | |

| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CLAMP SIZE [inch]** | **A** | **ØB** | **□C** | **D** | **øE** | **øF** | **øG** |
| 1" | 68 | 25,4 | 9 | 58 | 79 | 22,1 | 50,4 |
| 1"1/2 | 76 | 38,1 | 9 | 63 | 85 | 34,8 | 50,4 |
| 2" | 80 | 50,8 | 9 | 71 | 105 | 47,5 | 64 |
| 2"1/2 | 82 | 63,5 | 9 | 76 | 113 | 60,2 | 77,4 |
| 3" | 82 | 76,1 | 9 | 81 | 125 | 72,8 | 90,9 |
| 4" | 88 | 101,6 | 11 | 100 | 157 | 97,6 | 118,8 |

# ITEM 490-492-493
# CON ATTUATORE *WITH ACTUATOR*








## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO "F/F GAS" *ITEM CODE "F/F GAS"* | ARTICOLO "F/F DIN" *ITEM CODE "F/F DIN"* | ARTICOLO saldare di testa *ITEM CODE butt weld* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 25 | 1" | DG490H006 | DG492H066 | DG493H086 | DAN0015411S | KCF042253 | 159,0 | 120,2 | 1,6 |
| DN 32 | 1" 1/4 | DG490H007 | DG492H067 | DG493H087 | DAN0015411S | KCF042253 | 159,0 | 125,2 | 1,7 |
| DN 40 | 1" 1/2 | DG490H008 | DG492H068 | DG493H088 | DAN0015411S | KCF042253 | 159,0 | 127,2 | 2,2 |
| DN 50 | 2" | DG490H009 | DG492H069 | DG493H089 | DAN0030411S | KCF042253 | 174,2 | 140,2 | 2,9 |
| DN 65 | 2" 1/2 | DG490H010 | DG492H070 | DG493H090 | DAN0045412S | KCF042254 | 188,5 | 155,5 | 3,4 |
| DN 80 | 3" | DG490H011 | DG492H071 | DG493H091 | DAN0060412S | KCF052256 | 198,0 | 168,4 | 4,3 |
| DN 100 | 4" | DG490H012 | DG492H072 | DG493H092 | DAN0106411S | KCF072257 | 237,0 | 193,3 | 6,5 |

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

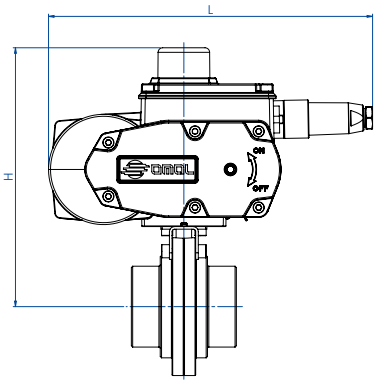
| MISURA *SIZE* | | ARTICOLO "F/F GAS" *ITEM CODE "F/F GAS"* | ARTICOLO "F/F DIN" *ITEM CODE "F/F DIN"* | ARTICOLO saldare di testa *ITEM CODE butt weld* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 25 | 1" | SG490H006 | SG492H066 | SG493H086 | SRN0015401S | KCF042253 | 233,2 | 127,2 | 2,2 |
| DN 32 | 1" 1/4 | SG490H007 | SG492H067 | SG493H087 | SRN0015401S | KCF042253 | 233,2 | 132,2 | 2,3 |
| DN 40 | 1" 1/2 | SG490H008 | SG492H068 | SG493H088 | SRN0015401S | KCF042253 | 233,2 | 134,2 | 2,5 |
| DN 50 | 2" | SG490H009 | SG492H069 | SG493H089 | SRN0030402S | KCF052255 | 258,8 | 151,4 | 3,8 |
| DN 65 | 2" 1/2 | SG490H010 | SG492H070 | SG493H090 | SRN0053401S | KCF075308 | 304,2 | 174,3 | 5,3 |
| DN 80 | 3" | SG490H011 | SG492H071 | SG493H091 | SRN0060401S | KCF072257 | 338,5 | 185,0 | 9,3 |
| DN 100 | 4" | SG490H012 | SG492H072 | SG493H092 | SRN0090401S | KCF105307 | 393,7 | 227,5 | 11,9 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*



I codici degli articoli con attuatore elettrico si riferiscono a una tensione di 230Vac.
*For the codes of the items operated by electrical actuators is considered 230Vac voltage.*

Versione ATEX non disponibile per attuatori elettrici.
*ATEX version not available for electric actuator.*




## CON ATTUATORE ELETTRICO ON-OFF *WITH ON-OFF ELECTRIC ACTUATOR*

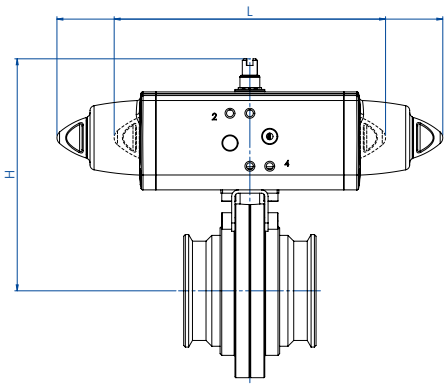
| MISURA *SIZE* | | ARTICOLO "F/F GAS" *ITEM CODE "F/F GAS"* | ARTICOLO "F/F DIN" *ITEM CODE "F/F DIN"* | ARTICOLO saldare di testa *ITEM CODE butt weld* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | | | |
| DN 25 | 1" | C490A5E06 | C492A5E66 | C493A5E86 | EA0035A5C000 | KCF052255 | 250,0 | 185,0 | 4,4 |
| DN 32 | 1" 1/4 | C490A5E07 | C492A5E67 | C493A5E87 | EA0035A5C000 | KCF052255 | 250,0 | 190,0 | 4,5 |
| DN 40 | 1" 1/2 | C490A5E08 | C492A5E68 | C493A5E88 | EA0035A5C000 | KCF052255 | 250,0 | 192,0 | 5,0 |
| DN 50 | 2" | C490A5E09 | C492A5E69 | C493A5E89 | EA0035A5C000 | KCF052255 | 250,0 | 198,0 | 5,5 |
| DN 65 | 2" 1/2 | C490A5G10 | C492A5G70 | C493A5G90 | EA0070A5C000 | KCF052255 | 250,0 | 208,0 | 5,8 |
| DN 80 | 3" | C490A5G11 | C492A5G71 | C493A5G91 | EA0070A5C000 | KCF053106 | 250,0 | 215,0 | 8,2 |
| DN 100 | 4" | C490A5I12 | C492A5I72 | C493A5I92 | EA0130A5C000 | KCF072257 | 280,0 | 247,6 | 11,5 |

Articoli con attuatore modulante disponibili a richiesta. *Article with modulating actuator available on request.*

# ITEM 494 CLAMP BS 4825 (DIN 32676 C SERIE)
# CON ATTUATORE *WITH ACTUATOR*








## CON ATTUATORE PNEUMATICO DOPPIO EFFETTO *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| CLAMP SIZE [inch] | ARTICOLO CLAMP *ITEM CODE CLAMP* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|
| 1" | DG494H006 | DAN0015411S | KCF042253 | 159,0 | 120,2 | 1,6 |
| 1" 1/2 | DG494H008 | DAN0015411S | KCF042253 | 159,0 | 127,2 | 2,2 |
| 2" | DG494H009 | DAN0030411S | KCF042253 | 174,2 | 140,2 | 2,9 |
| 2" 1/2 | DG494H010 | DAN0045412S | KCF042254 | 188,5 | 155,5 | 3,4 |
| 3" | DG494H011 | DAN0060412S | KCF052255 | 198,0 | 168,4 | 4,3 |
| 4" | DG494H012 | DAN0106411S | KCF072257 | 237,0 | 193,3 | 6,5 |

## CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| CLAMP SIZE [inch] | ARTICOLO CLAMP *ITEM CODE CLAMP* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|
| 1" | SG494H006 | SRN0015401S | KCF042253 | 233,2 | 127,2 | 2,2 |
| 1" 1/2 | SG494H008 | SRN0015401S | KCF042253 | 233,2 | 134,2 | 2,5 |
| 2" | SG494H009 | SRN0030402S | KCF052255 | 258,8 | 151,4 | 3,8 |
| 2" 1/2 | SG494H010 | SRN0053401S | KCF075308 | 304,2 | 174,3 | 5,3 |
| 3" | SG494H011 | SRN0060401S | KCF075752 | 338,5 | 185,0 | 9,3 |
| 4" | SG494H012 | SRN0090401S | KCF105307 | 393,7 | 227,5 | 11,9 |

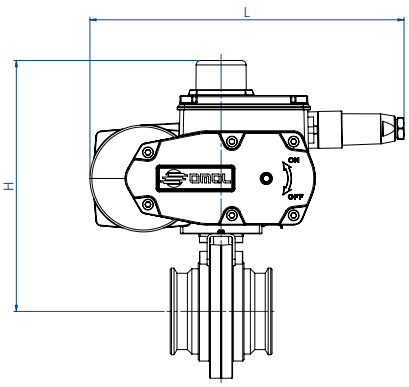
Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*





I codici degli articoli con attuatore elettrico si riferiscono a una tensione di 230Vac.
*For the codes of the items operated by electrical actuators is considered 230Vac voltage.*

Versione ATEX non disponibile per attuatori elettrici.
*ATEX version not available for electric actuator.*




## CON ATTUATORE ELETTRICO ON-OFF *WITH ON-OFF ELECTRIC ACTUATOR*

| CLAMP SIZE [inch] | ARTICOLO CLAMP *ITEM CODE CLAMP* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|
| 1" | C494A5E06 | EA0035A5C000 | KCF052255 | 250,0 | 185,0 | 4,4 |
| 1" 1/2 | C494A5E08 | EA0035A5C000 | KCF052255 | 250,0 | 192,0 | 5,0 |
| 2" | C494A5E09 | EA0035A5C000 | KCF052255 | 250,0 | 198,0 | 5,5 |
| 2" 1/2 | C494A5G10 | EA0070A5C000 | KCF052255 | 250,0 | 208,0 | 5,8 |
| 3" | C494A5G11 | EA0070A5C000 | KCF053106 | 250,0 | 215,0 | 8,2 |
| 4" | C494A5I12 | EA0130A5C000 | KCF072257 | 280,0 | 247,6 | 11,5 |

Articoli con attuatore modulante disponibili a richiesta. *Article with modulating actuator available on request.*

# ITEM 675

## VALVOLA A FARFALLA IN PVC PER MONTAGGIO TRA FLANGE TIPO "WAFER"
## *PVC BUTTERFLY VALVE FOR MOUNTING BETWEEN FLANGES, "WAFER" TYPE*



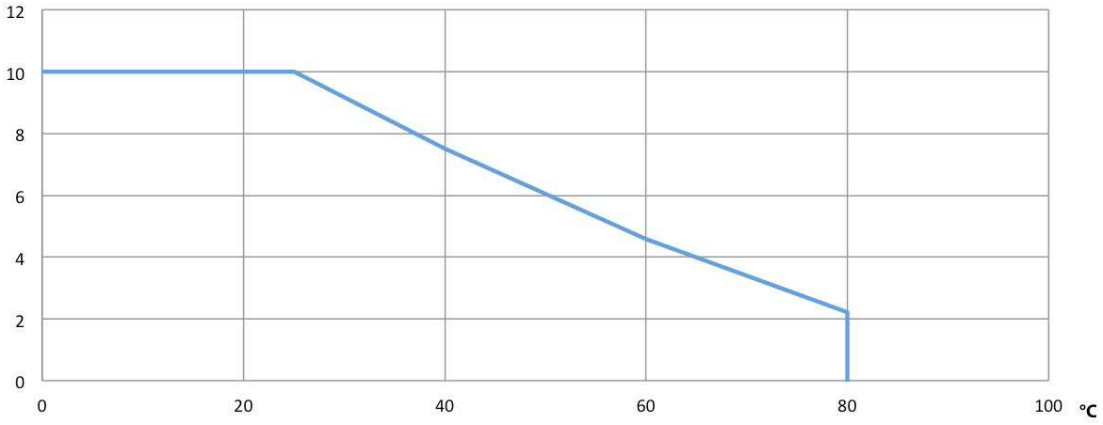
**ESECUZIONE STANDARD:**
- Costruzione secondo il principio del doppio eccentrico: garantisce una minor usura del seggio di tenuta e una coppia di azionamento inferiore fino al 50% rispetto a una valvola a farfalla centrica.
- Corpo esterno in polipropilene (PP-GR) resistente ai raggi UV.
- Lente in materiale termoplastico: PVC-C.
- Tenuta primaria con manicotto in elastomero: EPDM.
- Temperatura di esercizio: da 0°C a 80°C.
- Pressione di esercizio: vedi diagramma.
- Applicazioni: sostanze chimiche, fluidi ai quali il PVC-C ed EPDM sono chimicamente resistente.
- Gamma disponibile: dal DN50 al DN300 PN10.
- Flangiatura standard: dal DN40 al DN300, ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B16.5 classe 150, BS 1560: 1989, BS 4504, JIS B 2220.
- Interfaccia F07 secondo DIN/ISO 5211.

***STANDARD VERSION:***
- *Double eccentric operating principle: this construction helps to reduce seat abrasion and actuation torque lower than 50% compared to a centric butterfly valve.*
- *External body material: polypropylene fiber glass reinforced.*
- *Disc: PVC-C.*
- *Seal: EPDM.*
- *Working temperature: from 0°C to +80°C.*
- *Working pressure: see diagram.*
- *Application: chemicals and all kinds of fluids compatible with PVC-C and EPDM.*
- *Available range: from DN50 to DN300 PN 10.*
- *Standard flanges: from DN50 to DN300, ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B16.5 class 150, BS 1560: 1989, BS 4504, JIS B 2220.*
- *F07 connection as per DIN/ISO 5211.*

**ESECUZIONI SPECIALI A RICHIESTA:**
- Lenti speciali in materiale termoplastico: PVC-U, ABS, PP-H, PVDF.
- Tenute primarie speciali: FPM, FPM/PTFE.
- Possibilità di installare riduttore manuale.

***ON REQUEST:***
- *Disc: PVC-U, ABS, PP-H, PVDF.*
- *Seals: FPM, FPM/PTFE.*
- *Gear box.*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *PRESSURE/TEMPERATURE DIAGRAM*




## PORTATA/PERDITA DI CARICO E COEFFICIENTE NOMINALE KV
## *FLOW-PRESSURE LOSS DIAGRAM AND KV NOMINAL COEFFICIENT*

| | DN50 | DN65 | DN80 | DN100 | DN125 | DN150 | DN200 | DN250 | DN300 |
|---|---|---|---|---|---|---|---|---|---|
| Kv100 | 1470 | 2200 | 3000 | 6500 | 11500 | 16600 | 39600 | 51000 | 73000 |
| KV | 88,2 | 132 | 180 | 390 | 690 | 996 | 2376 | 3060 | 4380 |

KV100 litri al minuto *KV100 liters per minute*
KV metricubi/ora *KV cubic meters / hour*

Il valore Kv è il valore di portata in $m^3/h$ (con acqua a 15°C) che provoca la caduta di pressione di 1 bar. *Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

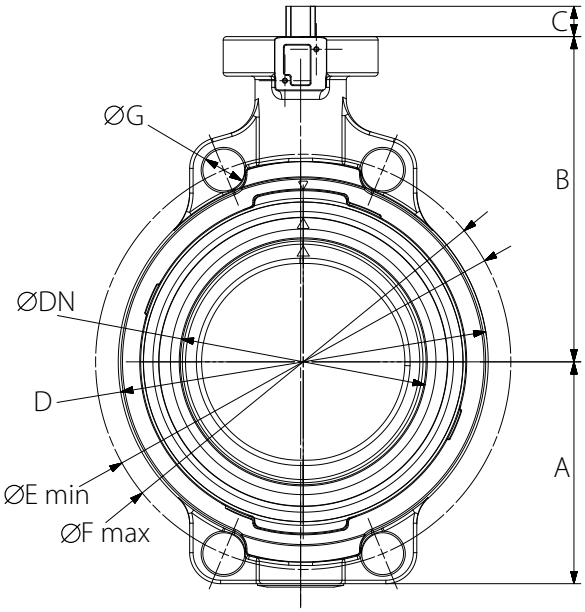
| COPPIE DI SPUNTO in Nm *BREAKAWAY TORQUES Nm* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MISURA** *SIZE* | DN 50 2" | DN 65 2"1/2 | DN 80 3" | DN 100 4" | DN 125 5" | DN 150 6" | DN 200 8" | DN 250 10" | DN 300 12" |
| PN 10 bar | 12 | 18 | 28 | 40 | 50 | 62 | 90 | 110 | 140 |

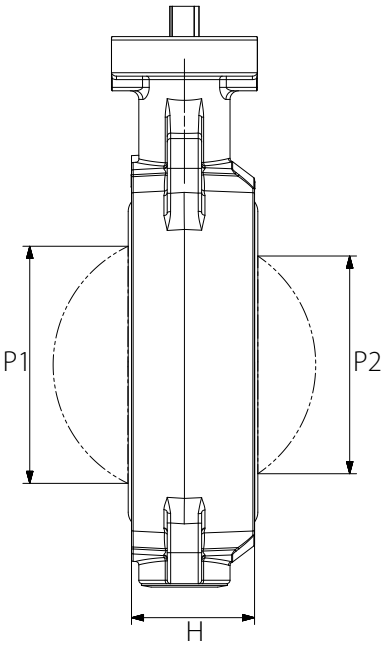
I valori della coppia possono variare in funzione della temperatura e del tipo di fluido. Considerare un fattore di sicurezza pari a 1,4.
Con frequenti cicli di apertura e chiusura la coppia di manovra può diminuire sensibilmente rispetto a quella iniziale. Gli accoppiamenti attuatore/valvola, riportati nelle pagine seguenti, sono realizzati per valvole che intercettano fluidi liquidi o gassosi, puliti e per medie temperature. Per maggiori informazioni, o utilizzi diversi, consultare il nostro ufficio commerciale.

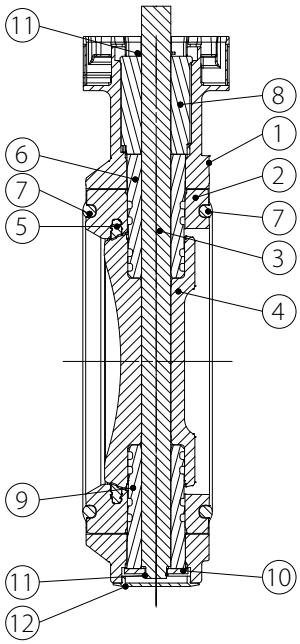
*Torque can vary depending on temperature and type of fluid; a safety factor of 1.4 must be applied. Torque can drop on high frequency of operations. The actuator/valve sizing, indicated on the following pages, are based for valves to be used with liquids or gaseous fluids, clean, and for medium temperatures. For further information, or different uses please contact our sales department.*

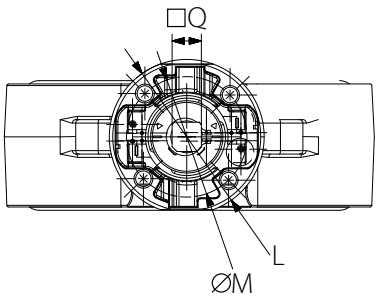
# ITEM 675
## PVC *PVC*
## ASSE LIBERO E CON LEVA *FREE SHAFT AND WITH LEVER*

| MISURA *SIZE* | | ASSE LIBERO *FREE SHAFT* | | CON LEVA *WITH LEVER* | |
|---|---|---|---|---|---|
| DN [mm] | [inch] | Asse libero *Free shaft* | Kg | Con leva *With lever* | Kg |
| DN 50 | 2" | V675PE69 | 0,8 | L675PE69 | 1,3 |
| DN 65 | 2"1/2 | V675PE70 | 0,9 | L675PE70 | 1,8 |
| DN 80 | 3" | V675PE71 | 1,1 | L675PE71 | 1,5 |
| DN 100 | 4" | V675PE72 | 2,1 | L675PE72 | 2,2 |
| DN 125 | 5" | V675PE73 | 2,3 | L675PE73 | 2,8 |
| DN 150 | 6" | V675PE74 | 3,3 | L675PE74 | 3,8 |
| DN 200 | 8" | V675PE75 | 5,2 | L675PE75 | 6,6 |
| DN 250 | 10" | V675PE76 | 11,8 | L675PE76 | 13 |
| DN 300 | 12" | V675PE77 | 16 | L675PE77 | 19,2 |



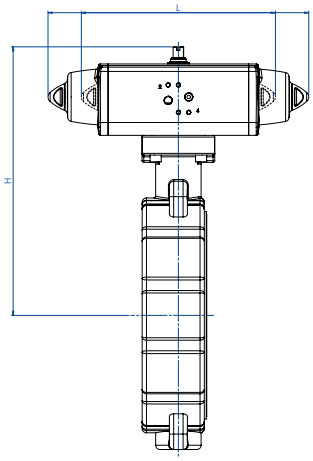

| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo *Body* | PP+GF30 |
| 2 | Corpo interno *Internal body* | PVC |
| 3 | Albero *Stem* | S.S. |
| 4 | Lente *Disc* | PVC |
| 5 | Guarnizione di tenuta *Gasket* | EPDM |
| 6 | Boccola superiore *Upper Bush* | PVC |
| 7 | Guarnizione flangia *Flange gasket* | EPDM |
| 8 | Boccola ferma stelo *Stem holder bush* | PP+GF30 |
| 9 | Boccola inferiore *Lower bush* | PVC |
| 10 | Rondella *Washer* | S.S. |
| 11 | Anello di bloccaggio *Retainer ring* | S.S. |
| 12 | Coperchio stelo *Shaft cover* | PE |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | | H | A | B | C | D | G | ØE min | ØF max | ØM | L | □Q | P1 | P2 |
| DN [mm] | [inch] | | | | | | | | | | | | | |
| DN 50 | 2" | 45 | 77 | 134 | 27 | 104 | 19 | 120 | 125 | 70 | 90 | 11 | 40 | 40 |
| DN 65 | 2" 1/2 | 46 | 83 | 140 | 27 | 115 | 19 | 140 | 145 | 70 | 90 | 11 | 54 | 35 |
| DN 80 | 3" | 49 | 89 | 146 | 27 | 131 | 19 | 150 | 160 | 70 | 90 | 11 | 67 | 50 |
| DN 100 | 4" | 56 | 104 | 167 | 16 | 161 | 19 | 175 | 191 | 70 | 90 | 14 | 88 | 74 |
| DN 125 | 5" | 64 | 117 | 181 | 16 | 187 | 23 | 210 | 216 | 70 | 90 | 14 | 113 | 97 |
| DN 150 | 6" | 72 | 130 | 189 | 19 | 215 | 24 | 241 | 241 | 70 | 90 | 17 | 139 | 123 |
| DN 200 | 8" | 73 | 158 | 210 | 19 | 267 | 23 | 290 | 295 | 70 | 90 | 17 | 178 | 169 |
| DN 250 | 10" | 113 | 205 | 264 | 40 | 329 | 25 | 353 | 362 | 102 | 125 | 22 | 210 | 207 |
| DN 300 | 12" | 113 | 228 | 285 | 40 | 379 | 25 | 400 | 432 | 102 | 125 | 22 | 256 | 253 |

# ITEM 675
## PVC *PVC*
## CON ATTUATORE *WITH ACTUATOR*








### CON ATTUATORE PNEUMATICO DOPPIO EFFETTO
### *WITH DOUBLE ACTING PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 50 | 2" | DG675PE69 | DAN0030411S | KCF055500 | 175 | 228 | 1,9 |
| DN 65 | 2"1/2 | DG675PE70 | DAN0030411S | KCF055500 | 175 | 234 | 2 |
| DN 80 | 3" | DG675PE71 | DAN0045412S | KCF055500 | 189 | 246 | 2,4 |
| DN 100 | 4" | DG675PE72 | DAN0060412S | KCF075505 | 198 | 258 | 3,7 |
| DN 125 | 5" | DG675PE73 | DAN0106411S | KCF075506 | 237 | 285 | 4,9 |
| DN 150 | 6" | DG675PE74 | DAN0106411S | KCF075505 | 237 | 293 | 5,9 |
| DN 200 | 8" | DG675PE75 | DAN0180411S | KCF075507 | 290 | 348 | 10 |
| DN 250 | 10" | DG675PE76 | DAN0180411S | KCF075501 | 290 | 402 | 16,7 |
| DN 300 | 12" | DG675PE77 | DAN0240411S | KCF075501 | 314 | 427 | 21,7 |

### CON ATTUATORE PNEUMATICO SEMPLICE EFFETTO
### *WITH SPRING RETURN PNEUMATIC ACTUATOR*

| MISURA *SIZE* | | ARTICOLO *ITEM CODE* | ATTUATORE *ACTUATOR* | KIT montaggio *Mounting KIT* | L [mm] | H [mm] | Kg |
|---|---|---|---|---|---|---|---|
| DN [mm] | [inch] | | | | | | |
| DN 50 | 2" | SG675PE69 | SRN0030402S | KCF055502 | 259 | 239 | 2,9 |
| DN 65 | 2"1/2 | SG675PE70 | SRN0030402S | KCF055502 | 259 | 245 | 3 |
| DN 80 | 3" | SG675PE71 | SRN0053401S | KCF055503 | 304 | 265 | 4,2 |
| DN 100 | 4" | SG675PE72 | SRN0060401S | KCF075506 | 339 | 275 | 5,5 |
| DN 125 | 5" | SG675PE73 | SRN0090401S | KCF075724 | 394 | 319 | 8,3 |
| DN 150 | 6" | SG675PE74 | SRN0120401S | KCF075507 | 410 | 327 | 10,2 |
| DN 200 | 8" | SG675PE75 | SRN0180401S | KCF075507 | 474 | 358 | 14,3 |
| DN 250 | 10" | SG675PE76 | SRN0180401S | KCF075501 | 474 | 412 | 21,2 |
| DN 300 | 12" | SG675PE77 | SRN0240401S | KCF075504 | 521 | 451 | 28,2 |

Dimensionamento degli attuatori pneumatici fatto considerando una pressione minima di alimentazione pari a 5,6 barg. *Sizing of pneumatic actuators by minimum pressure rate 5,6 barg.*

A richiesta, articoli disponibili anche con attuatori elettrici.
*On request, items available also with electric actuators.*





DVGW CERT

DIN-DVGW-Baumusterprüfzertifikat

DIN-DVGW type examination certificate

NG-4313BU0007

| | |
|---|---|
| Anwendungsbereich / field of application | Produkte der Gasversorgung / products of gas supply |
| Zertifikatinhaber / owner of certificate | OMAL S.p.A. Via Ponte Nuovo, 11, I-25050 Rodengo Saiano (BS) |
| Vertreiber / distributor | OMAL S.p.A. Via Ponte Nuovo, 11, I-25050 Rodengo Saiano (BS) |
| Produktart / product category | Gasarmaturen: Absperrarmatur <= PN 16 (4313) |
| Produktbezeichnung / product description | Gas-Absperrklappe in Zwischenflanschausführung mit Ringgehäuse (LUG- bzw. Wafer-Gehäuse) |
| Modell / model | V375/376/385/386XN... |
| Prüfberichte / test reports | Kontrollprüfung Labor: 17/1163/4313/235 vom 07.09.2017 (EBI) |
| Prüfgrundlagen / test basis | DIN EN 13774 (01.05.2013) |
| Ablaufdatum / AZ / date of expiry / file no. | 19.01.2024 / 18-1001-GNV |

09.01.2019 Rie A-1/2

DAkkS

## ▲ DVGW GAS

Certificazione dei materiali, della progettazione, della produzione e del collaudo di valvole a farfalla per sistemi di distribuzione di gas in accordo alla norma UNI EN 13774.

*Certification of materials, design, production and testing of valves for gas distribution systems in accordance with EN 13774 requirements.*



Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

INERIS

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura : BUTTERFLY VALVES

Type(s) / Type(s) / Tipo(i) : WAFER TYPE, LUG TYPE ITEM 375-376-377-385-386-387

Marquage / Marking / Marcatura : II 2 GD

Dépositaire / Applicant / Richiedente : OMAL S.p.A. Via Ponte Nuovo 11 I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 february 2014, acknowledges receipt of file according to the procedure described chapiter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VF-19 dated 25/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035349/19.

The technical documentation referenced : VF-19 dated 25/10/2019 Is consigned under the reference : no INERIS-EQEN 035349/19.

La documentazione tecnica di riferimento : VF-19 dated 25/10/2019 è depositata con il numero di registrazione n° INERIS-EQEN 035349/19.

Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.26

Validity completion date : 2029.11.26

Data di fine di validità : 2029.11.26

Verneuil-en-Halatte, le 2019.11.26

Le Directeur Général de l'INERIS, Par délégation,

The Chief Executive Officer of INERIS, By delegation,

Il Direttore generale dell' INERIS, Per Delega,

Ce document ne peut être reproduit que dans son intégralité / Only the entire document may be reprinted / Questo documento può essere riprodotto solo integralmente

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Etablissement public à caractère industriel et commercial - RCS Compiègne B 381 984 924 - Siret 381 984 921 00019 - APE 7120B - TVA Intracom FR 73 381 984 921

## ▲ ATEX

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



TYPE APPROVAL CERTIFICATE
No. MAC242716CS

This is to certify that the product identified below is in compliance with the regulations herewith specified.

| | |
|---|---|
| Description | BUTTERFLY VALVES |
| Type | WAFER/LUG TYPE |
| Applicant | OMAL S.P.A SAN LORENZO, 70 25069 VILLA CARCINA (BS) ITALY |
| Manufacturer / Place of manufacture | OMAL S.P.A SAN LORENZO, 70 25069 VILLA CARCINA (BS) ITALY |
| Reference standards | Part C, Chapter 1, Section 10 of RINA Rules |

Issued in Genoa on August 5, 2016. This Certificate is valid until August 4, 2021

RINA Services S.p.A.
Francesco Sciacca

This Certificate annuls and replace the previous one No. MAC420810CS dated 17 February 2011.
This Certificate consists of this page and 1 enclosure

## ▲ RINA

Certificazione di conformità del prodotto al Regolamento del RINA, Registro Navale Italiano, per l'installazione di valvole a farfalla a bordo di navi classificate con RINA.

*Certification of compliance of the product with the Technical Rules of RINA for butterfly valve installation on board ship classified with RINA.*



PASCAL

CERTIFICATO DI CONFORMITA'
*CONFORMITY CERTIFICATE*
N. 00004PED04001HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
*Consorzio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115*

ATTESTA
*ATTESTS*
che il sistema qualità adottato da
*that the quality system operated by*

FABBRICANTE / *MANUFACTURER*: OMAL S.p.A. Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA

Indirizzo Sede Operativa / *Operational Office Address*: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, modulo H, della Direttiva 2014/68/UE.
*for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE*

AUTORIZZA
*AUTHORIZES*

ad apporre, sui prodotti di seguito specificati, il marchio CE 1115
*to provide the above mentioned products, the mark*

ACCESSORI A PRESSIONE / *PRESSURE ACCESSORIES*: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO / *BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES*

Modelli coperti / *Covered models*: Vedere elenco riportato in Appendice A / *See list in Appendix A*

Rapporti di valutazione / *Evaluation Reports*: 004_ROG_2018_07_22, 004_RAO_2019_09_13

CONDIZIONI DI VALIDITA' / *VALIDITY TERMS AND CONDITIONS*

ACCREDIA

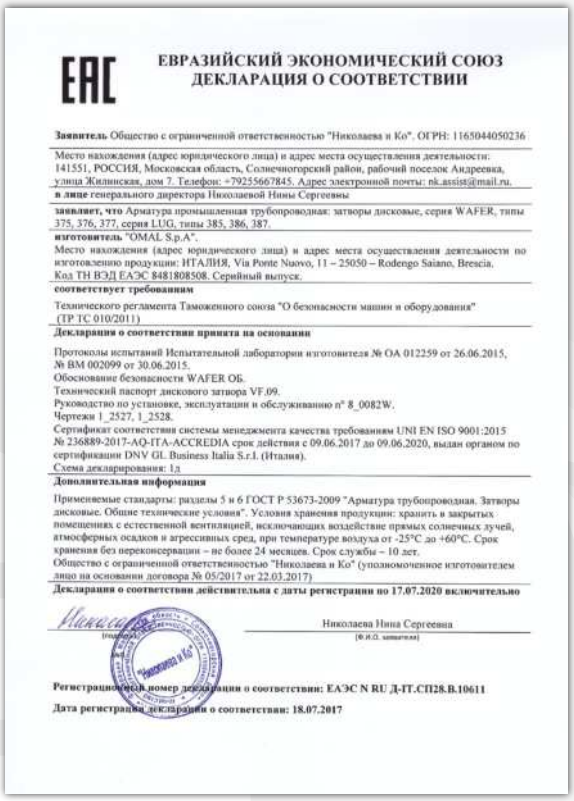
| Prima Emissione / *First Issue* | Emissione corrente / *Current Issue* | Data di Scadenza / *Expiring date* |
|---|---|---|
| 18/09/2007 | 18/09/2019 | 17/09/2022 |

Consorzio PASCAL srl

## ▲ PED

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко". ОГРН: 1165044050236

Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +79255667845. Адрес электронной почты: nk.assist@mail.ru.

**в лице** генерального директора Николаевой Нины Сергеевны

**заявляет, что** Арматура промышленная трубопроводная: затворы дисковые, серия WAFER, типы 375, 376, 377, серия LUG, типы 385, 386, 387.

**изготовитель** "OMAL S.p.A".

Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.

Код ТН ВЭД ЕАЭС 8481808508. Серийный выпуск.

**соответствует требованиям**

Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)

**Декларация о соответствии принята на основании**

Протоколы испытаний Испытательной лаборатории изготовителя № ОА 012259 от 26.06.2015, № ВМ 002099 от 30.06.2015.
Обоснование безопасности WAFER OБ.
Технический паспорт дискового затвора VF.09.
Руководство по установке, эксплуатации и обслуживанию n° 8_0082W.
Чертежи 1_2527, 1_2528.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 № 236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д

**Дополнительная информация**

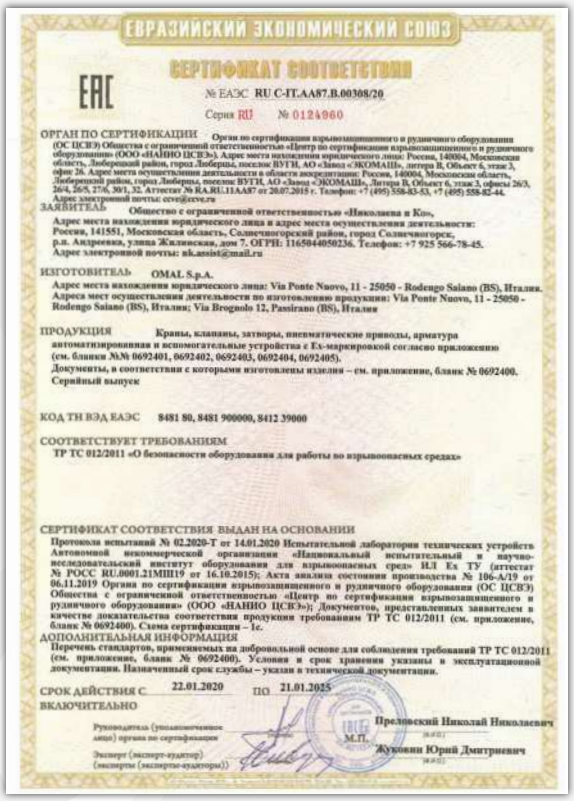
Применяемые стандарты: разделы 5 и 6 ГОСТ Р 53673-2009 "Арматура трубопроводная. Затворы дисковые. Общие технические условия". Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -25°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 10 лет.
Общество с ограниченной ответственностью "Николаева и Ко" (уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017)

**Декларация о соответствии действительна с даты регистрации по 17.07.2020 включительно**

Николаева Нина Сергеевна
(Ф.И.О. заявителя)

**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10611**

**Дата регистрации декларации о соответствии: 18.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ

№ ЕАЭС RU C-IT.АА87.В.00308/20
Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: ccve@ccve.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко».
Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A.
Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия.
Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405).
Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400.
Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ
ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ
Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ
Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации — Пролевский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC EX**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФІКАТ ЕКСПЕРТИЗИ ЗРАЗКА / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034 2322-17

Термін дії з 25.07.2017 р. до 03.09.2020 р.

Сертифікат видано 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Продукція Затвори дискові (без електричного обладнання), серій Wafer, Lug, типів: 375-376- 377, 385-386-387 8481

Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT)
Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі

Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Італія

Додаткова інформація

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ"
Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.

На підставі Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ 'ПРОМТЕСТ'

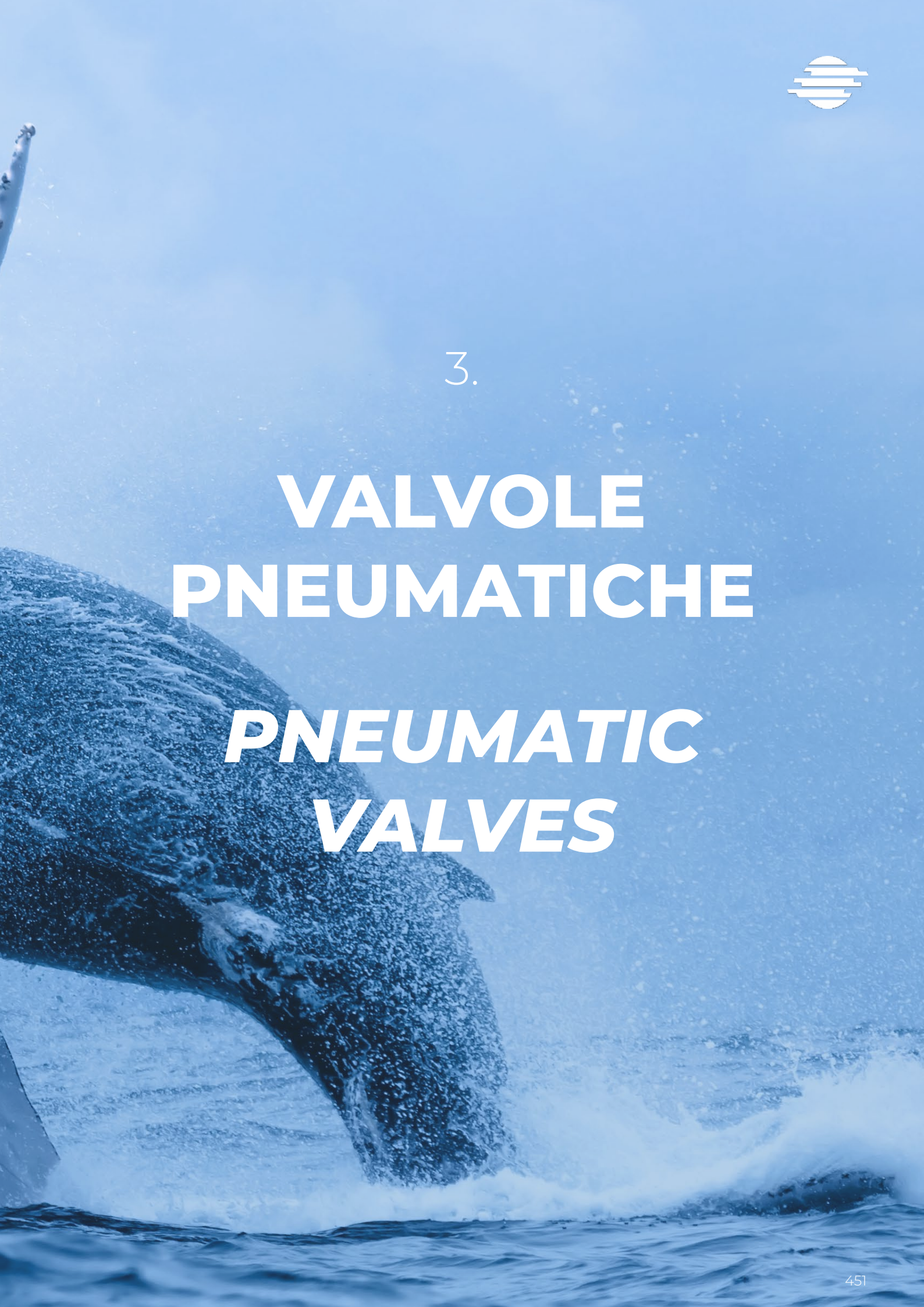
Керівник органу з оцінки — Самотой В.І.
М.П. M.U. Stamp

**▲ UKR**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.

*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*





3.

# VALVOLE PNEUMATICHE

# *PNEUMATIC VALVES*

# VALVOLE PNEUMATICHE · INDICE


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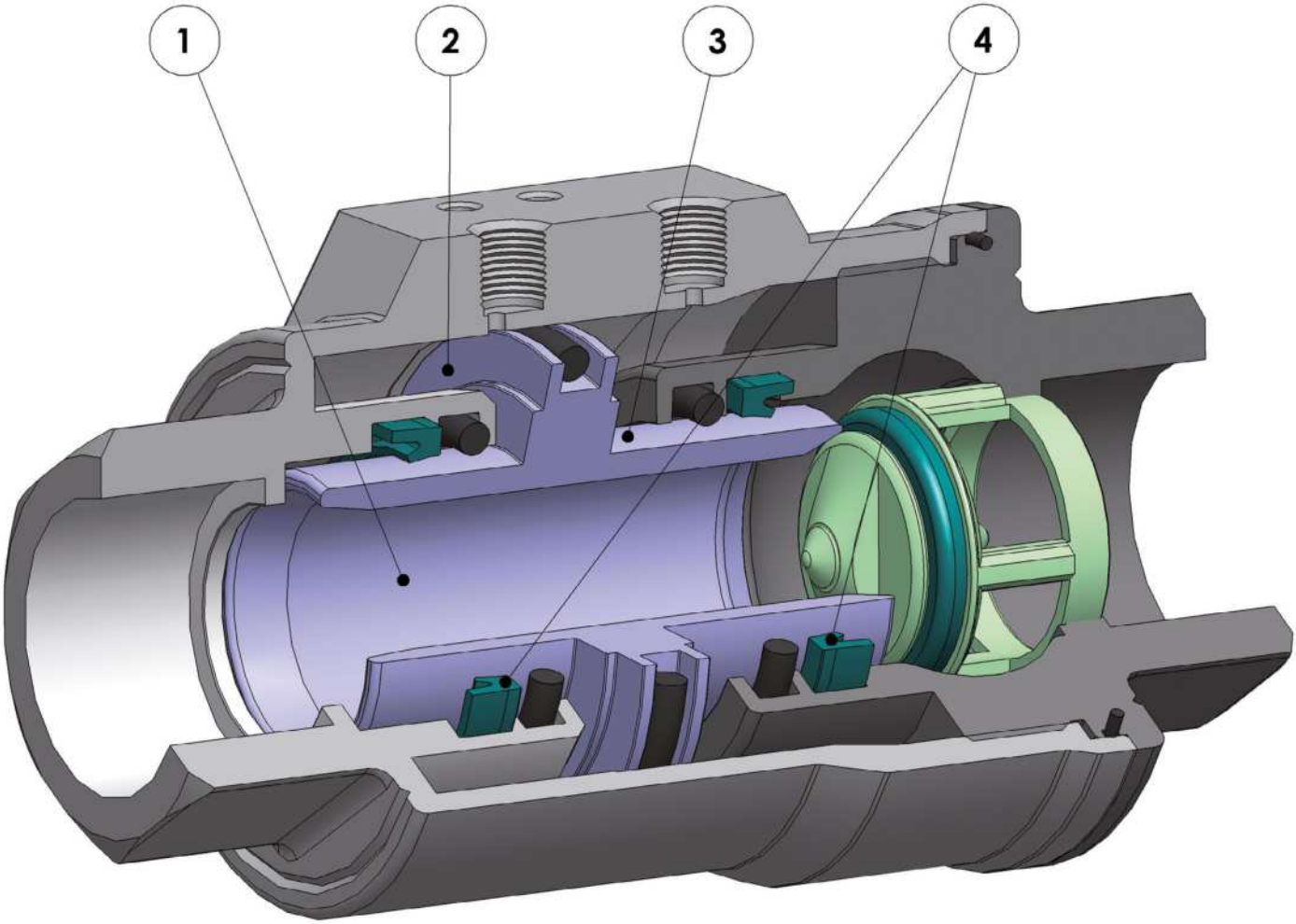
3.1

# VIP

# VIP

## VALVOLA DI INTERCETTAZIONE PNEUMATICA

## *PNEUMATIC COAXIAL VALVE*



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Diametro di passaggio interno uguale al diametro di passaggio del tubo<br>*Internal diameter equal to the diameter of the pipe* | Passaggio totale del fluido<br>*High flow capacity* |
| 2 | Attuatore e valvola integrati in un unico prodotto<br>*Pneumatic actuator integrated in the valve* | Minor ingombro (-60%) e costi ridotti rispetto ad una valvola attuata<br>*Space saving (-60%) and reduced costs compared to an automated valve* |
| 3 | Pistone con nichelatura chimica (20-25 micron)<br>*Piston with chemical nickel plating (20-25 micron)* | Maggior protezione contro gli agenti corrosivi<br>*High corrosion resistance* |
| | | Minor usura delle guarnizioni grazie all'aumento di durezza superficiale (400 -550 HV)<br>*Lower wear of the seals due to the increase of the surface hardness (400 -550 HV)* |
| 4 | Guarnizioni a labbro<br>*Lip seals* | Minor usura della guarnizione rispetto ad un o-ring<br>*Less wear of the seal comparing with an o-ring* |
| | Varie guarnizioni di tenuta<br>*Several seal materials available* | Massima compatibilità con diverse tipologie di fluidi a seconda della guarnizione montata (EPDM, NBR, FKM)<br>*Maximum compatibility with different types of fluids depending by the seals used* |
| | Assenza di parti mobili esterne<br>*No external moving parts* | Rischi di infortuni ridotti<br>*Maximum safety* |
| | | Facilità di montaggio in ogni posizione<br>*Easy mounting* |
| | Lunga vita garantita<br>*Long life time granted* | Durata 10 volte superiore rispetto alla valvola a sfera con costi di manutenzione ridotti<br>*Lifetime 10 times longer than a ball valve with with reduced maintenance costs* |
| | Processo produttivo interamente realizzato in OMAL<br>*100% in- house manufacturing process technology* | Massimo controllo in tutte le fasi di lavorazione<br>*Maximum control and accuracy in all the stages of the manufacturing process* |
| | Minor consumo d'aria<br>*Less Air consumption* | Risparmio d'aria pari ad un 80% rispetto ad una valvola attuata con attuatore semplice effetto con conseguente minor carico di lavoro del compressore o possibilità di utilizzo di un compressore con dimensioni ridotte<br>*80% less air consumption compared to an actuated valve with SR pneumatic actuator therefore less load on the compressor or the possibility of using a smaller compressor's size.* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is allowed in a potential explosive environment* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |

# VIP

# VALVOLA DI INTERCETTAZIONE PNEUMATICA

## *PNEUMATIC COAXIAL VALVE*




### CARATTERISTICHE GENERALI:

- Disponibile nelle versioni doppio effetto "DA" e semplice effetto "SR" (sia normalmente aperto sia normalmente chiuso) con misure da 3/8" a 2".
- Flusso unidirezionale.
- Attacchi filettati GAS EN 10226-1 Rp (Ex ISO 7/1) - DIN 2999 (a richiesta filetti NPT) con connessioni del fluido di comando secondo interfaccia NAMUR.
- L'ottimizzazione della fluidodinamica interna ha consentito la realizzazione di un condotto con perdite di carico ridotte al minimo: vedi diagramma portate.
- Possibilità di utilizzo in qualsiasi posizione di montaggio (orizzontale, verticale, obliqua).
- Disponibile con guarnizioni NBR, FKM ed EPDM:
  NBR: compatibile con aria, gas, olii, acqua, etc.
  FKM: ottima compatibilità con la maggior parte dei fluidi. Sconsigliato per il vapore.
  EPDM: ottima compatibilità con acqua calda e vapore. Non compatibile con prodotti minerali (olii, grassi etc.).
- Per gas, fluidi esplosivi e maggiori informazioni sulla compatibilità dei materiali si prega di consultare il nostro ufficio commerciale.
- Possibilità di segnalare l'apertura o chiusura della valvola tramite l'applicazione di finecorsa induttivi a contatto magnetico esterni (disponibili a richiesta). Previo acquisto della versione VIP con magnete interno, da specificare in fase d'ordine.
- **Conforme alla direttiva Europea 2014/68/UE "PED"**
- **Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.**

### *GENERAL FEATURES:*

- *Both Double Acting and Spring Return VIP valves (either Normally Open or Normally Closed) are available in sizes ranging from 3/8" to 2".*
- *Unidirectional flow.*
- *GAS threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) - DIN 2999 (NPT threads on request) with control fluid connections as per NAMUR interface.*
- *Improved fluid dynamics allow minimum pressure losses. See Flow Pressure Diagram.*
- *VIP valves can be used in any mounting position (horizontal, vertical or oblique).*
- *They can be provided with seals in NBR, FKM or EPDM:*
  *NBR: suitable for air, gas, oils, water etc.*
  *FKM: perfectly suitable for most fluid. Unsuitable for steam.*
  *EPDM: perfectly suitable for hot water and steam. Unsuitable for mineral products (oils, grease, etc.).*
- *For further information about gas, explosive fluids, material compatibilities etc. please contact our sales department.*
- *Possibility to check open / close valve position thanks to inductive limit switches (magnetic contact) available on request. Internal magnet needs to be requested at VIP order phase.*
- ***According to 2014/68/EU "PED"***
- ***2014/34/EU ATEX configuration to request at time of order.***

### FLUIDO DI COMANDO:

- Aria compressa filtrata non necessariamente lubrificata; con temperature da -20°C a 0°C usare aria secca.
- In caso di lubrificazione usare olio compatibile con le guarnizioni impiegate.
- Pressione di comando: min. 3 bar; max. 8 bar nella versione doppio effetto - min. 4,2 bar; max. 8 bar nelle versioni semplice effetto.

### *CONTROL MEDIA:*

- *Filtered compressed air, not necessarily lubricated. At temperatures from -20°C to 0°C, use dry air.*
- *In case of lubricated air, seal compatible oil must be used.*
- *Air supply: 3 bar min.- 8 bar max. in Double Acting execution. 4,2 bar min.- 8 bar max. in Spring Return execution.*

### FLUIDO INTERCETTATO:

- Pressione: max. 10 bar, vedere diagramma.
- Temperatura: da -20°C a +80°C (NBR); da -20°C a +150°C (FKM); da -20°C a +150°C (EPDM).
- Tenuta al vuoto: 97% vuoto (circa 30 mbar assoluti, -980 mbarg).

### *OPERATING MEDIA:*

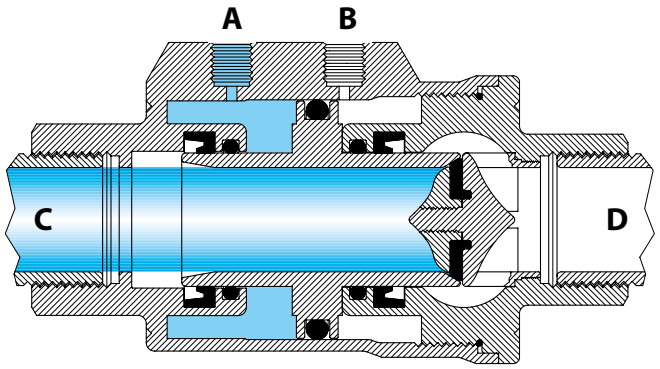
- *Pressure: 10 bar max, see diagram.*
- *Temperature: from -20°C to +80°C (NBR); from -20°C to +150°C (FKM); from -20°C to +150°C (EPDM).*
- *Vacuum tightness: 97% vacum (about 30 mbar absolut, -980 mbarg).*

**Principio di funzionamento**
La valvola di intercettazione pneumatica VIP (di esclusivo brevetto OMAL) é, a tutti gli effetti, una valvola automatica che raggruppa, in un unico dispositivo, sia il meccanismo di intercettazione (tra il condotto C-D) che quello di comando (A-B).
Il principio di funzionamento si basa sul movimento interno di un pistone dovuto alla pressione del fluido di comando. Il pistone, esaurita la sua corsa (VIP é una valvola on/off), preme o si stacca dalla guarnizione del seggio di tenuta, consentendo o impedendo il passaggio del liquido intercettato. Dato che la tenuta é realizzata sul seggio e le pressioni del fluido intercettato si scaricano sul medesimo, la pressione necessaria al movimento del pistone risulta indipendente da quella del fluido intercettato. Questo ha permesso di contenere i pesi e gli ingombri e di garantire un altissimo numero di manovre di apertura e chiusura. La valvola é a passaggio totale e l'accurato studio della fluidodinamica interna consente di ridurre al minimo le turbolenze e le perdite di carico.

***Working principle***
*A VIP valve (patented by OMAL exclusively) is a proper automatic valve embodying both interception device (between pipe C-D) and control device (A-B). It works thanks to the internal movement of a piston supplied with air. At the end of its stroke (a VIP valve is an ON/OFF valve), the piston presses on the seat seal or moves away from it letting the intercepted fluid flow or stopping it from flowing. As the seat is perfectly tight and the intercepted fluid pressures discharge on it, the pressure necessary to move the piston is completely independent of the fluid pressure. As a result OMAL has been able to design a light space saving and lasting valve. Its full bore and its improved internal dynamics allow minimum pressure losses, too.*

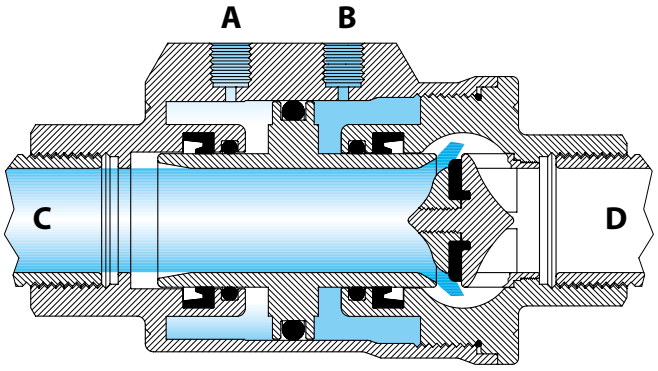
**Valvola chiusa**
Immettendo aria nel foro di comando "**A**" (il foro "**B**" deve essere a scarico) il pistone, esaurita la sua corsa, preme sulla guarnizione del seggio di tenuta: la valvola é chiusa.
Nelle versioni SEMPLICE EFFETTO N.C. la molla é alloggiata nella camera "**A**" questo fa si che, in mancanza di comando, il pistone sia a contatto con la guarnizione del seggio di tenuta: la posizione preferenziale é quindi quella chiusa.

***Closed valve***
*Supplying the hole "**A**" with air (the hole "**B**" must be discharging) at the end of its stroke the piston presses on the seat seal: the valve is closed.*
*As in Spring Return N.C. executions the spring is in "**A**", if there is no control, the piston will touch the seat seal: therefore, the preferable position is the closed one.*



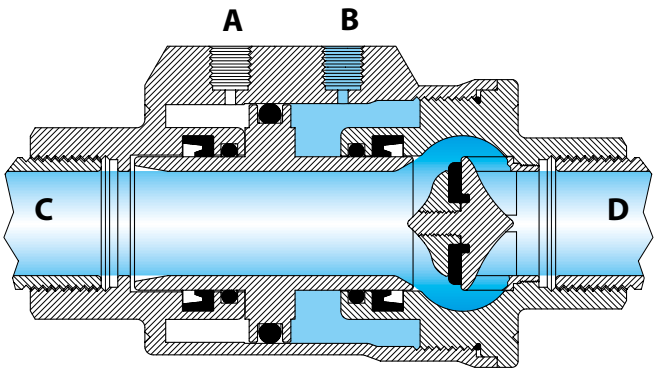

**Fase transitoria**
Durante la fase transitoria (la figura indica il transitorio di apertura della versione DOPPIO EFFETTO) viene data pressione a uno dei due fori di alimentazione. Il pistone si muove assialmente modificando lo stato di apertura o chiusura preesistente. Nella versione SEMPLICE EFFETTO N.C. la chiusura viene determinata dalla molla (in assenza di comando). Nella versione SEMPLICE EFFETTO N.A. l'apertura viene determinata dalla molla (in assenza di comando). La fase transitoria sia in apertura che in chiusura ha una durata inferiore al secondo.

***Transitionary phase***
*During the transitionary phase (the picture shows the opening transition in a Double Acting execution), one of the two holes is supplied. The piston moves axially changing the previous closed or open state. In Spring Return N.C. executions, the closing is caused by the spring (if there is no control). In Spring Return N.O. executions, the opening is caused by the spring (if there is no control).*
*Both opening and closing transitionary phases last less than a second.*

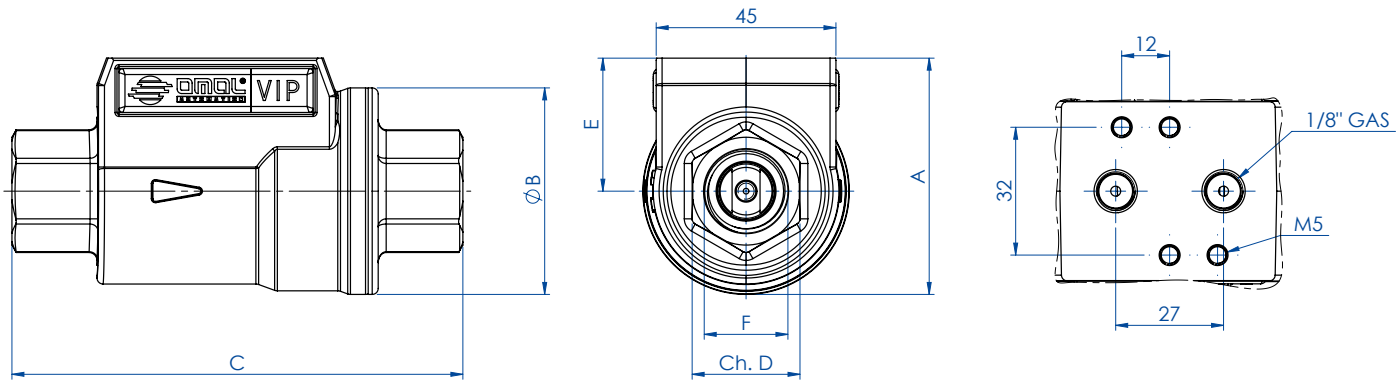



**Valvola aperta**
Immettendo aria nel foro di alimentazione "**B**" (il foro "**A**" deve essere a scarico) il pistone, esaurita la sua corsa, si trova alla massima distanza dal seggio di tenuta: la valvola é aperta.
Nelle versioni SEMPLICE EFFETTO N.A. la molla é alloggiata nella camera "**B**" questo fa si che, in mancanza di comando, il pistone sia lontano dal seggio di tenuta: la posizione preferenziale é quindi quella aperta.

***Opened valve***
*Supplying the hole "**B**" with air (the hole "**A**" must be discharging) at the end of its stroke the piston is at maximum distance from the seat seal: the valve is open.*
*As in Spring Return N.O. executions the spring is in "**B**", if there is no control, the piston will be away from the seat seal: therefore, the preferable position is the open one.*



# VIP




| DIMENSIONI *DIMENSIONS* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DN diametro nominale *DN nominal diameter* mm.** | **10** | **15** | **20** | **25** | **32** | **40** | **50** |
| **misura *size F GAS.*** | **3/8"** | **1/2"** | **3/4"** | **1"** | **1"1/4** | **1"1/2** | **2"** |
| passaggio *bore* mm. | 10 | 15 | 20 | 25 | 32 | 40 | 50 |
| A mm. | 54 | 60 | 70 | 76 | 92 | 102 | 115 |
| øB mm. | 46 | 51,7 | 63,5 | 69 | 86 | 96 | 109 |
| C mm. | 98 | 112 | 135 | 143 | 165 | 180 | 207 |
| ch. D mm. | 22 | 27 | 33 | 41 | 50 | 60 | 75 |
| E mm. | 31 | 34 | 39 | 42 | 49 | 54 | 60 |
| aria doppio effetto *double acting air* $dm^3$/cycle | 0,024 | 0,035 | 0,063 | 0,080 | 0,150 | 0,219 | 0,310 |
| aria semplice effetto *spring return air* $dm^3$/cycle | 0,012 | 0,017 | 0,031 | 0,040 | 0,075 | 0,109 | 0,155 |
| peso doppio effetto "DA" *weight double acting "DA"* Kg. | 0,80 | 1 | 1,59 | 1,8 | 3,13 | 3,5 | 5,5 |
| peso semplice effetto "SR" *weight spring return "SR"* Kg. | 0,85 | 1,05 | 1,69 | 1,88 | 3,41 | 3,7 | 5,8 |

| CODICI VIP CON GUARNIZIONI NBR *VIP CODE WITH SEALING IN NBR* | | | | | | | |
|---|---|---|---|---|---|---|---|
| codice VIP doppio effetto "DA" *VIP code double acting "DA"* | VDA10003 | VDA10004 | VDA10005 | VDA10006 | VDA10007 | VDA10008 | VDA10009 |
| codice VIP DA+1 finecorsa *VIP code DA+1 limit switch* | VDA10603 | VDA10604 | VDA10605 | VDA10606 | VDA10607 | VDA10608 | VDA10609 |
| codice VIP DA+2 finecorsa *VIP code DA+2 limit switches* | VDA10703 | VDA10704 | VDA10705 | VDA10706 | VDA10707 | VDA10708 | VDA10709 |
| codice VIP semplice effetto"SR"N.A. *VIP code spring return"SR"N.O.* | VNA10003 | VNA10004 | VNA10005 | VNA10006 | VNA10007 | VNA10008 | VNA10009 |
| codice VIP "SR"N.A.+1 finecorsa *VIP code "SR"N.O.+1 limit switch* | VNA10603 | VNA10604 | VNA10605 | VNA10606 | VNA10607 | VNA10608 | VNA10609 |
| codice VIP "SR" N.A.+2 finecorsa *VIP code "SR"N.O.+2 limit switches* | VNA10703 | VNA10704 | VNA10705 | VNA10706 | VNA10707 | VNA10708 | VNA10709 |
| codice VIP semplice effetto"SR"N.C. *VIP code spring return "SR"N.C.* | VNC10003 | VNC10004 | VNC10005 | VNC10006 | VNC10007 | VNC10008 | VNC10009 |
| codice VIP "SR"N.C.+1 finecorsa *VIP code"SR"N.C.+1 limit switch* | VNC10603 | VNC10604 | VNC10605 | VNC10606 | VNC10607 | VNC10608 | VNC10609 |
| codice VIP "SR"N.C.+2 finecorsa *VIP code "SR"N.C.+2 limit switches* | VNC10703 | VNC10704 | VNC10705 | VNC10706 | VNC10707 | VNC10708 | VNC10709 |
| Kit guarnizioni di ricambio *Spare seals KIT* | KGVN0103 | KGVN0104 | KGVN0105 | KGVN0106 | KGVN0107 | KGVN0108 | KGVN0109 |

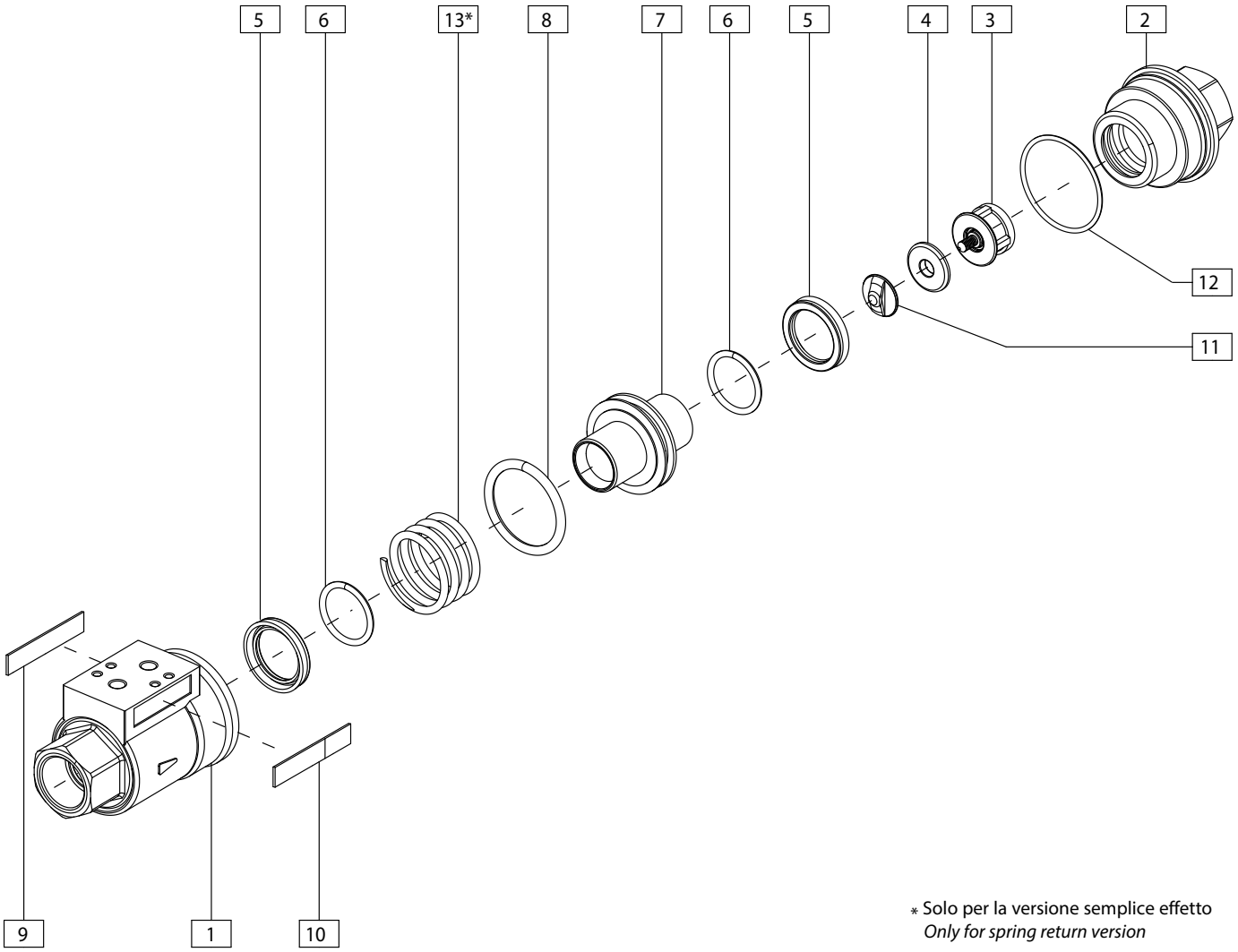
| CODICI VIP CON GUARNIZIONI FKM *VIP CODE WITH SEALING IN FKM* | | | | | | | |
|---|---|---|---|---|---|---|---|
| codice VIP doppio effetto "DA" *VIP code double acting "DA"* | VDA20003 | VDA20004 | VDA20005 | VDA20006 | VDA20007 | VDA20008 | VDA20009 |
| codice VIP DA+1 finecorsa *VIP code DA+1 limit switch* | VDA20603 | VDA20604 | VDA20605 | VDA20606 | VDA20607 | VDA20608 | VDA20609 |
| codice VIP DA+2 finecorsa *VIP code DA+2 limit switch* | VDA20703 | VDA20704 | VDA20705 | VDA20706 | VDA20707 | VDA20708 | VDA20709 |
| codice VIP semplice effetto"SR"N.A. *VIP code spring return "SR"N.O.* | VNA20003 | VNA20004 | VNA20005 | VNA20006 | VNA20007 | VNA20008 | VNA20009 |
| codice VIP"SR" N.A.+1 finecorsa *VIP code "SR" N.O.+1 limit switch* | VNA20603 | VNA20604 | VNA20605 | VNA20606 | VNA20607 | VNA20608 | VNA20609 |
| codice VIP "SR" N.A.+2 finecorsa *VIP code "SR" N.O.+2 limit switches* | VNA20703 | VNA20704 | VNA20705 | VNA20706 | VNA20707 | VNA20708 | VNA20709 |
| codice VIP semplice effetto"SR"N.C. *VIP code spring return"SR" N.C.* | VNC20003 | VNC20004 | VNC20005 | VNC20006 | VNC20007 | VNC20008 | VNC20009 |
| codice VIP "SR" N.C.+1 finecorsa *VIP code "SR" N.C.+1 limit switch* | VNC20603 | VNC20604 | VNC20605 | VNC20606 | VNC20607 | VNC20608 | VNC20609 |
| codice VIP "SR"N.C.+2 finecorsa *VIP code"SR"N.C.+2 limit switches* | VNC20703 | VNC20704 | VNC20705 | VNC20706 | VNC20707 | VNC20708 | VNC20709 |
| Kit guarnizioni di ricambio *Spare seals KIT* | KGVV0103 | KGVV0104 | KGVV0105 | KGVV0106 | KGVV0107 | KGVV0108 | KGVV0109 |

| CODICI VIP CON GUARNIZIONI IN FKM USO OSSIGENO *CODE WITH FKM SEALS OXYGEN USE* | | | | | | | |
|---|---|---|---|---|---|---|---|
| Versione sgrassata per ossigeno *Degreased execution for oxygen applications* | VNC90503 | VNC90504 | VNC90505 | VNC90506 | VNC90507 | VNC90508 | VNC90509 |

| CODICI VIP CON GUARNIZIONI EPDM *VIP CODE WITH SEALING IN EPDM* | | | | | | | |
|---|---|---|---|---|---|---|---|
| codice VIP doppio effetto "DA" *VIP code double acting "DA"* | VDA30003 | VDA30004 | VDA30005 | VDA30006 | VDA30007 | VDA30008 | VDA30009 |
| codice VIP DA+1 finecorsa *VIP code DA+1 limit switch* | VDA30603 | VDA30604 | VDA30605 | VDA30606 | VDA30607 | VDA30608 | VDA30609 |
| codice VIP DA+2 finecorsa *VIP code DA+2 limit switch* | VDA30703 | VDA30704 | VDA30705 | VDA30706 | VDA30707 | VDA30708 | VDA30709 |
| codice VIP semplice effetto"SR"N.A. *VIP code spring return "SR"N.O.* | VNA30003 | VNA30004 | VNA30005 | VNA30006 | VNA30007 | VNA30008 | VNA30009 |
| codice VIP "SR" N.A.+1 finecorsa *VIP code "SR" N.O.+1 limit switch* | VNA30603 | VNA30604 | VNA30605 | VNA30606 | VNA30607 | VNA30608 | VNA30609 |
| codice VIP "SR"N.A.+2 finecorsa *VIP code "SR"N.O.+2 limit switches* | VNA30703 | VNA30704 | VNA30705 | VNA30706 | VNA30707 | VNA30708 | VNA30709 |
| codice VIP semplice effetto"SR"N.C. *VIP code spring return"SR"N.C.* | VNC30003 | VNC30004 | VNC30005 | VNC30006 | VNC30007 | VNC30008 | VNC30009 |
| codice VIP "SR"N.C.+1 finecorsa *VIP code "SR"N.C.+1 limit switch* | VNC30603 | VNC30604 | VNC30605 | VNC30606 | VNC30607 | VNC30608 | VNC30609 |
| codice VIP "SR"N.C.+2 finecorsa *VIP code "SR"N.C.+2 limit switches* | VNC30703 | VNC30704 | VNC30705 | VNC30706 | VNC30707 | VNC30708 | VNC30709 |
| Kit guarnizioni di ricambio *Spare seals KIT* | KGVE0103 | KGVE0104 | KGVE0105 | KGVE0106 | KGVE0107 | KGVE0108 | KGVE0109 |

**Per tutti i modelli, la versione ATEX si ottiene aggiungendo YX alla fine del codice**
***For all the models, to create the ATEX code please add YX at the end of the standard version code***

# VIP




* Solo per la versione semplice effetto
*Only for spring return version*

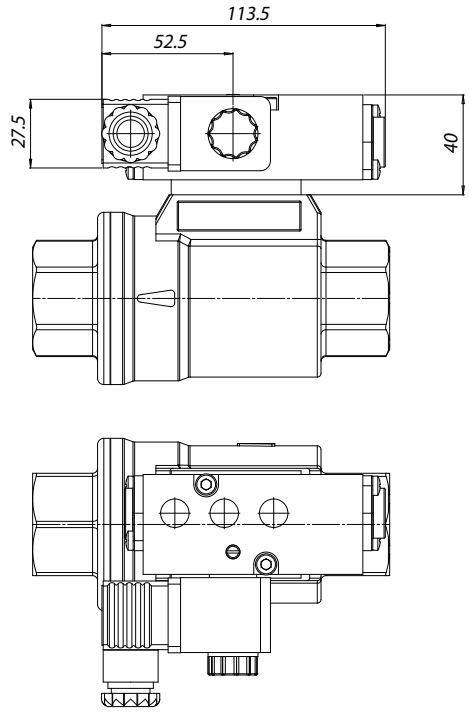


| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| **Pos.** | **Denominazione *Description*** | **Q.ty** | **Materiale *Material*** | **Normativa Trattamento *Standard Treatment*** |
| 1 | corpo *body* | 1 | ottone *brass* | EN 12165 CW617N - nichelato *nickel plated* |
| 2 | manicotto *sleeve* | 1 | ottone *brass* | EN 12165 CW617N - nichelato *nickel plated* |
| 3 | seggio di tenuta *seat* | 1 | ottone *brass* | EN 12165 CW617N - nichelato *nickel plated* |
| 4** | guarnizione di battuta *seat-seal* | 1 | NBR/FKM/EPDM | |
| 5** | guarnizione a labbro *lip seal* | 2 | NBR/FKM/EPDM | |
| 6** | O-ring stelo *stem O-ring* | 2 | NBR/FKM/EPDM | |
| 7 | pistone *piston* | 1 | ottone *brass* | EN 12165 CW617N - nichelato *nickel plated* |
| 8** | O-ring pistone *piston O-ring* | 1 | NBR/FKM/EPDM | |
| 9 | etichetta tecnica *technical label* | 1 | Poliestere *Polyestere* | |
| 10 | etichetta OMAL *OMAL label* | 1 | Poliestere *Polyestere* | |
| 11 | ghiera di battuta *seat nut* | 1 | ottone *brass* | EN 12164 CW614N - nichelato *nickel plated* |
| 12** | O-ring manicotto *sleeve O-ring* | 1 | NBR/FKM/EPDM | |
| 13 | molla (solo per SR) *spring (only for SR)* | 1 | Acciaio inox *Stainless steel* | |

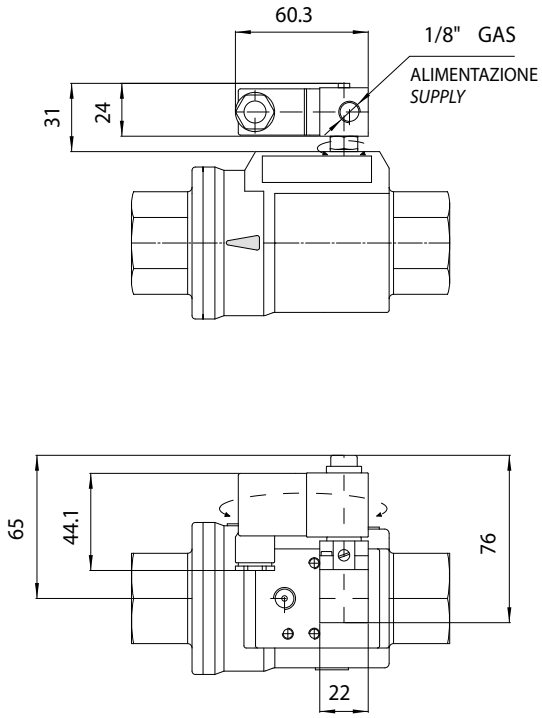
** Particolari del kit di ricambio *Components of spare part kit*

# ACCESSORI VIP *VIP ACCESSORIES*

| ELETTROVALVOLA NAMUR *NAMUR SOLENOID VALVE* | | | | | |
|---|---|---|---|---|---|
| Elettrovalvola *Solenoid valve* | ER8188A2 | ER8188A4 | ER8188A5 | ER8188C2 | ER8188C4 |
| Voltaggio *Voltage* | 24V AC | 115V AC | 230V AC | 24V DC | 110V DC |




| MICROELETTROVALVOLA *MICRO SOLENOID VALVE* | | | | | |
|---|---|---|---|---|---|
| Elettrovalvola *Solenoid valve* | EP415024 | EP415110 | EP415220 | EP412012 | EP412024 |
| Voltaggio *Voltage* | 24V AC | 115V AC | 230V AC | 12V DC | 24V DC |




**Elettrovalvola 5/2 a norma NAMUR**

- L'elettrovalvola é predisposta per la selezione tra la funzione 5/2 e 3/2 vie che si realizza utilizzando l'appropriata piastra di interfacciamento dell'elettrovalvola.
- Potenza assorbita D.C.: 2,5 W.
- Potenza assorbita A.C.: 2 W.
- Tolleranza tensione di alimentazione: ± 10%.
- Classe isolamento bobina: F.
- Grado di protezione con connettore: IP 65.
- Connessione elettrica: PG 9.
- Connessioni pneumatiche: alimentazione 1/4"; scarico 1/4" ISO 228.
- Pressione elettrovalvola max.: 10 bar.
- Temperatura fluido di alimentazione: da -10°C a +80°C.
- Temperatura ambiente: da -10°C a +50°C.

***Solenoid valve 5/2 as per NAMUR***

- *This solenoid valve is designed for the selection of the functions 5/2 and 3/2, which is realized by using wing the appropriate plate.*
- *Full-working input power - D.C.: 2,5 W.*
- *Full-working input power - A.C.: 2 W.*
- *Supply voltage tolerances: +/- 10%.*
- *Coil insulation: F-class.*
- *Protection with connector: IP65.*
- *Electric connection: PG 9.*
- *Pneumatic connections: inlet 1/4"; outlet 1/4" ISO 228.*
- *Max. pressure: 10 bar.*
- *Operating media temperature: from -10°C to +80°C.*
- *Ambient temperature: from -10°C to +50°C.*

**Microelettrovalvola universale compatta**

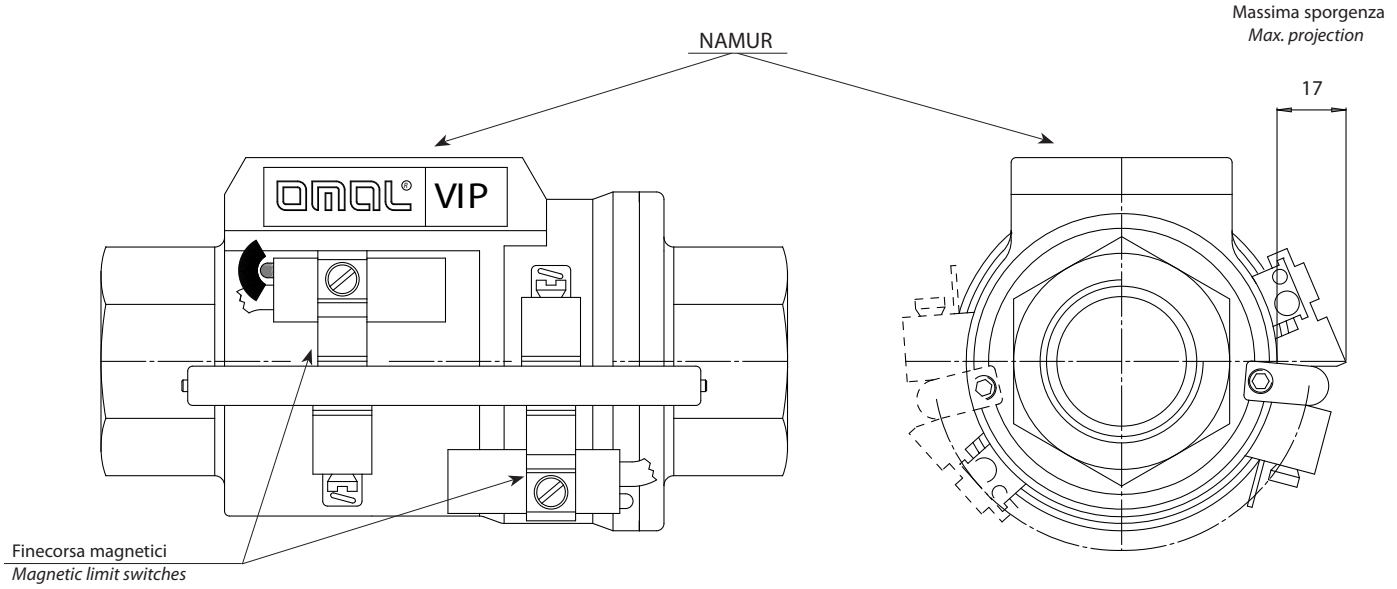
- Il collegamento dell'elettrovalvola è eseguito direttamente nella presa d'aria dell'attuatore, eliminando qualsiasi pezzo intermedio e viti di fissaggio.
- Elettrovalvola del tipo 3/2 con un solenoide disponibile con le seguenti tensioni: 24-110-220V AC; 12-24V DC.
- Potenza assorbita allo spunto - A.C.: 9 VA.
- Potenza assorbita a regime - D.C.: 5 W.
- Potenza assorbita a regime - A.C.: 6 VA.
- Tolleranza tensione di alimentazione: ±10%.
- Classe di isolamento filo di rame: H.
- Classe isolamento bobina: F.
- Grado di protezione con connettore: IP 65.
- Connessione elettrica: PG 9 (orientabile 360°).
- Connessione pneumatica: 1/8" ISO 228 (orientabile 360°).
- Pressione elettrovalvola max.: 10 bar.
- Temperatura fluido di alimentazione: da -10°C a +50°C.
- Temperatura ambiente: da -10°C a +50°C.
- Diametro nominale di passaggio 1,3 mm.

***Micro solenoid valve :***

- *This solenoid valve is connected by a joint which fits directly to the actuator air intake, without other fittings or fixing screws.*
- *3/2 solenoid valve, with solenoid available in the following voltages: 24-110-220V AC; 12-24V DC.*
- *Starting input power - A.C.: 9 VA.*
- *Full-working input power - D.C.: 5 W.*
- *Full-working input power - A.C.: 6 VA.*
- *Supply voltage tolerances: +/- 10%.*
- *Copper wire insulation: H-class.*
- *Coil insulation: F-class.*
- *Protection with connector: IP65.*
- *Electric connection: PG 9 any orientation acceptable 360°.*
- *Pneumatic connections:1/8" ISO 228 any orientation acceptable 360°.*
- *Max. pressure: 10 bar.*
- *Operating media temperature: from -10°C to +50°C .*
- *Ambient temperature: from -10°C to +50°C.*
- *ø Bore 1,3 mm.*

# ACCESSORI VIP *VIP ACCESSORIES*

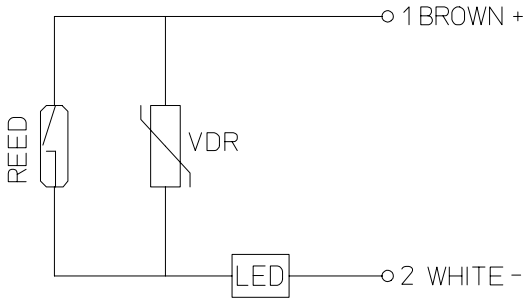
## FINECORSA *LIMIT-SWITCH*




VIP é predisposta per l'utilizzo di finecorsa induttivi a contatto magnetico, con led di segnalazione, i quali vengono forniti con un kit che ne consente un rapido fissaggio su gran parte della circonferenza esterna.
**I magneti per la rilevazione della posizione tramite finecorsa si trovano all'interno, di conseguenza si possono installare solamente durante l'assemblaggio del VIP e non in fase successiva. Per questo motivo é necessario specificare in fase d'ordine la richiesta di finecorsa.**

*VIP can be provided with magnetic contact inductive limit switches and signalling LED. Limit switches are supplied with a KIT which makes it possible to fix them on the outside easily and quickly.* ***Since the magnets are situated inside the valve, they must be assembled while mounting the VIP and not afterwards. That's the reason why the limit switches must be requested on ordering the valve.***

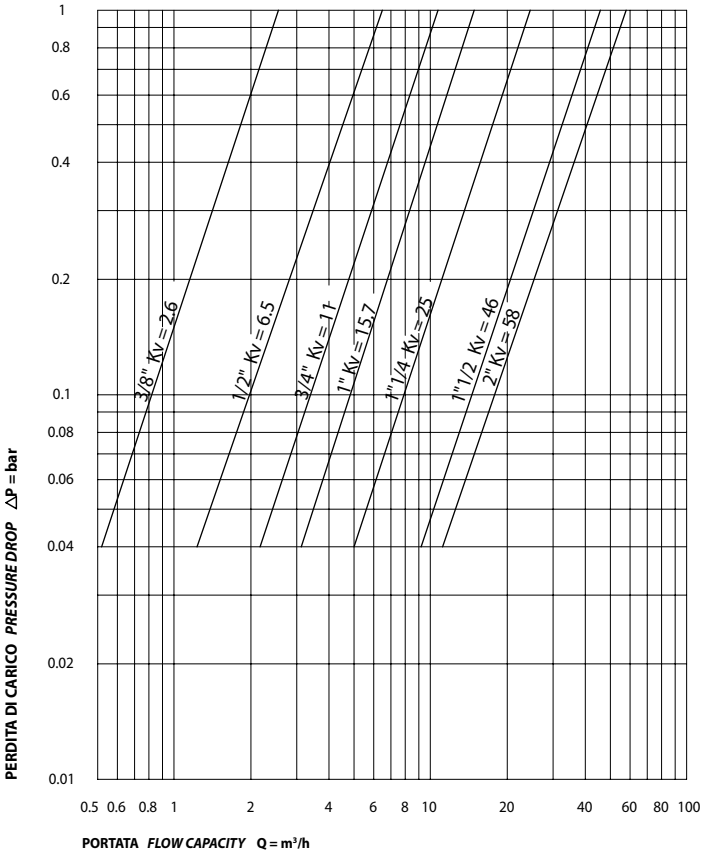
Schema elettrico dei finecorsa *Limit-switch electric plan*



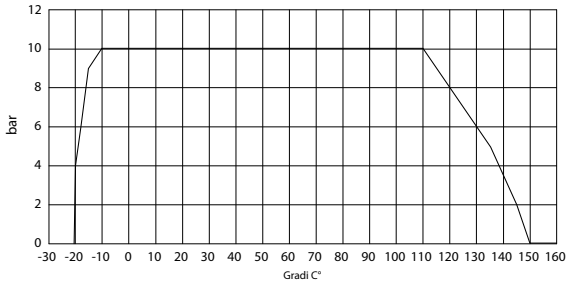

| CARATTERISTICHE ELETTRICHE DEI FINECORSA *LIMIT-SWITCH ELECTRICAL FEATURES* | |
|---|---|
| Indicatore di commutazione *Switch indicator* | LED |
| Grado di protezione *Protection level* | IP 67 |
| Tensione nominale a corrente continua *Nominal voltage with direct current* | 3÷250 V dc |
| Tensione nominale a corrente alternata *Nominal voltage with alternating current* | 3÷250 V ac |
| Caduta massima di tensione *Maximum voltage drop* | 2,5 V |
| Potenza massima in corrente continua *Maximum power with direct current* | 50 W |
| Potenza massima in corrente alternata *Maximum power with alternating current* | 50 VA |
| Corrente massima a 25°C (carico resistivo) *Maximum current at 25°C (resistive load)* | 1 A |
| Protezione contro i picchi di tensione induttivi *Protection against inductive tension peaks* | 250 VR |
| Protezione polarità inversa *Inverse polarity protection* | • |
| Massimo carico applicabile (bobina con soppressore di sovratensioni) | |
| *Maximum applicable load (coil with overvoltage suppressor)* | 10 W |
| Massimo carico applicabile (bobina semplice) *Maximum applicable load (simple coil)* | 10 W |
| Massimo carico applicabile (PLC) *Maximum applicable load (PLC)* | • |
| Vita elettrica (carico resistivo 20% pot. max. distanza breve tra carico e interruttore) | |
| *Electric life (resistive load 20% max. power short distance between load and switch)* | $10x10^6$ |
| Ripetibilità *Repeatability* | 0,1 mm |
| Tempo di azionamento (carico resistivo) *Operating time (resistive load)* | 2 ms |
| Tempo di rilascio (carico resistivo) *Release time (resistive load)* | 0,1 ms |
| Temperatura d'uso *Working temperature* | -30÷+80 °C |
| Resistenza all'urto (11ms) *Impact resistance (11ms)* | 50 g |
| Resistenza alle vibrazioni *Vibration resistance* | 1000 Hz |
| Tipo di sensore *Sensor type* | 1 |
| Cavo di collegamento 2m *Connecting cable 2m* | n° 2 fili |

## DIAGRAMMA PORTATA - PERDITA DI CARICO E COEFFICIENTE NOMINALE
*FLOW PRESSURE DROP DIAGRAM AND Kv NOMINAL COEFFICIENT*

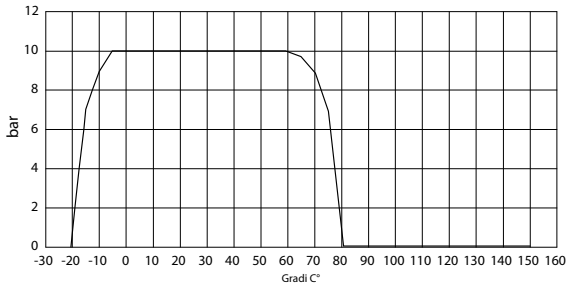
Il valore Kv é il valore di portata in m³/h (con acqua a 15°C) provocante la caduta di pressione di 1 bar. *Kv is the coefficient, expressed in m³/h (with water at 15°C) causing a pressure loss of 1 bar.*



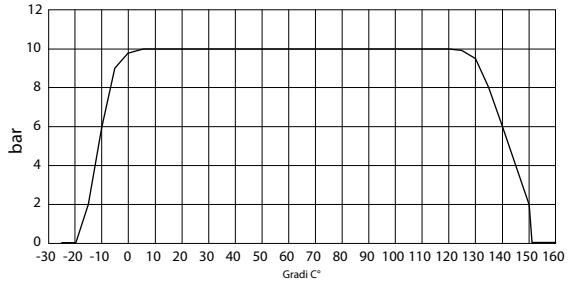

## DIAGRAMMA PRESSIONE TEMPERATURA VIP EPDM
*VIP EPDM PRESSURE TEMPERATURE DIAGRAM*



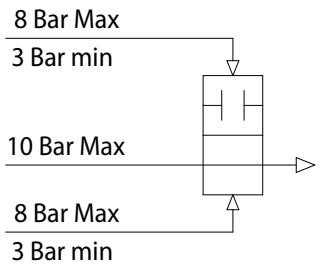

## DIAGRAMMA PRESSIONE TEMPERATURA VIP NBR
*VIP NBR PRESSURE TEMPERATURE DIAGRAM*




## DIAGRAMMA PRESSIONE TEMPERATURA VIP FKM
*VIP FPM PRESSURE TEMPERATURE DIAGRAM*

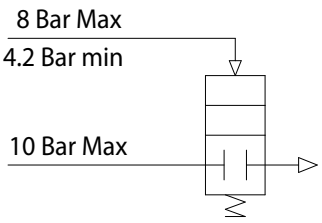



## SCHEMI DI FUNZIONAMENTO *WORKING PLAN*



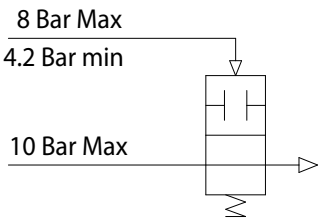

Schema di funzionamento nella configurazione doppio effetto

*Double acting VIP Working plan*




Schema di funzionamento nella configurazione semplice effetto normalmente chiuso

*Spring return Normally closed VIP Working plan*




Schema di funzionamento nella configurazione semplice effetto normalmente aperto

*Spring return Normally open VIP Working plan*



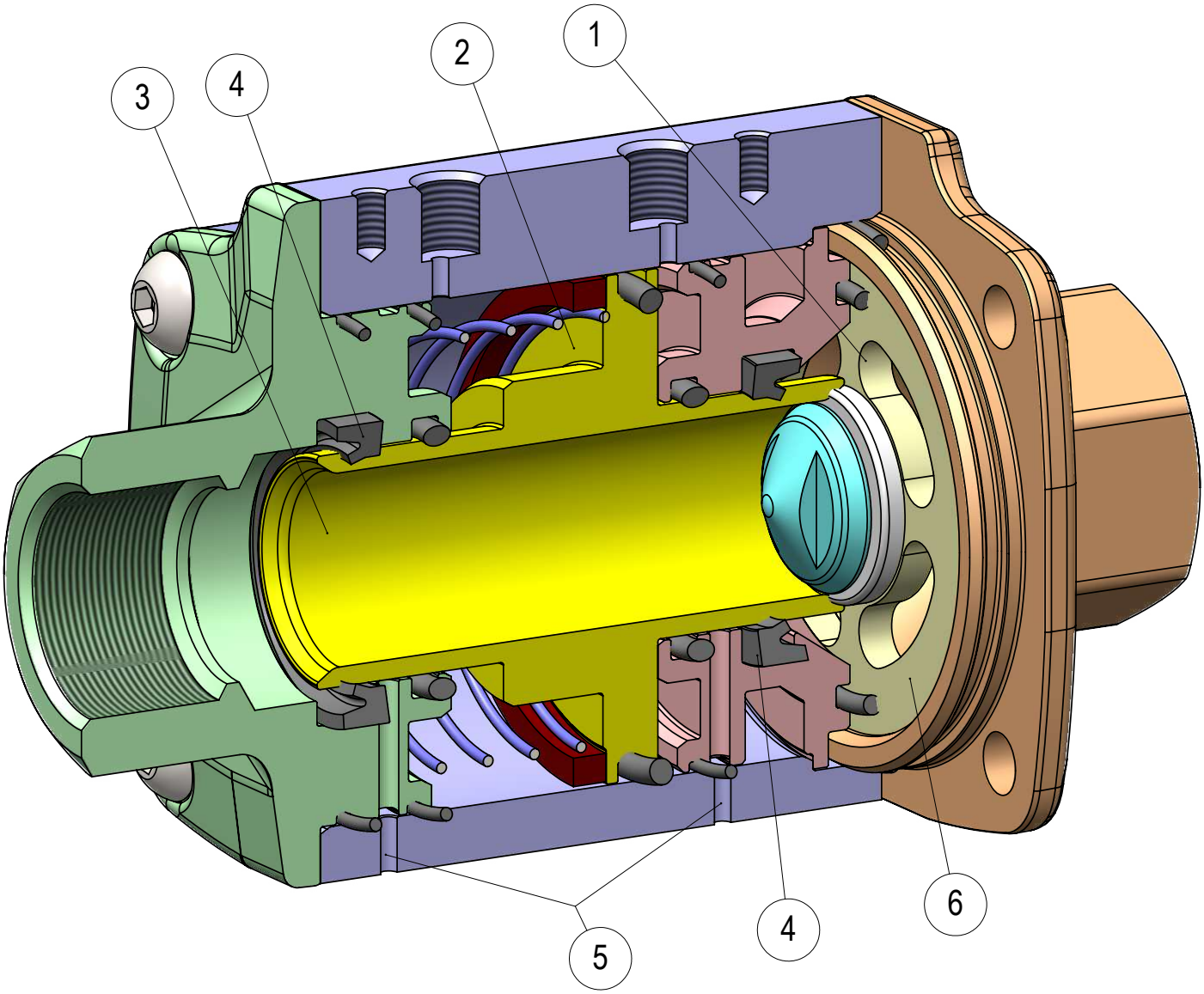
3.2

# VIP EVO®

# VIP EVO®

## VALVOLA DI INTERCETTAZIONE PNEUMATICA **PN40 / 580 psi**

## *PNEUMATIC COAXIAL VALVE **PN40 / 580 psi***



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Geometria interna sviluppata per minimizzare le perdite di carico.<br>*Internal geometry studied to reduce pressure drop.* | È stato eseguito uno studio fluidodinamico del passaggio interno in modo da massimizzare il coefficiente di portata.<br>*Fluid dynamic of internal of valve studied to maximize flow capacity.* |
| 2 | Attuatore e valvola integrati in un unico prodotto.<br>*Pneumatic actuator integrated in the valve.* | Minor ingombro ridotti rispetto ad una valvola attuata.<br>*Space saving compared to an automated valve.* |
| 3 | Pistone con nichelatura chimica (20-25 micron).<br>*Piston with chemical nickel plating (20-25 micron).* | Maggior protezione contro gli agenti corrosivi.<br>*High corrosion resistance.* |
| | | Minor usura delle guarnizioni grazie all'aumento di durezza superficiale (400 -550 HV).<br>*Lower wear of the seals due to the increase of the surface hardness (400 -550 HV).* |
| 4 | Guarnizioni a labbro.<br>*Lip seals.* | Minor usura della guarnizione rispetto ad un o-ring.<br>*Less wear of the seal compared to an o-ring.* |
| 5 | Fori di verifica perdita guarnizioni a labbro.<br>*Lip seal leakage check holes.* | I fori permettono di verificare l'eventuale perdita delle guarnizioni a labbro, evitando che il fluido intercettato possa risalire nell'impianto di alimentazione aria.<br>*These holes show eventual leakage from lip seal, preventing the intercepted fluid from damaging the air supply system.* |
| 6 | Porta seggio supporto guarnizione.<br>*Seat support disc.* | Porta seggio in 316L per la massima compatibilità chimica.<br>*316L S.S. disc for best chemical compatibility.* |
| | Varie guarnizioni di tenuta.<br>*Several seal materials available.* | Massima compatibilità con diverse tipologie di fluidi a seconda della guarnizione montata (EPDM, NBR, FKM).<br>*Maximum compatibility with different types of fluids depending on the seals used (EPDM, NBR, FKM).* |
| | Sedi per montaggio di sensori integrati.<br>*Integrated slot for valve position sensor.* | I sensori di posizione valvola possono essere montati da entrambi i lati per ottimizzare gli ingombri.<br>*Position sensor can be easily mounted in both sides of the valve to minimize space.* |
| | Assenza di parti mobili esterne.<br>*No external moving parts.* | Nessun rischio di infortunio dovuto a elementi in movimento.<br>*No risk of injury due to moving parts.* |
| | | Facilità di montaggio in ogni posizione.<br>*Easy mounting.* |
| | Lunga vita garantita.<br>*Long life time guaranteed.* | Durata fino 10 volte superiore rispetto alla valvola a sfera con costi di manutenzione ridotti.<br>*Lifetime up to 10 times longer than a ball valve with reduced maintenance costs.* |
| | Processo produttivo interamente realizzato in OMAL.<br>*100% in- house manufacturing process technology.* | Massimo controllo in tutte le fasi di lavorazione.<br>*Maximum control and accuracy in all the stages of the manufacturing process.* |
| | Minor consumo d'aria.<br>*Less Air consumption.* | Risparmio d'aria pari ad almeno il 70% rispetto ad una valvola attuata con attuatore semplice effetto con conseguente minor carico di lavoro del compressore o possibilità di utilizzo di un compressore con dimensioni ridotte.<br>*70% less air consumption compared to an actuated valve with SR pneumatic actuator therefore less load on the compressor or the possibility of using a smaller sized compressor.* |
| | Certificato ATEX.<br>*ATEX Certification.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is allowed in a potential explosive environment.* |
| | Certificato PED.<br>*PED Certification.* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.<br>*Full compliance with European Safety Standards for Pressure Equipment.* |
| | Certificato fino a SIL 3.<br>*Up to SIL 3 certified.* | Elevato livello di sicurezza funzionale.<br>*Guarantee of high level of functional safety.* |

# **VIP EVO** PN40 / 580 psi

## THE LATEST EVOLUTION OF OMAL COAXIAL VALVE




GIUGIARO DESIGN

### CARATTERISTICHE GENERALI:

- Disponibile nelle versioni doppio effetto "DA" e semplice effetto "SR" (sia normalmente aperto sia normalmente chiuso) con misure da 3/8" a 2".
- Flusso unidirezionale.
- P MAX 40 bar (580 psi) nella direzione indicata.
- Attacchi filettati GAS EN 10226-1 Rp (Ex ISO 7/1) - DIN 2999 ; NPT.
- Connessioni del fluido di comando filettate (NAMUR a richiesta con basetta).
- L'ottimizzazione della fluidodinamica interna ha consentito la realizzazione di un condotto con perdite di carico ridotte al minimo.
- Possibilità di utilizzo in qualsiasi posizione di montaggio (orizzontale, verticale, obliqua).
- Tenuta principale PTFE + VETRO.
- Tenute labbro e o-ring:
  - **NBR**: compatibile con aria, fluidi gassosi, olii, acqua, etc.
  - **FKM**: ottima compatibilità con la maggior parte dei fluidi. Sconsigliato per il vapore.
  - **EPDM**: ottima compatibilità con acqua calda e vapore. Non compatibile con prodotti minerali (olii, grassi etc.).
- Fluidi intercettabili: liquidi e gassosi del gruppo 1&2 purchè compatibili con i materiali delle tenute e della valvola.
- Possibilità di segnalare l'apertura o chiusura della valvola tramite l'applicazione di finecorsa induttivi a contatto magnetico esterni (disponibili a richiesta). Previo acquisto della versione VIP EVO con magnete interno, da specificare in fase d'ordine.
- **Conforme alla direttiva Europea 2014/68/UE "PED".**
- **Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.**
- Tenuta al vuoto: tasso di fuga <5·10$^{-5}$ mbar·l/s (Valore inferiore a 2g di aria a temperatura ambiente l'anno).

### *GENERAL FEATURES:*

- *Both Double Acting and Spring Return VIP valves (either Normally Open or Normally Closed) are available in sizes ranging from 3/8" to 2".*
- *Unidirectional flow.*
- *P MAX 40 bar (580 psi) in indicated direction.*
- *GAS threaded ends as per EN 10226-1 Rp (Ex ISO 7/1) - DIN 2999 ; NPT.*
- *Threaded connections for air supply system (NAMUR adapter plate on request).*
- *Improved fluid dynamics allow minimum pressure losses.*
- *VIP valves can be used in any mounting position (horizontal, vertical or angled).*
- *Seat PTFE + GF.*
- *Lips seals and o-ring:*
  - ***NBR**: suitable for air, gaseous fluids, oils, water etc.*
  - ***FKM**: perfectly suitable for most fluid. Unsuitable for steam.*
  - ***EPDM**: perfectly suitable for hot water and steam. Unsuitable for mineral products (oils, grease, etc.).*
- *Media: liquids and gases of 1&2 group as long as they are compatible with seals and valve materials.*
- *Possibility to check open / close valve position thanks to inductive limit switches (magnetic contact) available on request. Internal magnet needs to be requested at VIP EVO order phase.*
- ***According to 2014/68/EU "PED".***
- ***2014/34/EU ATEX configuration available upon request at time of order.***
- *Vacuum tightness: leack rate <5·10$^{-5}$ mbar·l/s (Value less than 2g of air at room temperature per year)*

### FLUIDO DI COMANDO:

- Aria compressa filtrata non necessariamente lubrificata; in accordo a UNI EN 15714-3:2009.
- In caso di lubrificazione usare olio compatibile con le guarnizioni impiegate.
- Pressione di comando:
  - Doppio Effetto: min. 3 bar (44 psi); max. 8,5 bar (123 psi).
  - Semplice Effetto N.C.: min. 4 bar (58 psi); max. 8,5 bar (123 psi).
  - Semplice Effetto N.O.: min. 4,5 bar (65 psi); max. 8,5 bar (123 psi).

### *CONTROL MEDIA:*

- *Filtered compressed air, not necessarily lubricated; according to UNI EN 15714-3: 2009.*
- *In case of lubricated air, seal compatible oil must be used.*
- *Air supply:*
  - *Double Acting: min. 3 bar (44 psi); max. 8,5 bar (123 psi).*
  - *Spring Return N.C.: min. 4 bar (58 psi); max. 8,5 bar (123 psi).*
  - *Spring Return N.O.: min. 4,5 bar (65 psi); max. 8,5 bar (123 psi).*

### FLUIDO INTERCETTATO:

- Pressione: max. 40 bar (580 psi), vedere diagramma.
- Temperatura:
  NBR: da -20°C a +80°C (da -4°F a 176°F);
  EPDM e FKM: da -20°C a +150°C (da -4°F a 302°F).

### *OPERATING MEDIA:*

- *Pressure: 40 bar (580 psi) max, see diagram.*
- *Temperature:*
  *NBR: from -20°C to +80°C (from -4°F to 176°F);*
  *EPDM e FKM: from -20°C to +150°C (from -4°F to 302°F).*

# VIP EVO PN40 / 580 psi

## PRINCIPIO DI FUNZIONAMENTO *WORKING PRINCIPLE*

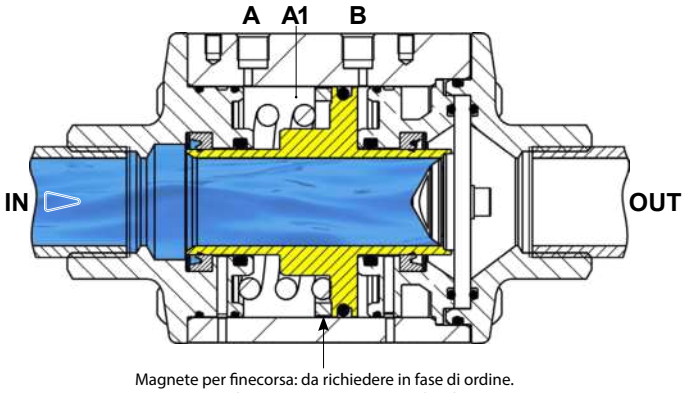
La valvola di intercettazione pneumatica "VIP EVO" è l'evoluzione della valvola "VIP". "VIP EVO" è a tutti gli effetti, una valvola automatica che raggruppa, in un unico dispositivo, sia il meccanismo di intercettazione (tra il condotto IN-OUT) che quello di comando (A-B). Il principio di funzionamento si basa sul movimento interno di un pistone dovuto alla pressione del fluido di comando. Il pistone, esaurita la sua corsa (VIP EVO é una valvola on/off), preme o si stacca dalla guarnizione del seggio di tenuta, consentendo o impedendo il passaggio del liquido intercettato. Dato che la tenuta é realizzata sul seggio e le pressioni del fluido intercettato si scaricano sul medesimo, la pressione necessaria al movimento del pistone risulta poco influenzata da quella del fluido intercettato. Questo ha permesso di contenere i pesi e gli ingombri e di garantire un altissimo numero di manovre di apertura e chiusura. La fluidodinamica interna è stata studiata in modo da ridurre al minimo le turbolenze e le perdite di carico.

*The pneumatic coaxial valve "VIP EVO" is the evolution of the "VIP" valve. "VIP EVO" is an interception valve (between pipe IN-OUT) with built in control system (A-B). It works thanks to the internal movement of a piston supplied with air. At the end of its stroke (VIP EVO valve is an ON/OFF valve), the piston presses on the seat seal, stopping the fluid from flowing, or moves away from the seal, allowing the intercepted fluid to flow. As the seat is perfectly tight and the intercepted fluid pressures discharge on it, the pressure necessary to move the piston is little affected by the fluid pressure. As a result OMAL has been able to design a light space saving and lasting valve. Internal fluid-dynamics has been designed to reduce turbolence and pressure loss.*

### VALVOLA CHIUSA *CLOSED VALVE*

**SEMPLICE EFFETTO - SR N.C.** La molla é alloggiata nella camera "**A1**" questo fa si che, in mancanza di comando, il pistone sia a contatto con la guarnizione del seggio di tenuta: la posizione preferenziale é quindi quella chiusa.

***SPRING RETURN - SR N.C.*** *The spring is in "**A1**", if there is no control, the piston will touch the seat seal: therefore, the preferable position is the closed one.*

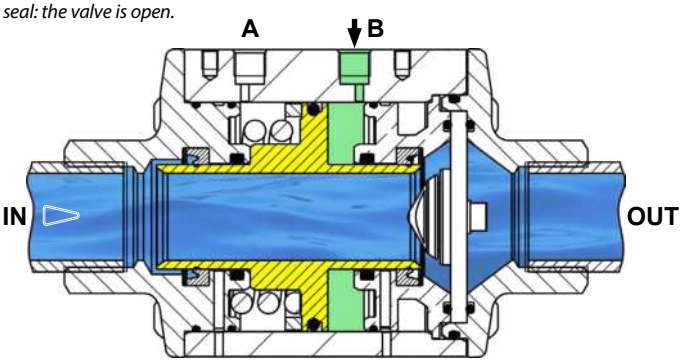



Magnete per finecorsa: da richiedere in fase di ordine.
*Limit switch magnet : on request at order phase.*

### VALVOLA APERTA *OPENED VALVE*

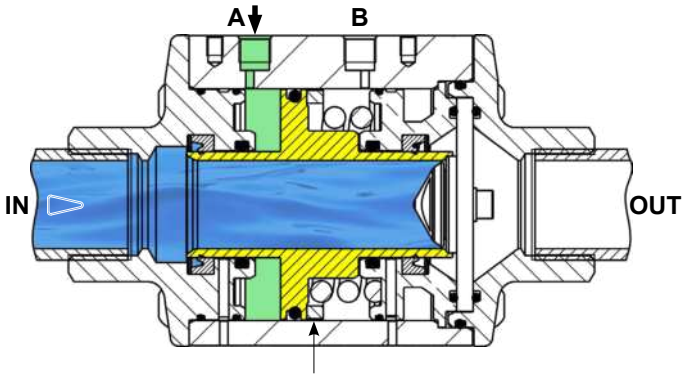
**SEMPLICE EFFETTO - SR N.C.** Immettendo aria nel foro di comando "**B**" (il foro "**A**" deve essere a scarico) il pistone, esaurita la sua corsa, si trova alla massima distanza dal seggio di tenuta: la valvola é aperta.

***SPRING RETURN - SR N.C.*** *Supplying the hole "**B**" with air (the hole "**A**" must be discharging) at the end of its stroke the piston is at maximum distance from the seat seal: the valve is open.*




**SEMPLICE EFFETTO - SR N.O.** Immettendo aria nel foro di comando "**A**" (il foro "**B**" deve essere a scarico) il pistone, esaurita la sua corsa, preme sulla guarnizione del seggio di tenuta: la valvola é chiusa.

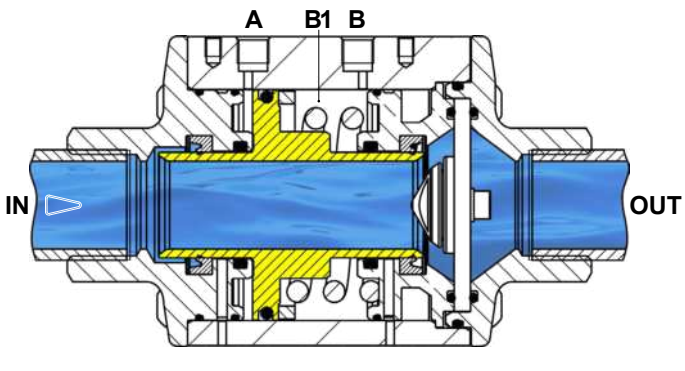
***SPRING RETURN - SR N.O.*** *Supplying the hole "**A**" with air (the hole "**B**" must be discharging) the piston presses on the seat seal at the end of its stroke: the valve is closed.*




Magnete per finecorsa: da richiedere in fase di ordine.
*Limit switch magnet : on request at order phase.*

**SEMPLICE EFFETTO - SR N.O.** La molla é alloggiata nella camera "**B1**" questo fa si che, in mancanza di comando, il pistone sia lontano dal seggio di tenuta: la posizione preferenziale é quindi quella aperta.

***SPRING RETURN - SR N.O.*** *The spring is in "**B1**", if there is no control, the piston will be away from the seat seal: therefore, the preferable position is the open one.*




**DOPPIO EFFETTO - DA** Immettendo aria nel foro di comando "**A**" (il foro "**B**" deve essere a scarico) il pistone preme sulla guarnizione del seggio di tenuta: la valvola é chiusa.

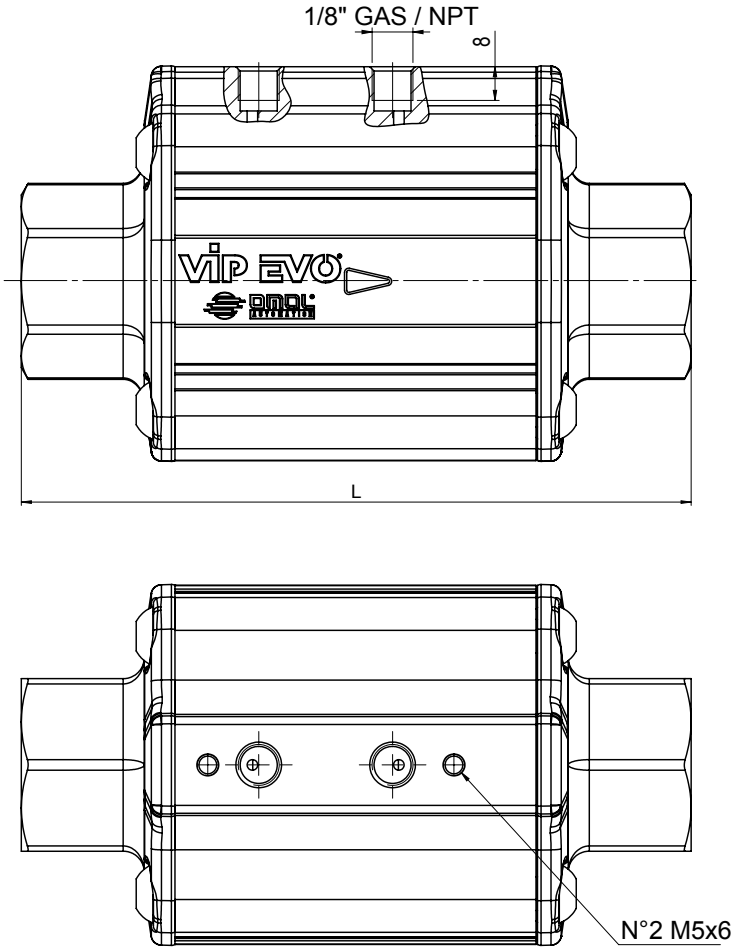
***DOUBLE ACTING - DA*** *Supplying the hole "**A**" with air (the hole "**B**" must be discharging) the piston presses on the seat seal: the valve is closed.*

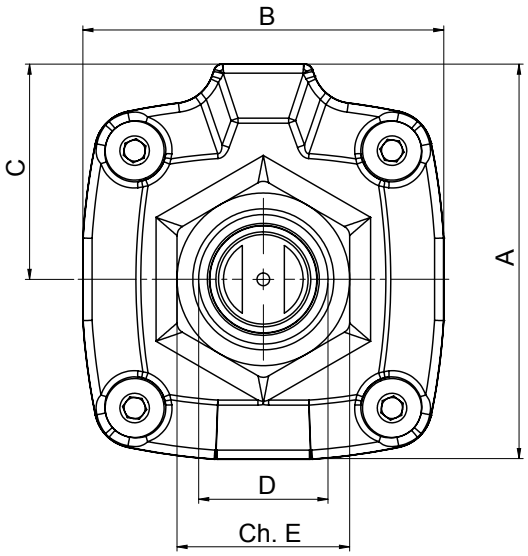
**DOPPIO EFFETTO - DA** Immettendo aria nel foro di comando "**B**" (il foro "**A**" deve essere a scarico) il pistone si allontana dal seggio di tenuta: la valvola è aperta.

***DOUBLE ACTING - DA*** *Supplying the hole "**B**" with air (the hole "**A**" must be discharging) the piston is at maximum distance from the seat seal: the valve is open.*

Magnete per finecorsa: da richiedere in fase di ordine. *Limit switch magnet : on request at order phase.*
Versioni Doppio Effetto DA: inclusa molla per dispositivo antistatico. *Double Acting DA versions: spring included for antistatic device.*

# VIP EVO PN40 / 580 psi

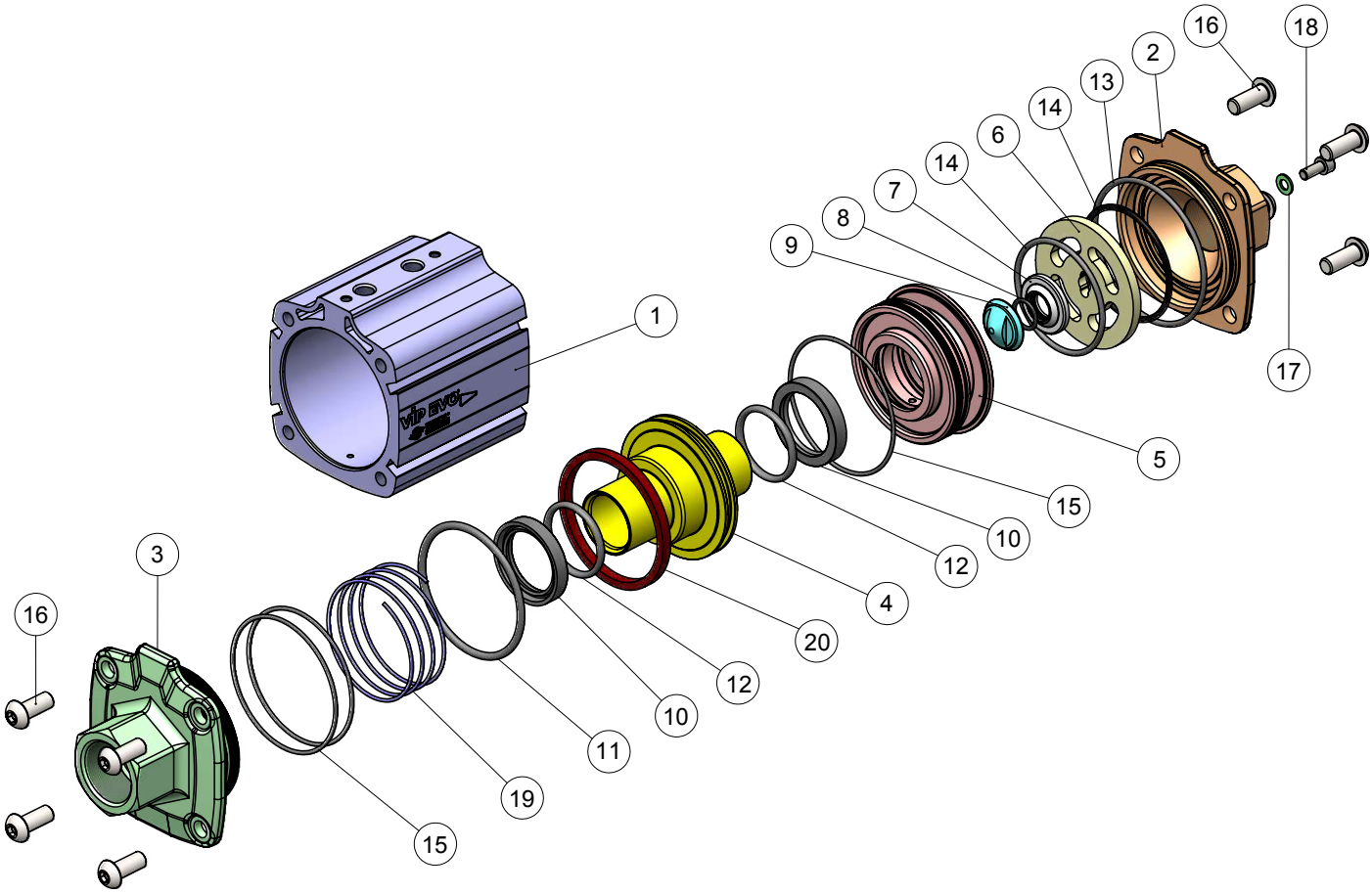



| DIMENSIONI [metriche] *DIMENSIONS [metric]* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DN diametro nominale** ***DN nominal diameter*** | **mm** | **10** | **15** | **20** | **25** | **32** | **40** | **50** |
| **D Filetto** ***Thread*** | **GAS / NPT** | **3/8"** | **1/2"** | **3/4"** | **1"** | **1"1/4** | **1"1/2** | **2"** |
| **Passaggio** ***Bore*** | mm | 10,5 | 16 | 20,8 | 26,6 | 33,5 | 41 | 51 |
| **A** | mm | 63 | 73,5 | 85,5 | 94 | 110 | 123,5 | 134 |
| **B** | mm | 56 | 66 | 78,5 | 86 | 103 | 115,5 | 123,5 |
| **L** | mm | 120 | 134,5 | 154 | 159 | 185 | 211 | 228 |
| **ch. E** | mm | 22 | 27 | 34 | 41 | 50 | 60 | 70 |
| **C** | mm | 35,5 | 40,5 | 47 | 51 | 60 | 66 | 72,5 |
| **Doppio effetto "DA" - Volume aria** ***Double acting "DA" - Air volume*** | $dm^3$/cycle | 0,024 | 0,039 | 0,074 | 0,082 | 0,15 | 0,22 | 0,25 |
| **Semplice effetto "SR" - Volume aria** ***Spring return "SR" - Air volume*** | $dm^3$/cycle | 0,011 | 0,021 | 0,034 | 0,037 | 0,07 | 0,10 | 0,13 |
| **Doppio effetto "DA" - Peso** ***Double acting "DA" - Weight*** | Kg | 1,1 | 1,7 | 2,5 | 3 | 4,7 | 7,2 | 8 |
| **Semplice effetto "SR" - Peso** ***Spring return "SR" - Weight*** | Kg | 1,15 | 1,8 | 2,6 | 3,1 | 4,9 | 7,5 | 8,3 |
| **Tempi di azionamento** ***Switching times*** | ms | 25/40 | 30/55 | 40/60 | 45/70 | 50/80 | 70/120 | 100/160 |

| *DIMENSIONS [imperial]* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ***D Thread*** | **GAS / NPT** | **3/8"** | **1/2"** | **3/4"** | **1"** | **1"1/4** | **1"1/2** | **2"** |
| ***Bore*** | in | 0,41 | 0,63 | 0,82 | 1,05 | 1,32 | 1,61 | 2,01 |
| ***A*** | in | 2,48 | 2,89 | 3,37 | 3,70 | 4,33 | 4,86 | 5,28 |
| ***B*** | in | 2,20 | 2,60 | 3,09 | 3,39 | 4,06 | 4,55 | 4,86 |
| ***L*** | in | 4,72 | 5,30 | 6,06 | 6,26 | 7,28 | 8,31 | 8,98 |
| ***ch. E*** | in | 0,87 | 1,06 | 1,34 | 1,61 | 1,97 | 2,36 | 2,76 |
| ***C*** | in | 1,40 | 1,59 | 1,85 | 2,01 | 2,36 | 2,60 | 2,85 |
| ***Double acting "DA" - Air volume*** | $in^3$/cycle | 1,46 | 2,38 | 4,52 | 5,00 | 9,15 | 13,43 | 15,26 |
| ***Spring return "SR" - Air volume*** | $in^3$/cycle | 0,67 | 1,28 | 2,07 | 2,26 | 4,27 | 6,10 | 7,93 |
| ***Double acting "DA" - Weight*** | lb | 2,43 | 3,75 | 5,51 | 6,61 | 10,36 | 15,87 | 17,64 |
| ***Spring return "SR" - Weight*** | lb | 2,54 | 3,97 | 5,73 | 6,83 | 10,80 | 16,53 | 18,30 |
| ***Switching times*** | ms | 25/40 | 30/55 | 40/60 | 45/70 | 50/80 | 70/120 | 100/160 |

# VIP EVO PN40 / 580 psi




| MATERIALI *MATERIALS* | | | | |
|---|---|---|---|---|
| **Pos.** | **Descrizione** ***Description*** | **Q.ty** | **Materiale** ***Material*** | **Trattamento** ***Treatment*** |
| 1 | Cilindro attuatore di pilotaggio *Pilot actuator cylinder* | 1 | Alluminio *Aluminum* | Anodizzazione nera *Black anodizing* |
| 2 | Manicotto uscita *Output sleeve* | 1 | Ottone *Brass* CW617N | Nichelatura *Nickel plated* |
| 3 | Manicotto ingresso *Input sleeve* | 1 | Ottone *Brass* CW617N | Nichelatura *Nickel plated* |
| 4 | Pistone *Piston* | 1 | Ottone *Brass* CW617N | Nichelatura *Nickel plated* |
| 5 | Supporto interno *Internal support* | 1 | Ottone *Brass* CW617N | - |
| 6* | Porta seggio *Seat support* | 1 | 316L S.S. | - |
| 7* | Guarnizione *Seat* | 1 | PTFE+15% vetro *glass* | - |
| 8* | O-ring guarnizione *O-ring Seat* | 1 | NBR/EPDM/FKM | - |
| 9* | Ghiera battuta *Seat nut* | 1 | Ottone *Brass* CW617N | - |
| 10** | Labbro *Lip seal* | 2 | NBR/EPDM/FKM | - |
| 11** | O-ring pistone comando *Command piston O-ring* | 1 | NBR/EPDM/FKM | - |
| 12** | O-ring pistone interno *Internal piston O-ring* | 2 | NBR/EPDM/FKM | - |
| 13* | O-ring corpo manicotto *Sleeve-body O-ring* | 1 | NBR/EPDM/FKM | - |
| 14* | O-ring frontale *Frontal O-ring* | 2 | NBR/EPDM/FKM | - |
| 15** | O-ring supporto *Support O-ring* | 3 | NBR/EPDM/FKM | - |
| 16 | Viti chiusura *Closing Screw* | 8 | A2-70 | - |
| 17 | Rondella *Washer* | 1 | A2 (304 S.S.) | - |
| 18 | Vite *Screw* | 1 | A2-70 | - |
| 19 | Molla *Spring* | 1 | 301 S.S. | - |
| 20 | Magnete *Magnet* | 1 | Plasto-ferrite *Plastic ferrite* | - |

*Kit ricambio guarnizione principale. **Main seat spare kit.*
**Kit ricambio completo (comprensivo di Kit ricambio guarnizione principale). *** Complete spare kit (including main seat spare kit).*

# VIP EVO PN40 / 580 psi

## CODICI GAS EN 10226-1 Rp (ISO 7/1) *GAS EN 10226-1 Rp (ISO 7/1) CODES*

### NBR — CODICI GAS CON GUARNIZIONI NBR *GAS CODES WITH NBR SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JBBA1BCA00003 | VECH0JBBA1BCA10003 | VEAH0JBBA1BCA00003 | VEAH0JBBA1BCA10003 | VEDH0JBBA1BCA00003 | VEDH0JBBA1BCA10003 |
| 15 | 1/2" | VECH0JBBA1BCA00004 | VECH0JBBA1BCA10004 | VEAH0JBBA1BCA00004 | VEAH0JBBA1BCA10004 | VEDH0JBBA1BCA00004 | VEDH0JBBA1BCA10004 |
| 20 | 3/4" | VECH0JBBA1BCA00005 | VECH0JBBA1BCA10005 | VEAH0JBBA1BCA00005 | VEAH0JBBA1BCA10005 | VEDH0JBBA1BCA00005 | VEDH0JBBA1BCA10005 |
| 25 | 1" | VECH0JBBA1BCA00006 | VECH0JBBA1BCA10006 | VEAH0JBBA1BCA00006 | VEAH0JBBA1BCA10006 | VEDH0JBBA1BCA00006 | VEDH0JBBA1BCA10006 |
| 32 | 1"1/4 | VECH0JBBA1BCA00007 | VECH0JBBA1BCA10007 | VEAH0JBBA1BCA00007 | VEAH0JBBA1BCA10007 | VEDH0JBBA1BCA00007 | VEDH0JBBA1BCA10007 |
| 40 | 1"1/2 | VECH0JBBA1BCA00008 | VECH0JBBA1BCA10008 | VEAH0JBBA1BCA00008 | VEAH0JBBA1BCA10008 | VEDH0JBBA1BCA00008 | VEDH0JBBA1BCA10008 |
| 50 | 2" | VECH0JBBA1BCA00009 | VECH0JBBA1BCA10009 | VEAH0JBBA1BCA00009 | VEAH0JBBA1BCA10009 | VEDH0JBBA1BCA00009 | VEDH0JBBA1BCA10009 |

### EPDM — CODICI GAS CON GUARNIZIONI EPDM *GAS CODES WITH EPDM SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JEEA1BCA00003 | VECH0JEEA1BCA10003 | VEAH0JEEA1BCA00003 | VEAH0JEEA1BCA10003 | VEDH0JEEA1BCA00003 | VEDH0JEEA1BCA10003 |
| 15 | 1/2" | VECH0JEEA1BCA00004 | VECH0JEEA1BCA10004 | VEAH0JEEA1BCA00004 | VEAH0JEEA1BCA10004 | VEDH0JEEA1BCA00004 | VEDH0JEEA1BCA10004 |
| 20 | 3/4" | VECH0JEEA1BCA00005 | VECH0JEEA1BCA10005 | VEAH0JEEA1BCA00005 | VEAH0JEEA1BCA10005 | VEDH0JEEA1BCA00005 | VEDH0JEEA1BCA10005 |
| 25 | 1" | VECH0JEEA1BCA00006 | VECH0JEEA1BCA10006 | VEAH0JEEA1BCA00006 | VEAH0JEEA1BCA10006 | VEDH0JEEA1BCA00006 | VEDH0JEEA1BCA10006 |
| 32 | 1"1/4 | VECH0JEEA1BCA00007 | VECH0JEEA1BCA10007 | VEAH0JEEA1BCA00007 | VEAH0JEEA1BCA10007 | VEDH0JEEA1BCA00007 | VEDH0JEEA1BCA10007 |
| 40 | 1"1/2 | VECH0JEEA1BCA00008 | VECH0JEEA1BCA10008 | VEAH0JEEA1BCA00008 | VEAH0JEEA1BCA10008 | VEDH0JEEA1BCA00008 | VEDH0JEEA1BCA10008 |
| 50 | 2" | VECH0JEEA1BCA00009 | VECH0JEEA1BCA10009 | VEAH0JEEA1BCA00009 | VEAH0JEEA1BCA10009 | VEDH0JEEA1BCA00009 | VEDH0JEEA1BCA10009 |

### FKM — CODICI GAS CON GUARNIZIONI FKM *GAS CODES WITH FKM SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JVVA1BCA00003 | VECH0JVVA1BCA10003 | VEAH0JVVA1BCA00003 | VEAH0JVVA1BCA10003 | VEDH0JVVA1BCA00003 | VEDH0JVVA1BCA10003 |
| 15 | 1/2" | VECH0JVVA1BCA00004 | VECH0JVVA1BCA10004 | VEAH0JVVA1BCA00004 | VEAH0JVVA1BCA10004 | VEDH0JVVA1BCA00004 | VEDH0JVVA1BCA10004 |
| 20 | 3/4" | VECH0JVVA1BCA00005 | VECH0JVVA1BCA10005 | VEAH0JVVA1BCA00005 | VEAH0JVVA1BCA10005 | VEDH0JVVA1BCA00005 | VEDH0JVVA1BCA10005 |
| 25 | 1" | VECH0JVVA1BCA00006 | VECH0JVVA1BCA10006 | VEAH0JVVA1BCA00006 | VEAH0JVVA1BCA10006 | VEDH0JVVA1BCA00006 | VEDH0JVVA1BCA10006 |
| 32 | 1"1/4 | VECH0JVVA1BCA00007 | VECH0JVVA1BCA10007 | VEAH0JVVA1BCA00007 | VEAH0JVVA1BCA10007 | VEDH0JVVA1BCA00007 | VEDH0JVVA1BCA10007 |
| 40 | 1"1/2 | VECH0JVVA1BCA00008 | VECH0JVVA1BCA10008 | VEAH0JVVA1BCA00008 | VEAH0JVVA1BCA10008 | VEDH0JVVA1BCA00008 | VEDH0JVVA1BCA10008 |
| 50 | 2" | VECH0JVVA1BCA00009 | VECH0JVVA1BCA10009 | VEAH0JVVA1BCA00009 | VEAH0JVVA1BCA10009 | VEDH0JVVA1BCA00009 | VEDH0JVVA1BCA10009 |

### FKM $O_2$ — CODICI GAS FKM PER USO OSSIGENO *GAS FKM CODES FOR OXYGEN SERVICE*

**VERSIONE SPECIALE *SPECIAL VERSION:* P max 30 bar (435psi), T max 60°C (140°F)**

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECCXJVVA1BCA00003 | VECCXJVVA1BCA10003 | VEACXJVVA1BCA00003 | VEACXJVVA1BCA10003 | VEDCXJVVA1BCA00003 | VEDCXJVVA1BCA10003 |
| 15 | 1/2" | VECCXJVVA1BCA00004 | VECCXJVVA1BCA10004 | VEACXJVVA1BCA00004 | VEACXJVVA1BCA10004 | VEDCXJVVA1BCA00004 | VEDCXJVVA1BCA10004 |
| 20 | 3/4" | VECCXJVVA1BCA00005 | VECCXJVVA1BCA10005 | VEACXJVVA1BCA00005 | VEACXJVVA1BCA10005 | VEDCXJVVA1BCA00005 | VEDCXJVVA1BCA10005 |
| 25 | 1" | VECCXJVVA1BCA00006 | VECCXJVVA1BCA10006 | VEACXJVVA1BCA00006 | VEACXJVVA1BCA10006 | VEDCXJVVA1BCA00006 | VEDCXJVVA1BCA10006 |
| 32 | 1"1/4 | VECCXJVVA1BCA00007 | VECCXJVVA1BCA10007 | VEACXJVVA1BCA00007 | VEACXJVVA1BCA10007 | VEDCXJVVA1BCA00007 | VEDCXJVVA1BCA10007 |
| 40 | 1"1/2 | VECCXJVVA1BCA00008 | VECCXJVVA1BCA10008 | VEACXJVVA1BCA00008 | VEACXJVVA1BCA10008 | VEDCXJVVA1BCA00008 | VEDCXJVVA1BCA10008 |
| 50 | 2" | VECCXJVVA1BCA00009 | VECCXJVVA1BCA10009 | VEACXJVVA1BCA00009 | VEACXJVVA1BCA10009 | VEDCXJVVA1BCA00009 | VEDCXJVVA1BCA10009 |

Per VIP EVO ad uso ossigeno non sono disponibili Kit di ricambio. *Spare parts are not available for VIP EVO for oxygen service.*

### CODICI FINECORSA *LIMIT SWITCHES CODES*

| | | | | | | |
|---|---|---|---|---|---|---|
| Tipo di contatto *Type of contact* | REED (PNP) | | HALL (PNP) | | HALL (PNP) | |
| | N.O. | | N.O. | | N.O. | |
| Certificazioni *Certification* | CE/UL/EAC/CCC | | CE/UL/EAC | | CE Ex | |
| Codice *Code* | FM7B9200 | FM7B9112 | FM7C3200 | FM7C3112 | FM7A3200 | FM7A3112 |

# VIP EVO PN40 / 580 psi

## CODICI NPT *NPT CODES*

### NBR — CODICI NPT CON GUARNIZIONI NBR *NPT CODES WITH NBR SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JBBA2BCA00403 | VECH0JBBA2BCA10403 | VEAH0JBBA2BCA00403 | VEAH0JBBA2BCA10403 | VEDH0JBBA2BCA00403 | VEDH0JBBA2BCA10403 |
| 15 | 1/2" | VECH0JBBA2BCA00404 | VECH0JBBA2BCA10404 | VEAH0JBBA2BCA00404 | VEAH0JBBA2BCA10404 | VEDH0JBBA2BCA00404 | VEDH0JBBA2BCA10404 |
| 20 | 3/4" | VECH0JBBA2BCA00405 | VECH0JBBA2BCA10405 | VEAH0JBBA2BCA00405 | VEAH0JBBA2BCA10405 | VEDH0JBBA2BCA00405 | VEDH0JBBA2BCA10405 |
| 25 | 1" | VECH0JBBA2BCA00406 | VECH0JBBA2BCA10406 | VEAH0JBBA2BCA00406 | VEAH0JBBA2BCA10406 | VEDH0JBBA2BCA00406 | VEDH0JBBA2BCA10406 |
| 32 | 1"1/4 | VECH0JBBA2BCA00407 | VECH0JBBA2BCA10407 | VEAH0JBBA2BCA00407 | VEAH0JBBA2BCA10407 | VEDH0JBBA2BCA00407 | VEDH0JBBA2BCA10407 |
| 40 | 1"1/2 | VECH0JBBA2BCA00408 | VECH0JBBA2BCA10408 | VEAH0JBBA2BCA00408 | VEAH0JBBA2BCA10408 | VEDH0JBBA2BCA00408 | VEDH0JBBA2BCA10408 |
| 50 | 2" | VECH0JBBA2BCA00409 | VECH0JBBA2BCA10409 | VEAH0JBBA2BCA00409 | VEAH0JBBA2BCA10409 | VEDH0JBBA2BCA00409 | VEDH0JBBA2BCA10409 |

### EPDM — CODICI NPT CON GUARNIZIONI EPDM *NPT CODES WITH EPDM SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JEEA2BCA00403 | VECH0JEEA2BCA10403 | VEAH0JEEA2BCA00403 | VEAH0JEEA2BCA10403 | VEDH0JEEA2BCA00403 | VEDH0JEEA2BCA10403 |
| 15 | 1/2" | VECH0JEEA2BCA00404 | VECH0JEEA2BCA10404 | VEAH0JEEA2BCA00404 | VEAH0JEEA2BCA10404 | VEDH0JEEA2BCA00404 | VEDH0JEEA2BCA10404 |
| 20 | 3/4" | VECH0JEEA2BCA00405 | VECH0JEEA2BCA10405 | VEAH0JEEA2BCA00405 | VEAH0JEEA2BCA10405 | VEDH0JEEA2BCA00405 | VEDH0JEEA2BCA10405 |
| 25 | 1" | VECH0JEEA2BCA00406 | VECH0JEEA2BCA10406 | VEAH0JEEA2BCA00406 | VEAH0JEEA2BCA10406 | VEDH0JEEA2BCA00406 | VEDH0JEEA2BCA10406 |
| 32 | 1"1/4 | VECH0JEEA2BCA00407 | VECH0JEEA2BCA10407 | VEAH0JEEA2BCA00407 | VEAH0JEEA2BCA10407 | VEDH0JEEA2BCA00407 | VEDH0JEEA2BCA10407 |
| 40 | 1"1/2 | VECH0JEEA2BCA00408 | VECH0JEEA2BCA10408 | VEAH0JEEA2BCA00408 | VEAH0JEEA2BCA10408 | VEDH0JEEA2BCA00408 | VEDH0JEEA2BCA10408 |
| 50 | 2" | VECH0JEEA2BCA00409 | VECH0JEEA2BCA10409 | VEAH0JEEA2BCA00409 | VEAH0JEEA2BCA10409 | VEDH0JEEA2BCA00409 | VEDH0JEEA2BCA10409 |

### FKM — CODICI NPT CON GUARNIZIONI FKM *NPT CODES WITH FKM SEALING*

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECH0JVVA2BCA00403 | VECH0JVVA2BCA10403 | VEAH0JVVA2BCA00403 | VEAH0JVVA2BCA10403 | VEDH0JVVA2BCA00403 | VEDH0JVVA2BCA10403 |
| 15 | 1/2" | VECH0JVVA2BCA00404 | VECH0JVVA2BCA10404 | VEAH0JVVA2BCA00404 | VEAH0JVVA2BCA10404 | VEDH0JVVA2BCA00404 | VEDH0JVVA2BCA10404 |
| 20 | 3/4" | VECH0JVVA2BCA00405 | VECH0JVVA2BCA10405 | VEAH0JVVA2BCA00405 | VEAH0JVVA2BCA10405 | VEDH0JVVA2BCA00405 | VEDH0JVVA2BCA10405 |
| 25 | 1" | VECH0JVVA2BCA00406 | VECH0JVVA2BCA10406 | VEAH0JVVA2BCA00406 | VEAH0JVVA2BCA10406 | VEDH0JVVA2BCA00406 | VEDH0JVVA2BCA10406 |
| 32 | 1"1/4 | VECH0JVVA2BCA00407 | VECH0JVVA2BCA10407 | VEAH0JVVA2BCA00407 | VEAH0JVVA2BCA10407 | VEDH0JVVA2BCA00407 | VEDH0JVVA2BCA10407 |
| 40 | 1"1/2 | VECH0JVVA2BCA00408 | VECH0JVVA2BCA10408 | VEAH0JVVA2BCA00408 | VEAH0JVVA2BCA10408 | VEDH0JVVA2BCA00408 | VEDH0JVVA2BCA10408 |
| 50 | 2" | VECH0JVVA2BCA00409 | VECH0JVVA2BCA10409 | VEAH0JVVA2BCA00409 | VEAH0JVVA2BCA10409 | VEDH0JVVA2BCA00409 | VEDH0JVVA2BCA10409 |

### FKM $O_2$ — CODICI NPT FKM PER USO OSSIGENO *NPT FKM CODES FOR OXYGEN SERVICE*

**VERSIONE SPECIALE *SPECIAL VERSION:* P max 30 bar (435psi), T max 60°C (140°F)**

| DN [mm] | [inch] | SR N.C. | | SR N.O. | | DA | |
|---|---|---|---|---|---|---|---|
| | | Semplice effetto "N.C." *Spring return "N.C."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Semplice effetto "N.O." *Spring return "N.O."* | + solo magnete senza finecorsa *+ only magnet without limit switch* | Doppio effetto *Double acting* | + solo magnete senza finecorsa *+ only magnet without limit switch* |
| 10 | 3/8" | VECCXJVVA2BCA00403 | VECCXJVVA2BCA10403 | VEACXJVVA2BCA00403 | VEACXJVVA2BCA10403 | VEDCXJVVA2BCA00403 | VEDCXJVVA2BCA10403 |
| 15 | 1/2" | VECCXJVVA2BCA00404 | VECCXJVVA2BCA10404 | VEACXJVVA2BCA00404 | VEACXJVVA2BCA10404 | VEDCXJVVA2BCA00404 | VEDCXJVVA2BCA10404 |
| 20 | 3/4" | VECCXJVVA2BCA00405 | VECCXJVVA2BCA10405 | VEACXJVVA2BCA00405 | VEACXJVVA2BCA10405 | VEDCXJVVA2BCA00405 | VEDCXJVVA2BCA10405 |
| 25 | 1" | VECCXJVVA2BCA00406 | VECCXJVVA2BCA10406 | VEACXJVVA2BCA00406 | VEACXJVVA2BCA10406 | VEDCXJVVA2BCA00406 | VEDCXJVVA2BCA10406 |
| 32 | 1"1/4 | VECCXJVVA2BCA00407 | VECCXJVVA2BCA10407 | VEACXJVVA2BCA00407 | VEACXJVVA2BCA10407 | VEDCXJVVA2BCA00407 | VEDCXJVVA2BCA10407 |
| 40 | 1"1/2 | VECCXJVVA2BCA00408 | VECCXJVVA2BCA10408 | VEACXJVVA2BCA00408 | VEACXJVVA2BCA10408 | VEDCXJVVA2BCA00408 | VEDCXJVVA2BCA10408 |
| 50 | 2" | VECCXJVVA2BCA00409 | VECCXJVVA2BCA10409 | VEACXJVVA2BCA00409 | VEACXJVVA2BCA10409 | VEDCXJVVA2BCA00409 | VEDCXJVVA2BCA10409 |

Per VIP EVO ad uso ossigeno non sono disponibili Kit di ricambio. *Spare parts are not available for VIP EVO for oxygen service.*

### CODICI FINECORSA *LIMIT SWITCHES CODES*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Tipo di contatto *Type of contact* | REED (PNP) | | HALL (PNP) | | HALL (PNP) | |
| | N.O. | | N.O. | | N.O. | |
| Certificazioni *Certification* | CE/UL/EAC/CCC | | CE/UL/EAC | | CE Ex | |
| Codice *Code* | FM7B9200 | FM7B9112 | FM7C3200 | FM7C3112 | FM7A3200 | FM7A3112 |

# VIP EVO PN40 / 580 psi

## CODICI KIT DI RICAMBIO *SPARE KIT CODES*

| NBR | | KIT RICAMBIO PER GUARNIZIONI NBR | *SPARE KIT FOR NBR SEALING* |
|---|---|---|---|
| DN [mm] | [inch] | Kit ricambio guarnizione principale *Main seat spare kit* | Kit ricambio completo *Complete spare kit* |
| 10 | 3/8" | KGEB203 | KGEB203C |
| 15 | 1/2" | KGEB204 | KGEB204C |
| 20 | 3/4" | KGEB205 | KGEB205C |
| 25 | 1" | KGEB206 | KGEB206C |
| 32 | 1"1/4 | KGEB207 | KGEB207C |
| 40 | 1"1/2 | KGEB208 | KGEB208C |
| 50 | 2" | KGEB209 | KGEB209C |

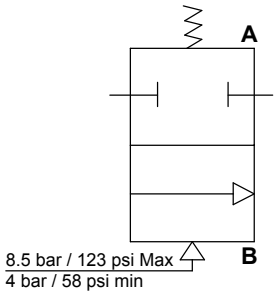
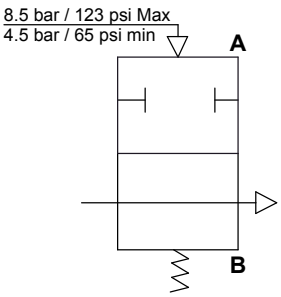
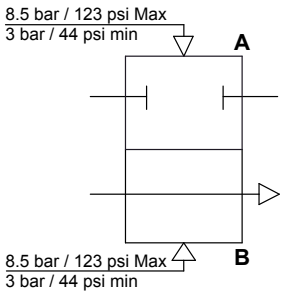
| EPDM | | KIT RICAMBIO PER GUARNIZIONI EPDM | *SPARE KIT FOR EPDM SEALING* |
|---|---|---|---|
| DN [mm] | [inch] | Kit ricambio guarnizione principale *Main seat spare kit* | Kit ricambio completo *Complete spare kit* |
| 10 | 3/8" | KGEE203 | KGEE203C |
| 15 | 1/2" | KGEE204 | KGEE204C |
| 20 | 3/4" | KGEE205 | KGEE205C |
| 25 | 1" | KGEE206 | KGEE206C |
| 32 | 1"1/4 | KGEE207 | KGEE207C |
| 40 | 1"1/2 | KGEE208 | KGEE208C |
| 50 | 2" | KGEE209 | KGEE209C |

| FKM | | KIT RICAMBIO PER GUARNIZIONI FKM | *SPARE KIT FOR FKM SEALING* |
|---|---|---|---|
| DN [mm] | [inch] | Kit ricambio guarnizione principale *Main seat spare kit* | Kit ricambio completo *Complete spare kit* |
| 10 | 3/8" | KGEV203 | KGEV203C |
| 15 | 1/2" | KGEV204 | KGEV204C |
| 20 | 3/4" | KGEV205 | KGEV205C |
| 25 | 1" | KGEV206 | KGEV206C |
| 32 | 1"1/4 | KGEV207 | KGEV207C |
| 40 | 1"1/2 | KGEV208 | KGEV208C |
| 50 | 2" | KGEV209 | KGEV209C |

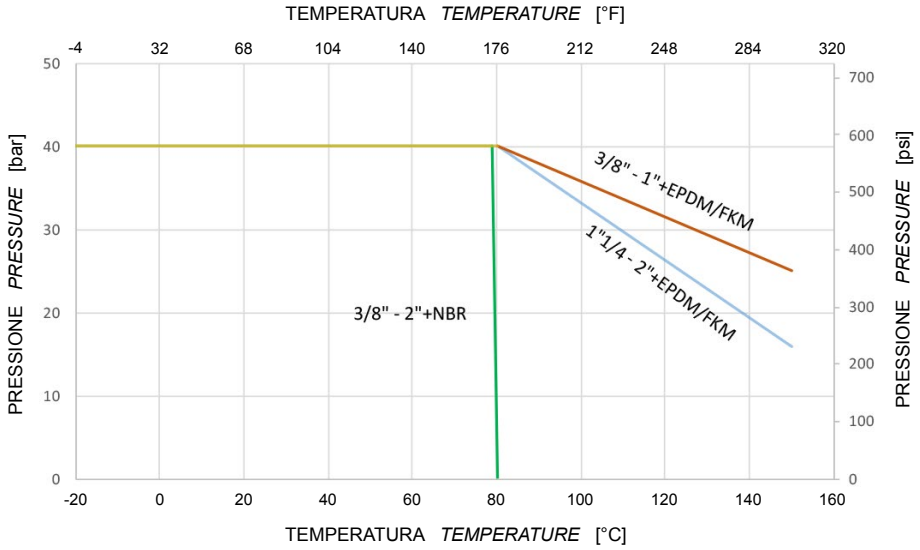
Per VIP EVO ad uso ossigeno non sono disponibili Kit di ricambio. *Spare parts are not available for VIP EVO for oxygen service.*

# VIP EVO PN40 / 580 psi

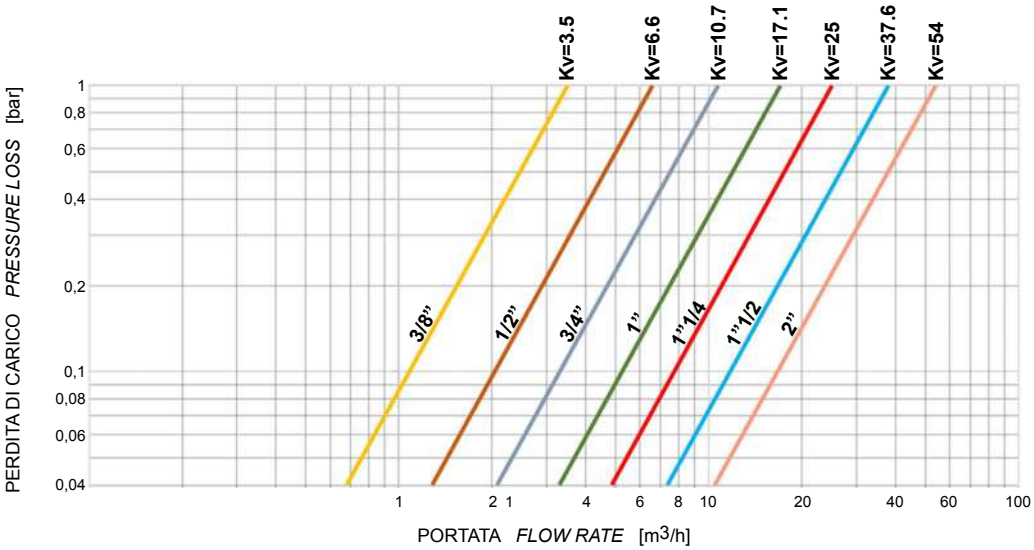
## SCHEMA DI FUNZIONAMENTO *WORKING PLAN*

| Semplice Effetto SR N.C.<br>*Spring Return SR N.C.* | Semplice Effetto SR N.O.<br>*Spring Return SR N.O.* | Doppio Effetto DA<br>*Double Acting DA* |
|---|---|---|
|  |  |  |

## DIAGRAMMA PRESSIONE / TEMPERATURA *PRESSURE / TEMPERATURE DIAGRAM*




## DIAGRAMMA PORTATA / PERDITA DI CARICO E COEFFICIENTE NOMINALE
## *FLOW RATE / PRESSURE LOSS AND NOMINAL COEFFICIENT*




Il valore Kv é il valore di portata in $m^3/h$ (con acqua a 15°C) provocante la caduta di pressione di 1 bar.

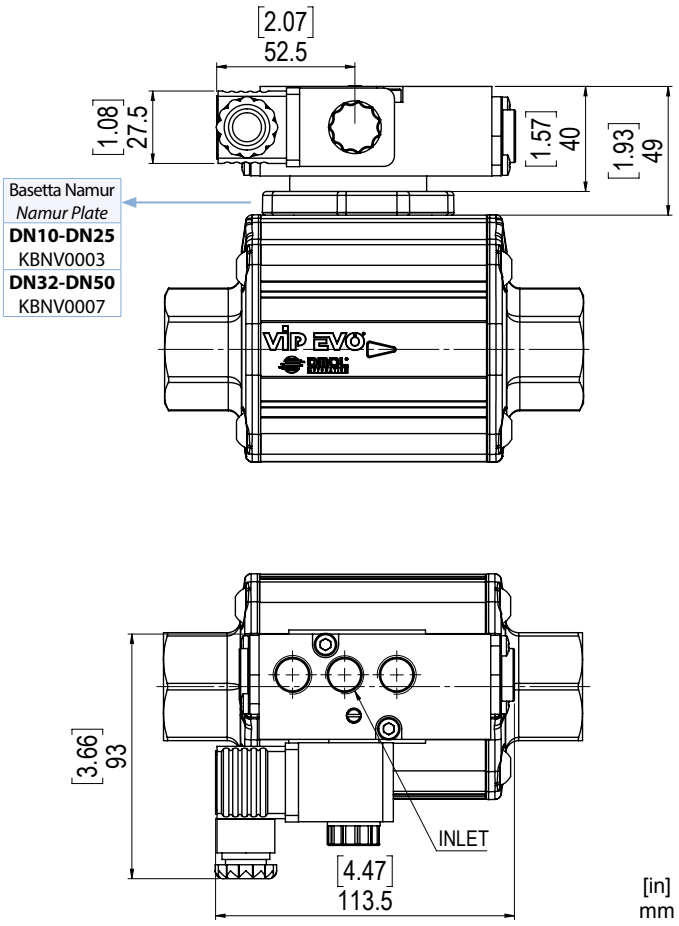
*Kv is the coefficient, expressed in $m^3/h$ (with water at 15°C) causing a pressure loss of 1 bar.*

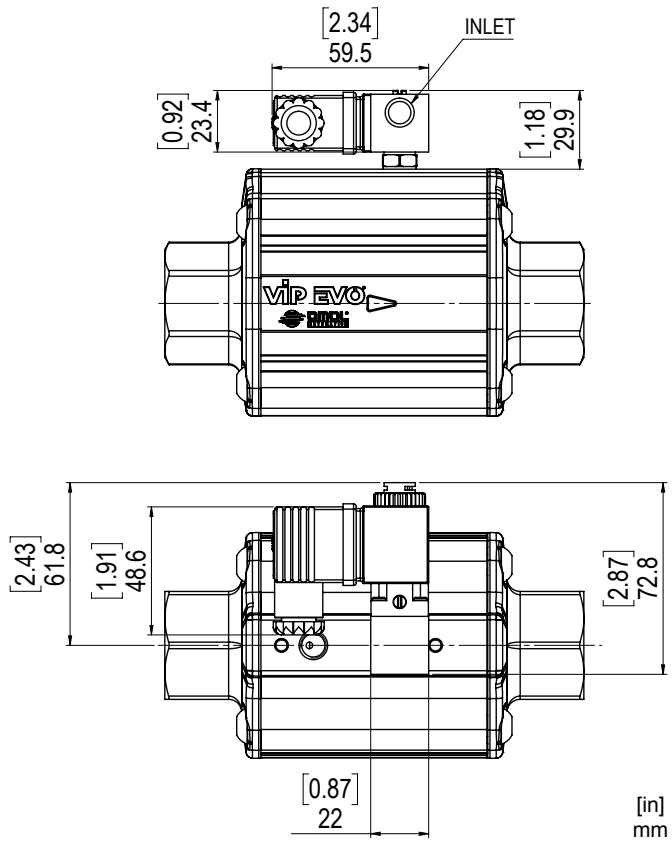
*Cv factor is the flow of water at 60°F in US gallons/minutes (gpm) at appressure drop of 1lb / $in^2$.*
*Cv = 1,156 * Kv*

# ACCESSORI VIP EVO *VIP EVO ACCESSORIES*

| ELETTROVALVOLA NAMUR *NAMUR SOLENOID VALVE* | | | | | |
|---|---|---|---|---|---|
| Elettrovalvola *Solenoid valve* | ER8188A2 | ER8188A4 | ER8188A5 | ER8188C2 | ER8188C4 |
| Voltaggio *Voltage* | 24V AC | 115V AC | 230V AC | 24V DC | 110V DC |

| MICROELETTROVALVOLA *MICRO SOLENOID VALVE* | | | | | |
|---|---|---|---|---|---|
| Elettrovalvola *Solenoid valve* | EP415024 | EP415110 | EP415220 | EP412012 | EP412024 |
| Voltaggio *Voltage* | 24V AC | 115V AC | 230V AC | 12V DC | 24V DC |




**Elettrovalvola 5/2 a norma NAMUR**

- L'elettrovalvola é predisposta per la selezione tra la funzione 5/2 e 3/2 vie che si realizza utilizzando l'appropriata piastra di interfacciamento dell'elettrovalvola.
- Potenza assorbita D.C.: 2,5 W.
- Potenza assorbita A.C.: 2 W.
- Tolleranza tensione di alimentazione: ± 10%.
- Classe isolamento bobina: F.
- Grado di protezione con connettore: IP 65.
- Connessione elettrica: PG 9.
- Connessioni pneumatiche: alimentazione 1/4"; scarico 1/4" ISO 228.
- Pressione elettrovalvola max.: 10 bar (145 psi).
- Temperatura fluido di alimentazione: da -10°C a +80°C (da 14°F a 176°F).
- Temperatura ambiente: da -10°C a +50°C (da 14°F a 122°F).

***Solenoid valve 5/2 as per NAMUR***

- *This solenoid valve is designed for the selection of the functions 5/2 and 3/2, which is realized by using with the appropriate mounting plate.*
- *Full-working input power - D.C.: 2,5 W.*
- *Full-working input power - A.C.: 2 W.*
- *Supply voltage tolerances: +/- 10%.*
- *Coil insulation: F-class.*
- *Protection with connector: IP65.*
- *Electric connection: PG 9.*
- *Pneumatic connections: inlet 1/4"; outlet 1/4" ISO 228.*
- *Max. pressure: 10 bar (145 psi).*
- *Operating media temperature: from -10°C to +80°C (from 14°F to 176°F).*
- *Ambient temperature: from -10°C to +50°C (from 14°F to 122°F).*

**Microelettrovalvola universale compatta**

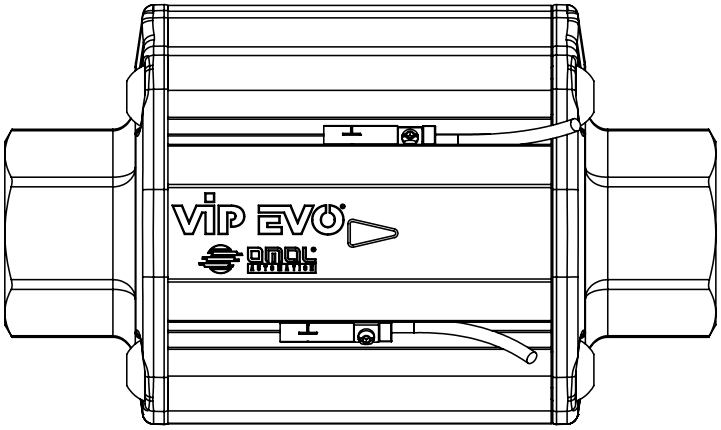
- Il collegamento dell'elettrovalvola è eseguito direttamente nella presa d'aria dell'attuatore, eliminando qualsiasi pezzo intermedio e viti di fissaggio.
- Elettrovalvola del tipo 3/2 con un solenoide disponibile con le seguenti tensioni: 24-110-220V AC; 12-24V DC.
- Potenza assorbita allo spunto - A.C.: 9 VA.
- Potenza assorbita a regime - D.C.: 5 W.
- Potenza assorbita a regime - A.C.: 6 VA.
- Tolleranza tensione di alimentazione: ±10%.
- Classe di isolamento filo di rame: H.
- Classe isolamento bobina: F.
- Grado di protezione con connettore: IP 65.
- Connessione elettrica: PG 9 (orientabile 360°).
- Connessione pneumatica: 1/8" ISO 228 (orientabile 360°).
- Pressione elettrovalvola max.: 10 bar (145 psi).
- Temperatura fluido di alimentazione: da -10°C a +50°C (da 14°F a 122°F).
- Temperatura ambiente: da -10°C a +50°C (da 14°F a 122°F).
- Diametro nominale di passaggio 1,3 mm (0,05 in).

***Micro solenoid valve***

- *This solenoid valve is connected by a joint which fits directly to the actuator air intake, without other fittings or fixing screws.*
- *3/2 solenoid valve, with solenoid available in the following voltages: 24-110-220V AC; 12-24V DC.*
- *Starting input power - A.C.: 9 VA.*
- *Full-working input power - D.C.: 5 W.*
- *Full-working input power - A.C.: 6 VA.*
- *Supply voltage tolerances: +/- 10%.*
- *Copper wire insulation: H-class.*
- *Coil insulation: F-class.*
- *Protection with connector: IP65.*
- *Electric connection: PG 9 any orientation acceptable 360°.*
- *Pneumatic connections:1/8" ISO 228 any orientation acceptable 360°.*
- *Max. pressure: 10 bar (145 psi).*
- *Operating media temperature: from -10°C to +50°C (from 14°F to 122°F).*
- *Ambient temperature: from -10°C to +50°C (from 14°F to 122°F).*
- *Bore 1,3 mm (0,05 in).*

# ACCESSORI VIP EVO *VIP EVO ACCESSORIES*

## FINECORSA *LIMIT SWITCH*



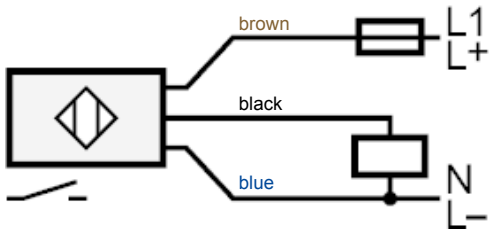

VIP EVO é predisposto per l'utilizzo di finecorsa induttivi a contatto magnetico, con led di segnalazione, i quali vengono forniti con un kit che ne consente un rapido fissaggio nelle scanalature laterali del corpo. I magneti per la rilevazione della posizione tramite finecorsa si trovano all'interno, di conseguenza si possono installare solamente durante l'assemblaggio di VIP EVO e non in fase successiva. Per questo motivo é necessario **specificare in fase d'ordine la richiesta del magnete.**

*VIP EVO can be provided with inductive limit switch (magnetic contact) and signal LED. Limit switches can be easily mounted in the integrated slots and fixed with a screw. Since the magnets are situated inside the valve, they must be mounted while assembling the VIP EVO and not afterwards. For this reason, in case needed,* ***magnet must be requested at VIP EVO order phase.***

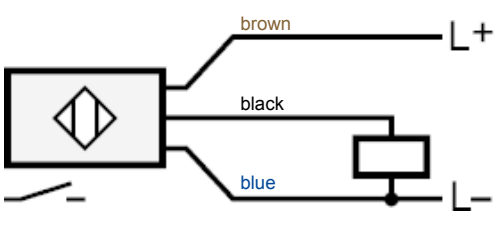
| DATI TECNICI FINECORSA *LIMIT SWITCH TECHNICAL DATA* | | | | | | | |
|---|---|---|---|---|---|---|---|
| Modello elettrico *Electrical design* | | REED (PNP) | | HALL (PNP) | | HALL (PNP) | |
| Tipo di contatto *Type of contact* | | N.O. | | N.O. | | N.O. | |
| Tensione alimentazione *Operating voltage* | V | 5-50 AC/DC | | 10-30 DC | | 10-30 DC | |
| Permanente capacità di corrente dell'uscita di commutazione AC *Permanent current rating of switching output AC* | mA | 350 | | - | | - | |
| Permanente capacità di corrente dell'uscita di commutazione DC *Permanent current rating of switching output DC* | mA | 500 | | 100 | | 100 | |
| Grado di protezione *Degree of protection* | | IP 67 | | IP 69K | | IP 69K | |
| Temperatura ambiente *Ambient temperature* | °C | -25 ÷ +70 | | -25 ÷ +85 | | -25 ÷ +60 | |
| | °F | -13 ÷ +158 | | -13 ÷ +185 | | -13 ÷ +140 | |
| Numero fili *Wire number* | | 3 | | 3 | | 3 | |
| Lunghezza filo *Wire length* | m | 2 | 0,3 | 2 | 0,3 | 2 | 0,3 |
| | ft | 6,56 | 0,98 | 6,56 | 0,98 | 6,56 | 0,98 |
| Collegamento *Mounting type* | | Diretto *Direct* | M12 | Diretto *Direct* | M12 | Diretto *Direct* | M12 |
| Categoria Atex *Atex category* | | - | | - | | II 3D Ex tc IIIC T125°C Dc X | |
| Certificazioni *Certifications* | | CE/UL/EAC/CCC | | CE/UL/EAC | | CE Ex | |
| Codice *Code* | | **FM7B9200** | **FM7B9112** | **FM7C3200** | **FM7C3112** | **FM7A3200** | **FM7A3112** |
| Materiale *Material* | | PA / Inox | | PA / Inox | | PA / Inox | |

**Cablaggio finecorsa** ***Limit switch wiring***

REED (PNP)

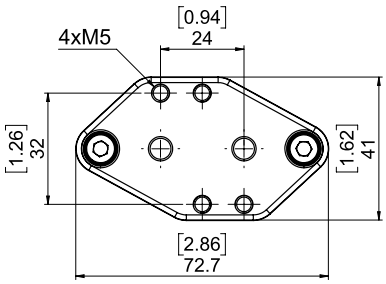



HALL (PNP)



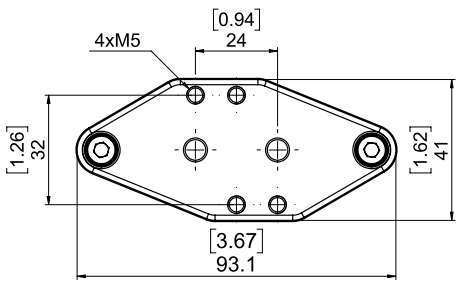

## BASETTA INTERFACCIA NAMUR *NAMUR PLATE ADAPTER*

**VIP EVO**
**DN10-DN25**
KBNV0003




[in]
mm

**VIP EVO**
**DN32-DN50**
KBNV0007




[in]
mm

# CERTIFICATI VIP EVO
## *VIP EVO CERTIFICATES*



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04001HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
*Consorzio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115*

ATTESTA
*ATTESTS*

che il sistema qualità adottato da
*that the quality system operated by*

FABBRICANTE / *MANUFACTURER*: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa / *Operational Office Address*: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, **modulo H**, della **Direttiva 2014/68/UE**.
*for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, **module H**, of the Pressure Equipment **Directive 2014/68/UE**.*

AUTORIZZA
*AUTHORIZES*

ad apporre, sui prodotti di seguito specificati, il marchio / *to provide the above mentioned products, the mark* CE 1115

ACCESSORI A PRESSIONE / *PRESSURE ACCESSORIES*: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO
*BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES*

Modelli coperti / *Covered models*: Vedere elenco riportato in Appendice A / *See list in Appendix A*
Rapporti di valutazione / *Evaluation Reports*: 004_ROQ_2019_07_22, 004_RAQ_2019_09_13

CONDIZIONI DI VALIDITA' / *VALIDITY TERMS AND CONDITIONS*

| Prima Emissione / *First issue* | Emissione corrente / *Current issue* | Data di Scadenza / *Expiry date* |
|---|---|---|
| 18/09/2007 | 18/09/2019 | 17/09/2022 |

Consorzio PASCAL srl
IL PRESIDENTE - THE PRESIDENT

Pagina / Page 1 di / of 2

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non elecrtical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura : PNEUMATIC VALVES

Type(s)/ Type(s) / Tipo(i) : ANGLE SEAT VALVES ARES-ATENA-ZEUS / PNEUMATIC COAXIAL VALVES VIP-VIP EVO

Marquage/ Marking / Marcatura : Ex II 2 GD

Dépositaire / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
I- 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 febraury 2014, acknowledges receipt of file according to the procedure described chapiter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VAP-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035242/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.
Date de fin de validité : 2029.11.07
Le Directeur Général de l'INERIS, Par délégation,

The technical documentation referenced : VAP-19 dated 10/10/2019 is consigned under the reference : no INERIS-EQEN 035242/19.
Within the scope of the recording, INERIS did not examine the contain of the technical documentation.
Validity completion date : 2029.11.07
The Chief Executive Officer of INERIS, By delegation,

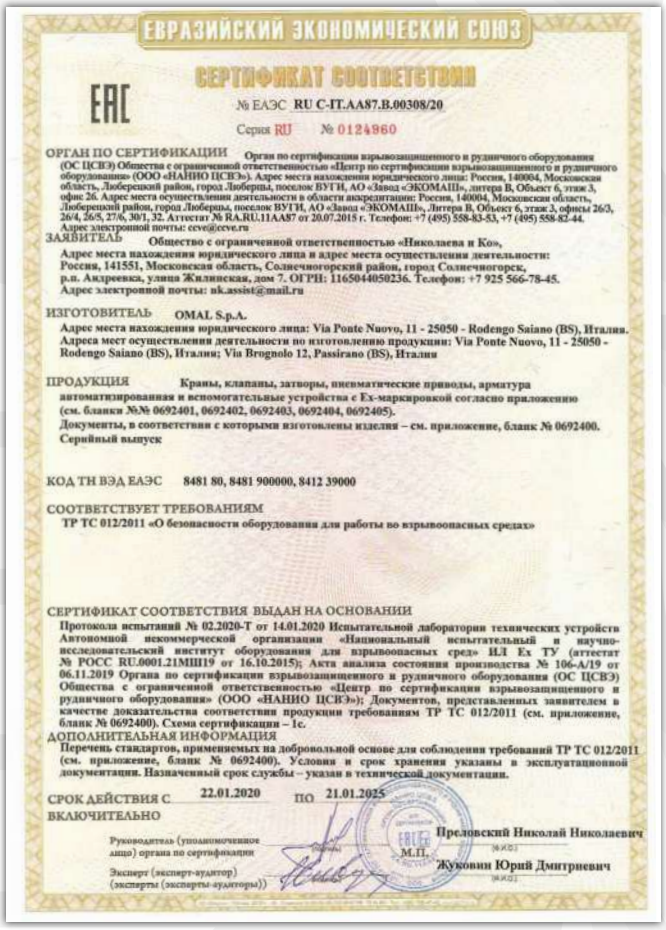
La documentazione tecnica di riferimento : VAP-19 dated 10/10/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 035242/19.
Nel quadro di questa registrazione, INERIS non ha examinato il contenuto della documentazione tecnica.
Data di fine di validità : 2029.11.07
Verneuil-en-Halatte, le 2019.11.07
Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél: +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 internet www.ineris.fr
Institut national de l'environnement industriel et des risques
Établissement public à caractère industriel et commercial - RCS Compiègne B 381 984 934 - Siret 381 984 921 00819 - APE 7120B - TVA Intracom FR 73 381 984 921

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ

СЕРТИФИКАТ СООТВЕТСТВИЯ

EAC

№ ЕАЭС RU C-IT.AA87.B.00308/20

Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11AA87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: cevе@cevе.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ex ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации — Преловский Николай Николаевич

М.П.

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



TÜV NORD

CERTIFICATE

This certifies, that the company

**Omal S.p.A.**
**Via Ponte Nuovo, 11**
**25050 Rodengo Saiano (BS)**
**Italy**

Is authorized to provide the product mentioned below

Description of product: **Coaxial actuated valve series VIP EVO**

In accordance with: **EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7**

Registration No 20 20256 03
Test Report No PS.20256-20-L-03
File reference 20256-03

Validity
from 2020-06-19
until 2023-06-19

TÜV NORD Italia S.r.l. (TÜV NORD Group)
Via Turati, 70 20023 Cerro Maggiore (MI) www.tuev-nord.it

Cerro Maggiore, 2020-06-19
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

**▲ SIL**

Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification of compliance to the IEC 61508 requirements, of the functional safety level provided by the product intended to be integrated in systems with required safety integrity level up to SIL 3.*


DN25 PN25 1.4408 1

3.3

# VALVOLE A FLUSSO AVVIATO

# *ANGLE SEAT VALVES*

# VALVOLE A FLUSSO AVVIATO
# *ANGLE SEAT VALVES*



**PN 25**

**Acciaio inox**

**ARES** da 3/8" a 2"; **ATENA** versione compatta da 3/8" a 3/4" **con attuatore ø40**.

***Stainless steel***

***ARES*** *from 3/8" to 2"; **ATENA** compact version from 3/8" to 3/4"* ***with actuator ø40.***



**PN 16**

**Bronzo**

**ZEUS**: Versione in bronzo da 3/8" a 2"

***Bronze***

***ZEUS****: bronze versions from 3/8" to 2"*

## CARATTERISTICHE GENERALI:

- Attacchi valvola filettati secondo EN 10226-1 Rp (ex ISO 7/1) per valvole ARES; ISO 228/1 per valvole ZEUS. Altri tipi di attacchi a richiesta.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da 3/8" a 2" nelle versioni doppio effetto, semplice effetto normalmente chiusa da sopra e sotto l'otturatore, semplice effetto normalmente aperta da sotto l'otturatore.
- **Conforme alla direttiva Europea 2014/68/UE "PED".**
- **Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.**
- Le diverse versioni degli azionamenti, le varie combinazioni della valvola e la possibilità di intercettare il flusso da sopra o sotto l'otturatore, danno origine a molteplici versioni della valvola automatica.
- Nelle tabelle seguenti sono elencate le versioni standard con i principali parametri di funzionamento.
- In base al tipo di valvola ed alla variazione di pressione ΔP che deve essere intercettata tra monte e valle della stessa, viene individuata la pressione di comando necessaria all'azionamento e conseguentemente il codice della valvola corrispondente.
- A richiesta: versioni per vuoto e per uso ossigeno.

## *GENERAL FEATURES:*

- *Threaded valve ends, as per EN 10226-1 Rp (ex ISO 7/1) for ARES valves; ISO 228/1 for ZEUS valves. Other types available on request.*
- *Assembling is possible in all positions: upright, flat or angled.*
- *Range available from 3/8" to 2" in the Double Acting versions, Spring Return N.C. from above and below the plug, Spring Return N.O. from below the plug.*
- ***According to 2014/68/EU "PED".***
- ***2014/34/EU ATEX configuration to request at time of order.***
- *The variations in the actioning of the valve, the several combinations and the possibility to intercept the fluid from above or below the plug, originate multiple versions of the automatic valve.*
- *In the table below are indicated the standard versions with the main parameters.*
- *On the basis of the kind of valve and the variations of pressure ΔP that must be intercepted, the necessary control pressure can be individuated, and consequently, the code for the corresponding valve.*
- *On request: versions for vacuum and oxygen service.*

## FLUIDO DI COMANDO:

- Fluido di pilotaggio: aria compressa lubrificata o secca, gas e fluidi neutri.
- Temperatura ambiente: da -10°C a +60° C.

## FLUIDO INTERCETTATO:

- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc..(comunque compatibili con A 351 CF8M O CuSn5Zn5Pb5-B).
- Pressione di utilizzo da 0 a 16 / 25 bar (vapore a 180°C da 0 a 10 bar) in funzione della misura e della versione scelta (vedi pagine seguenti).
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

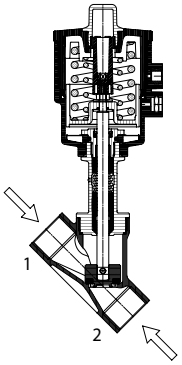
## *CONTROL MEDIA:*

- *Driving media: compressed air, lubricated or dry, gas or neutral media.*
- *Ambient temperature: -10°C to +60°C.*

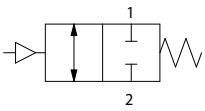
## *OPERATING MEDIA:*

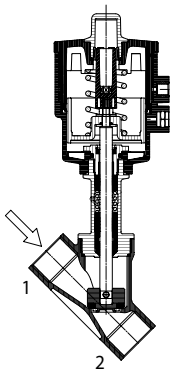
- *Air,water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with* A 351 CF8M O CuSn5Zn5Pb5-B*).*
- *Pressure from 0 to 16 / 25 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen (see following pages).*
- *Temperature from –10°C to 180°C.*
- *Max. viscosity 600 cst ($mm^2/s$).*

## MODALITÀ DI IMPIEGO *METHODS OF USE*



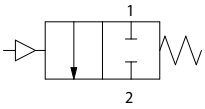

N.C. Normalmente chiusa bidirezionale. Con ingresso sotto l'otturatore si evita il colpo d'ariete.
Ingresso sopra l'otturatore per fluidi comprimibili.
*N.C. Normally Closed bidirectional. With the flow coming from below the plug you avoid water hammering.*
*Flow from above the plug for condensable media.*

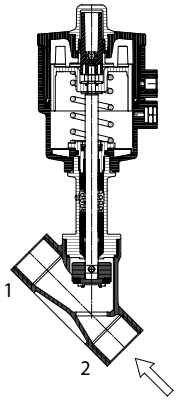


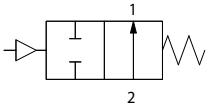

N.C. Normalmente chiusa con ingresso sopra l'otturatore.
Ingresso sopra l'otturatore per fluidi comprimibili.

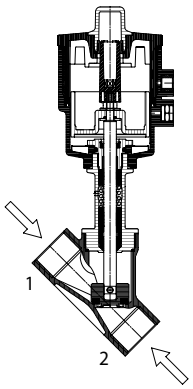
*N.C. Normally Closed with the flow from above the plug.*
*Flow from above the plug for condensable media.*



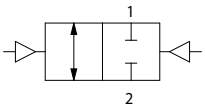




N.A. Normalmente aperta con ingresso sotto l'otturatore
*N.O. Normally Open with flow from below the plug*




Doppio effetto bidirezionale
*Double Acting bidirectional*




# SCHEMA DI CODIFICA VALVOLE A FLUSSO AVVIATO
# *ANGLE SEAT VALVES CODE PLAN*

| J | 4 / 9 | - | P | G | - | - | - | - | Y | X |
|---|---|---|---|---|---|---|---|---|---|---|

**Versione *Version***
**4** = **ARES - ATENA**
**9** = **ZEUS**

**Versione *Version***
**P** = Standard
**X** = Per uso ossigeno
For oxygen

**ø teste di comando**
***ø control heads***
14 = Ø 40
16 = Ø 50
18 = Ø 63
21 = Ø 90
23 = Ø 110

**YX solo per la versione ATEX**
***YX only for ATEX version***

**Versione *Version***
**S** = N.C. sottosede anticolpo d'ariete
*below the plug anti water hammer*
**C** = N.C. soprasede *above the plug*
**A** = N.A. - *N.O.*
**D** = doppio effetto - *double acting*

**Tipo di connessioni *Connection types***
**0** = Filettate *Threaded*
- EN 10226-1 Rp (ex ISO 7/1) ARES;
- ISO 228/1 ZEUS.

**4** = Filettate *Threaded*
NPT
Per altri attacchi ARES vedere "ARES con attacchi speciali".
*For other thread see "ARES with special ends".*

**Misura valvola *Valve size***

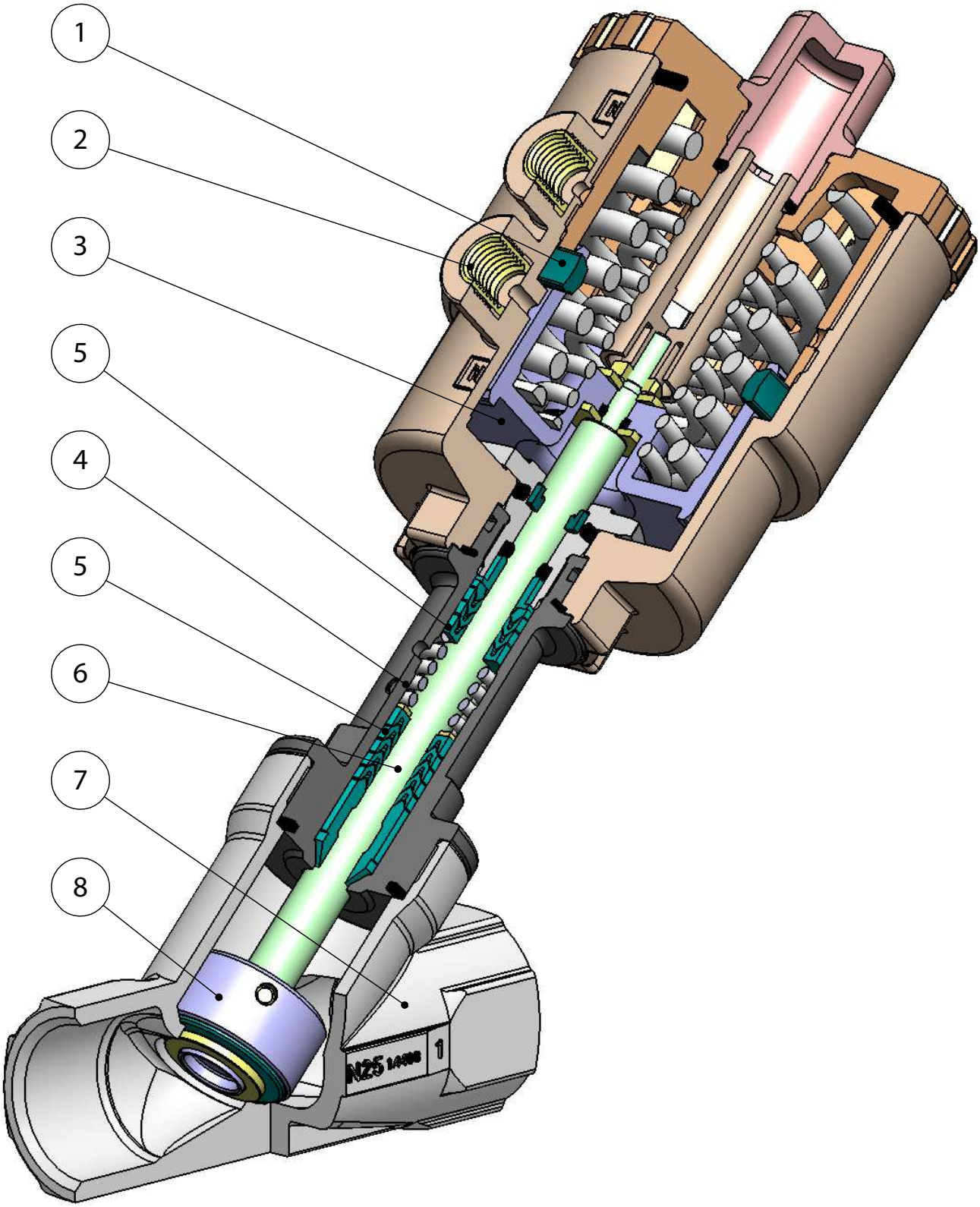
| | |
|---|---|
| **3** = 3/8" | |
| **4** = 1/2" | **4** = DN 15 |
| **5** = 3/4" | **5** = DN 20 |
| **6** = 1" | **6** = DN 25 |
| **7** = 1" 1/4 | **7** = DN 32 |
| **8** = 1" 1/2 | **8** = DN 40 |
| **9** = 2" | **9** = DN 50 |

A richiesta versione per vuoto e per uso ossigeno *On request: versions for vacuum and oxygen service*
Per versioni con teste di comando differenti dallo standard contattare l'ufficio commerciale OMAL.
*For versions with control head different from standard executions, please contact our sales department*

# ARES

## VALVOLA INCLINATA

## *ANGLE SEAT VALVE*

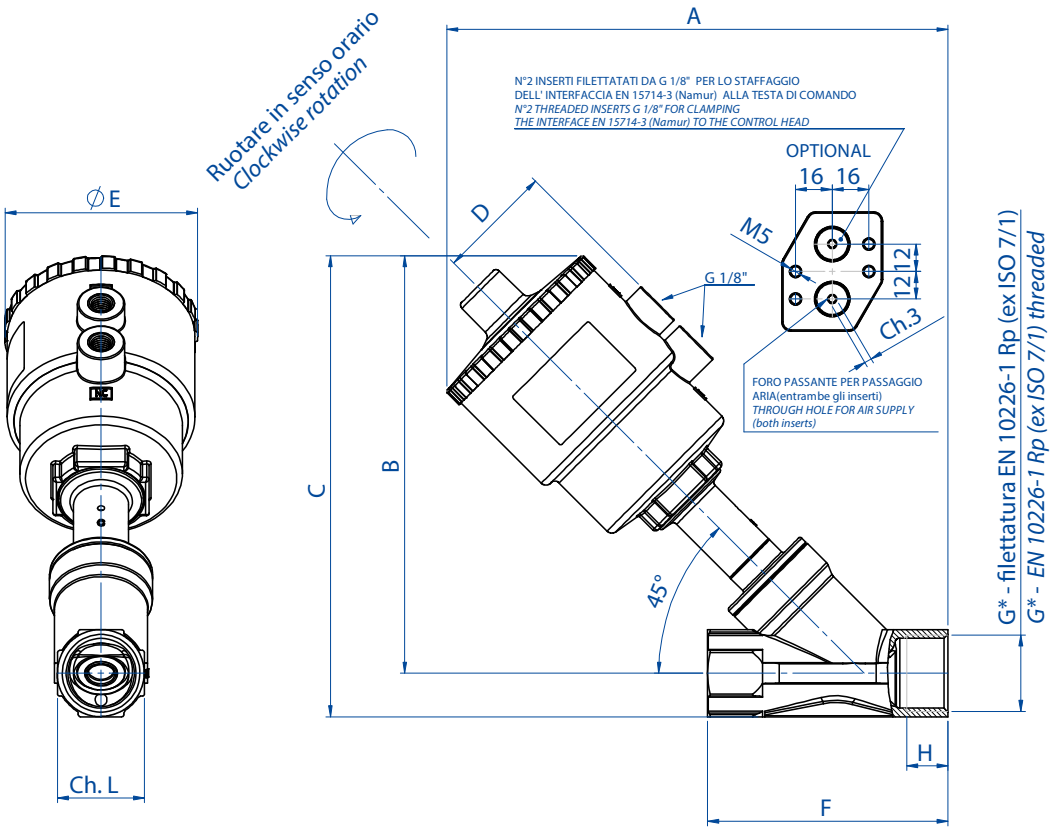


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone.<br>*Seal placed in the cylinder rather than on the piston.* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico).<br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss).* |
| | | Minor usura della guarnizione.<br>*Less wear of the seal.* |
| 2 | Inserti della testa di comando in 303 S.S..<br>*Piloting head inserts in 303 S.S..* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni.<br>*Increases considerably the corrosion resistance caused by external agents.* |
| 3 | Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron).<br>*Starting from DN63 metal piston with CHEMICAL NICKEL coating (10-15 micron).* | Si riduce l'usura del pistone grazie al raggiungimento di una maggior durezza superficiale(700-750 HV).<br>*Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV).* |
| 4 | Guarnizioni precaricate da molla.<br>*Seals pre-loaded by spring.* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno.<br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche.<br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions.* |
| 5 | Guarnizioni tipo "chevron" (a "v") con 5 guarnizioni nella parte inferiore e 3 nella parte superiore della molla.<br>*CHEVRON seals (V shape) with 5 seals in the lower part of the spring and 3 seals in the upper part.* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 6 | Albero rullato.<br>*Rolled shaft.* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento.<br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft.* |
| 7 | *Scartamento lungo.*<br>*Longer face to face.* | Miglior fluidodinamica con riduzione delle turbolenze.<br>*Better fluidodynamic with reduction of the turbulences.* |
| 8 | Otturatore oscillante/autoallineante.<br>*Oscillating / self-aligning shutter.* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta.<br>*It fits perfectly to the valve body ensuring the maximum tightness.* |
| | Certificato ATEX.<br>*ATEX Certificate.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is allowed in a potential explosive environment.* |
| | Certificato PED.<br>*PED Certificate.* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione.<br>*Full compliance with European Safety Standards for Pressure Equipment.* |

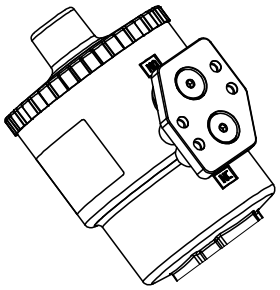
# ARES

Testa di comando orientabile a 360°
*Control head adjustable at 360°*




Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*Example of NAMUR plate EN 15714-3 to be assembled on the control head*
***Available ON REQUEST once NAMUR Solenoid valve should be needed***
***Code: KBNJ0001***

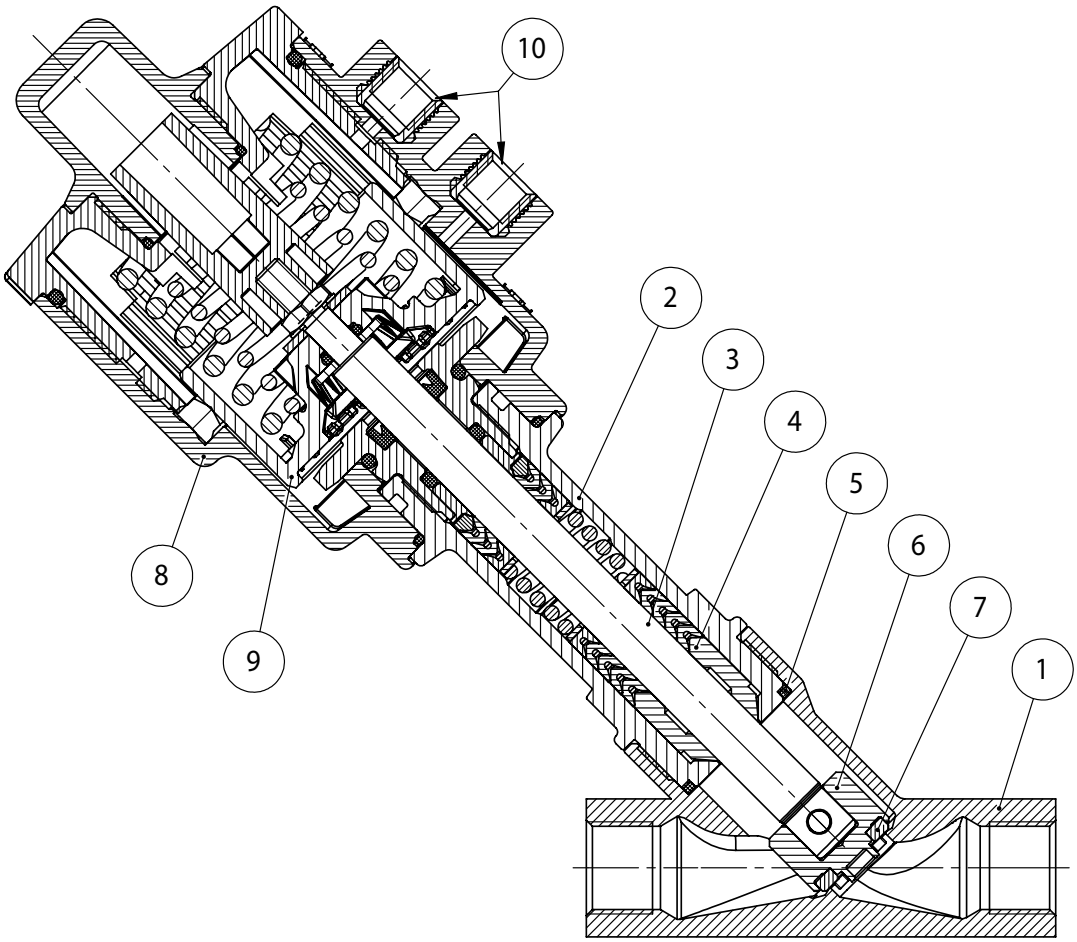


**DIMENSIONI** ***DIMENSIONS***

| DN [mm] | G * [inch] | ATTUATORE *ACTUATOR* | A | B | C | D | øE | F | ch. L | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | Ø 50 | 190 | 156,5 | 169 | 44 | 70 | 85 | 25 | 12 |
| 15 | 1/2" | Ø 50 | 190 | 156,5 | 169 | 44 | 70 | 85 | 25 | 15 |
| 20 | 3/4" | Ø 50 | 195 | 160,5 | 176 | 44 | 70 | 95 | 31 | 16,3 |
| 20 | 3/4" | Ø 63 | 213 | 178,5 | 194,4 | 50,5 | 84,4 | 95 | 31 | 16,3 |
| 25 | 1" | Ø 50 | 200 | 164 | 183 | 44 | 70 | 105 | 38 | 19,5 |
| 25 | 1" | Ø 63 | 219 | 183 | 202 | 50,5 | 84,4 | 105 | 38 | 19,5 |
| 25 | 1" | Ø 90 | 259 | 223 | 242 | 66,2 | 116,4 | 105 | 38 | 19 |
| 32 | 1 1/4" | Ø 50 | 208 | 167,5 | 191 | 44 | 70 | 120 | 47 | 19 |
| 32 | 1 1/4" | Ø 63 | 226 | 185,5 | 209 | 50,5 | 84,4 | 120 | 47 | 19 |
| 32 | 1 1/4" | Ø 90 | 266 | 225,5 | 249 | 66,2 | 116,4 | 120 | 47 | 18 |
| 32 | 1 1/4" | Ø 110 | 302 | 261,5 | 285 | 77,4 | 140,6 | 120 | 47 | 18 |
| 40 | 1 1/2" | Ø 63 | 231 | 191 | 218 | 50,5 | 84,4 | 130 | 54 | 18 |
| 40 | 1 1/2" | Ø 90 | 271 | 231 | 258 | 66,2 | 116,4 | 130 | 54 | 20 |
| 40 | 1 1/2" | Ø 110 | 307 | 266 | 294 | 77,4 | 140,6 | 130 | 54 | 20 |
| 50 | 2" | Ø 63 | 245 | 200 | 233 | 50,5 | 84,4 | 150 | 66 | 20 |
| 50 | 2" | Ø 90 | 285 | 241 | 274 | 66,2 | 116,4 | 150 | 66 | 20 |
| 50 | 2" | Ø 110 | 321 | 276 | 310 | 77,4 | 140,6 | 150 | 66 | 20 |

* A richiesta la versione con filettatura NPT *On request NPT-threading*

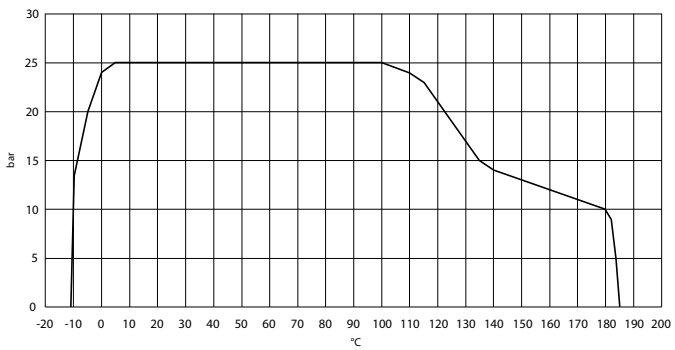
# ARES



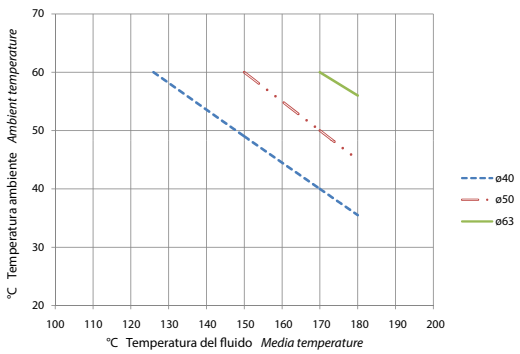

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | A351-CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | A351-CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | Ottone nichel chimico *Brass chem-nickel* (PBT + GF 20% testa/head ø40 - ø50) |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*



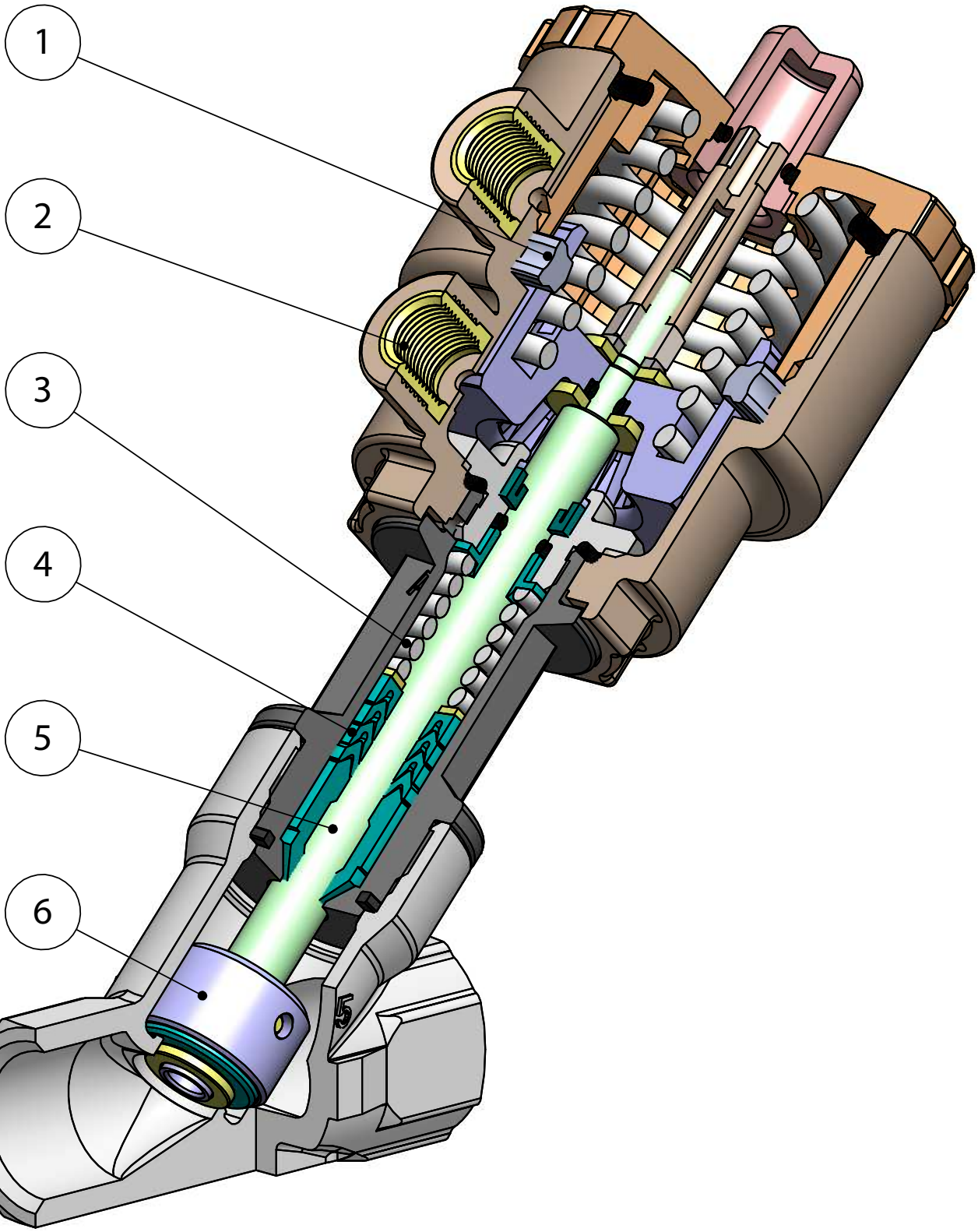

## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ATENA

## VALVOLA INCLINATA

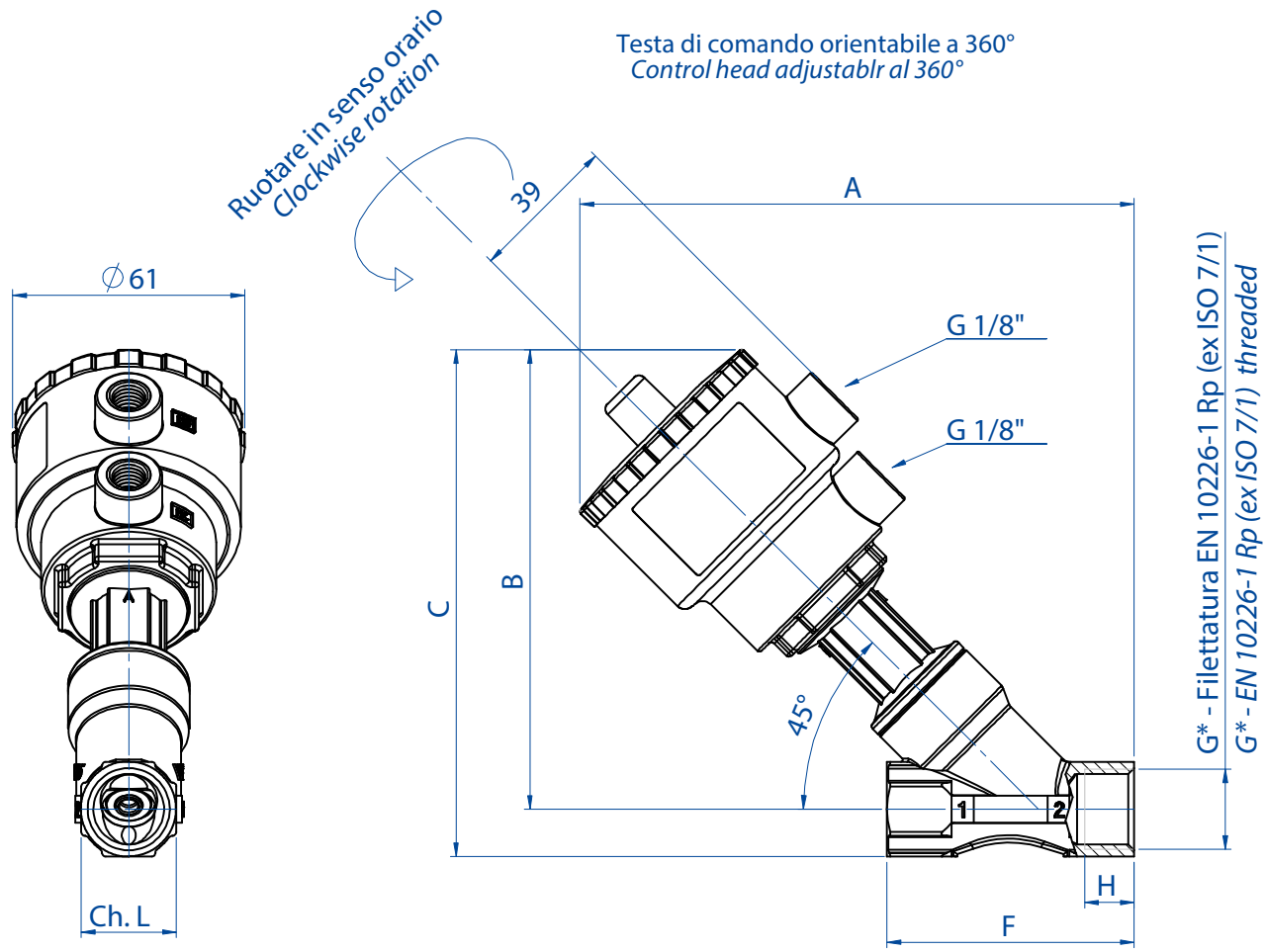
## *ANGLE SEAT VALVE*



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone<br>*Seal placed in the cylinder rather than on the piston* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico)<br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)* |
| | | Minor usura della guarnizione<br>*Less wear of the seal* |
| 2 | Inserti della testa di comando in 303 S.S.<br>*Piloting head inserts in 303 S.S.* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni<br>*Increases considerably the corrosion resistance caused by external agents* |
| 3 | Guarnizioni precaricate da molla<br>*Seals pre-loaded by spring* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite verso l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions* |
| 4 | Guarnizioni tipo "chevron" (a "V") con 4 guarnizioni nella parte rivolta al fluido<br>*CHEVRON seals (V shape) with 4 seals in the part towards the fluid* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 5 | Albero rullato<br>*Rolled shaft* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento<br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft* |
| 6 | Otturatore oscillante/autoallineante<br>*Oscillating / self-aligning shutter* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta<br>*It fits perfectly to the valve body ensuring the maximum tightness* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is allowed in a potential explosive environment* |

# ATENA

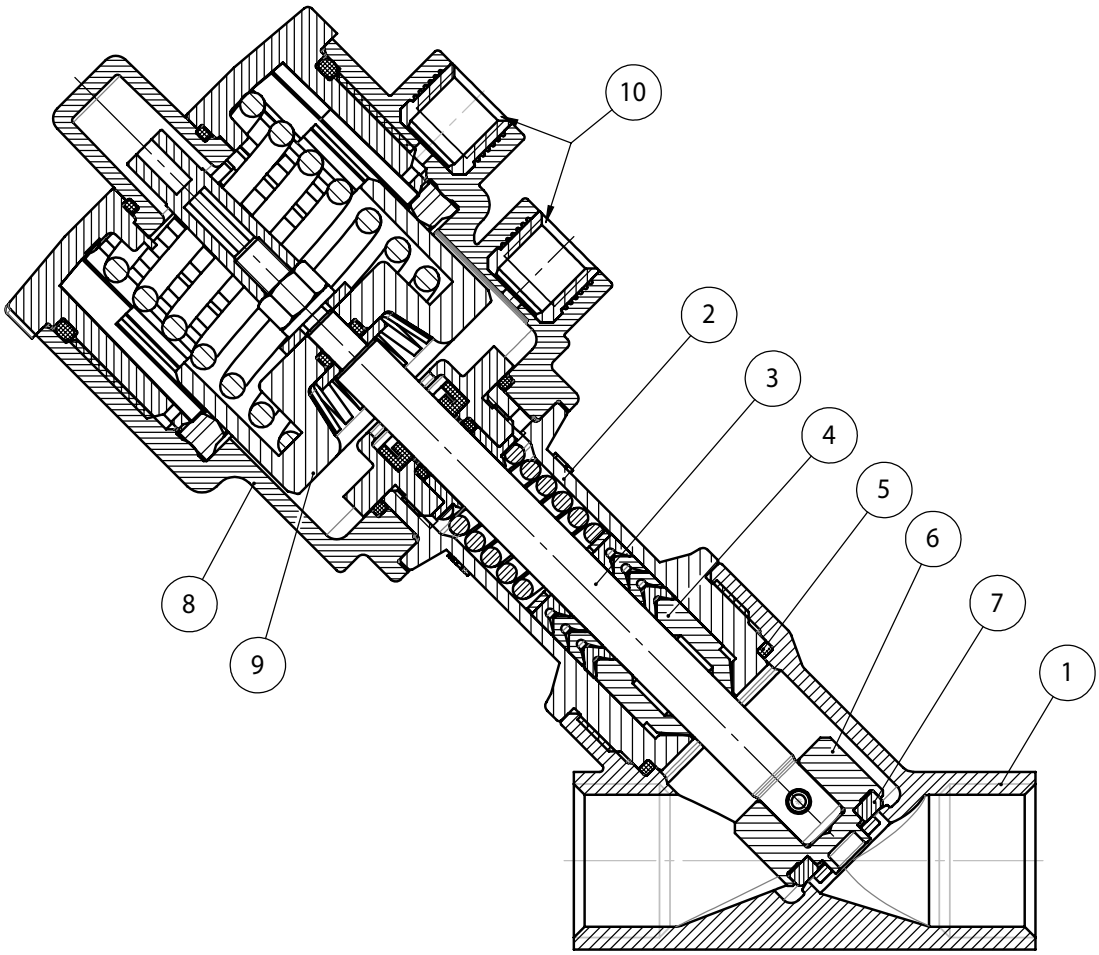



## DIMENSIONI *DIMENSIONS*

| | | | Versioni in CF8M *CF8M version* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G *[inch]** | **ATTUATORE** *ACTUATOR* | **A** | **B** | **C** | **H** | **39** | **ø61** | **F** | **ch. L** |
| 15 | 3/8" | Ø 40* | 146 | 120,5 | 133,5 | 12 | 39 | 61 | 65 | 25 |
| 15 | 1/2" | Ø 40* | 146 | 120,5 | 133,5 | 13 | 39 | 61 | 65 | 25 |
| 20 | 3/4" | Ø 40* | 153 | 127,5 | 141,5 | 14,3 | 39 | 61 | 75 | 31 |

* A richiesta la versione con filettatura NPT *On request NPT-threading*

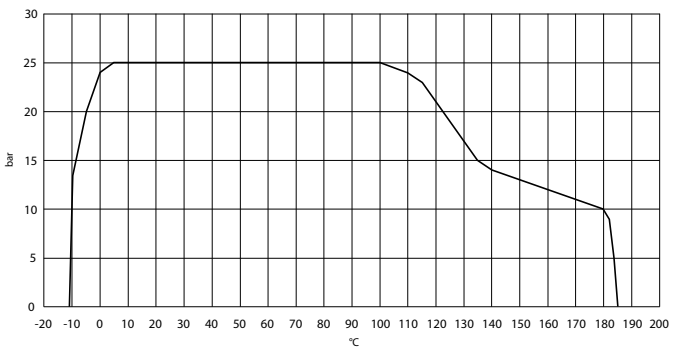
# ATENA



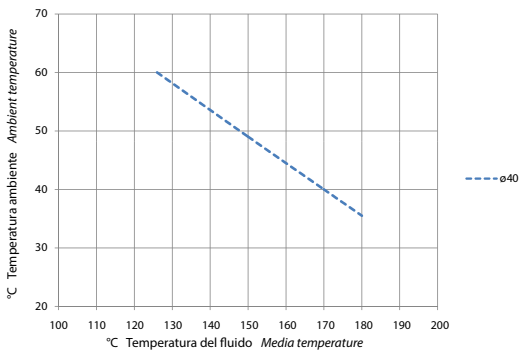

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | A351-CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | A351-CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | PBT + GF 20% |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ARES - ATENA

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

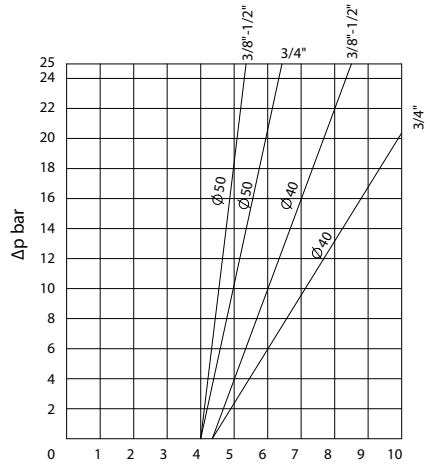
| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4SPG1403** | 4,5 | 40 (ATENA) | 4,2 | 10 | 16 | 1 | **KGJP1303** | **J4SPG14R3** |
| 15 | 3/8" | **J4SPG1603** | 4,9 | 50 | 4 | 10 | 16 | 1,1 | **KGJP1003** | **J4SPG16R3** |
| 15 | 1/2" | **J4SPG1404** | 5,3 | 40 (ATENA) | 4,2 | 10 | 16 | 1 | **KGJP1303** | **J4SPG14R4** |
| 15 | 1/2" | **J4SPG1604** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 20 | 3/4" | **J4SPG1405** | 9,2 | 40 (ATENA) | 4,2 | 10 | 8 | 1,2 | **KGJP1305** | **J4SPG14R5** |
| 20 | 3/4" | **J4SPG1605** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | 3/4" | **J4SPG1805** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP1005** | **J4SPG18R5** |
| 25 | 1" | **J4SPG1806** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP1006** | **J4SPG18R6** |
| 25 | 1" | **J4SPG2106** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP1106** | **J4SPG21R6** |
| 32 | 1 1/4" | **J4SPG2107** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 40 | 1 1/2" | **J4SPG2108** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 40 | 1 1/2" | **J4SPG2308** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |
| 50 | 2" | **J4SPG2309** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

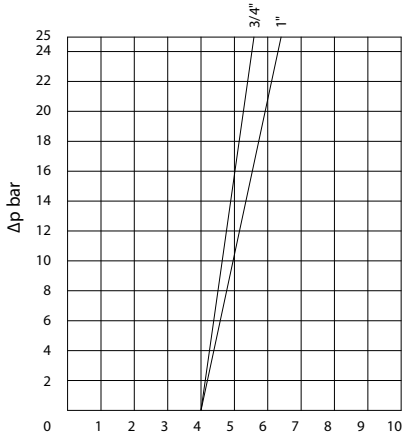
### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



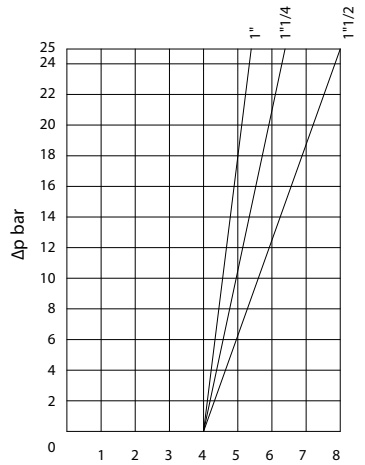

ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



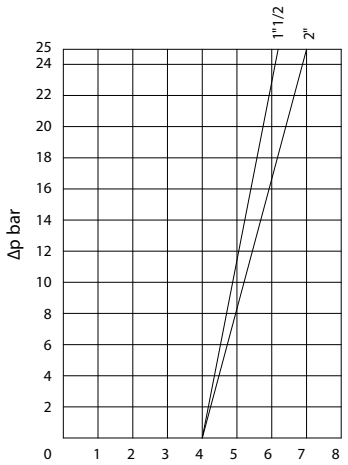

aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES - ATENA

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore

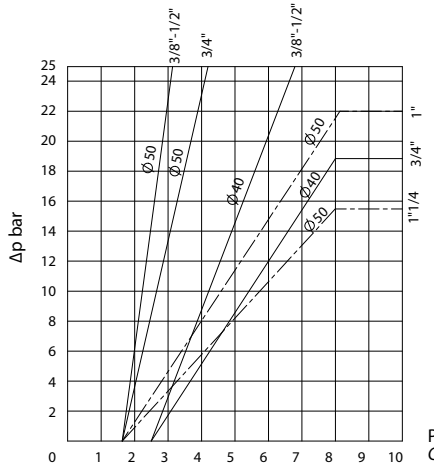
## *N.C. Normally Closed with the flow from above the plug*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4CPG1403** | 4,5 | 40 (ATENA) | 2,5 | 10 | diagram n° 5 | 1 | **KGJP1303** | **J4CPG14R3** |
| 15 | 3/8" | **J4CPG1603** | 4,9 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R3** |
| 15 | 1/2" | **J4CPG1404** | 5,3 | 40 (ATENA) | 2,,5 | 10 | diagram n° 5 | 1 | **KGJP1303** | **J4CPG14R4** |
| 15 | 1/2" | **J4CPG1604** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | 3/4" | **J4CPG1405** | 9,2 | 40 (ATENA) | 2,5 | 10 | diagram n° 5 | 1,2 | **KGJP1305** | **J4CPG14R5** |
| 20 | 3/4" | **J4CPG1605** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | 1" | **J4CPG1806** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | 1 1/4" | **J4CPG2107** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | 1 1/2" | **J4CPG2108** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 40 | 1 1/2" | **J4CPG2308** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | 2" | **J4CPG2109** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 50 | 2" | **J4CPG2309** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

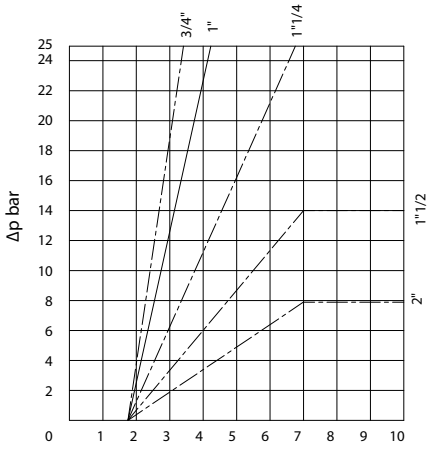
diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**




ø40: aria 0,031 dm³/cilclo
ø50: aria 0,051 dm³/cilclo
*ø40: air 0,031 dm³/cycle*
*ø50: air 0,051 dm³/cycle*

Pressione di comando
*Control pressure* bar

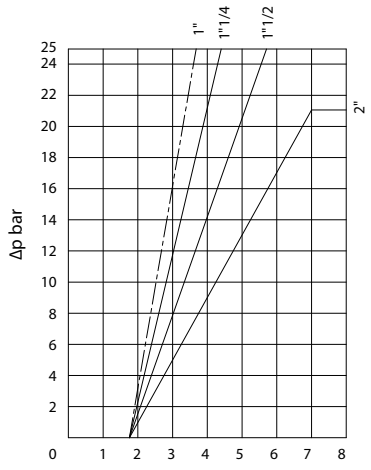
diagramma 6
*diagram 6*
**testa *head***
**Ø63**




aria 0,108 dm³/cilclo
*air 0,108 dm³/cycle*

Pressione di comando
*Control pressure* bar

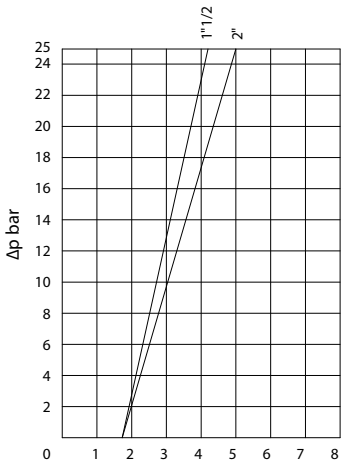
diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 dm³/cilclo
*air 0,238 dm³/cycle*

Pressione di comando
*Control pressure* bar

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 dm³/cilclo
*air 0,505 dm³/cycle*

Pressione di comando
*Control pressure* bar

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

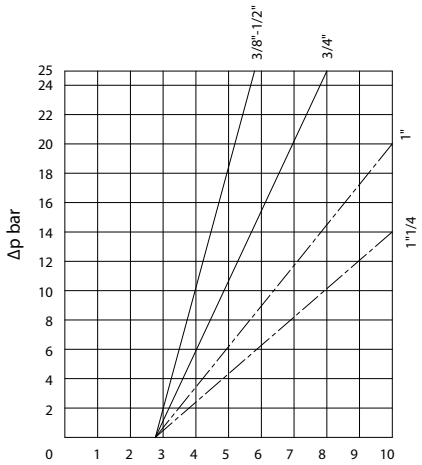
# ARES
## N.A. Normalmente Aperta con ingresso sotto l'otturatore
## *N.O. Normally Open with flow from below the plug*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4APG1603** | 4,9 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R3** |
| 15 | 1/2" | **J4APG1604** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 20 | 3/4" | **J4APG1605** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 25 | 1" | **J4APG1806** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP1006** | **J4APG18R6** |
| 32 | 1 1/4" | **J4APG1807** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP1007** | **J4APG18R7** |
| 40 | 1 1/2" | **J4APG2108** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |
| 50 | 2" | **J4APG2309** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP1109** | **J4APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

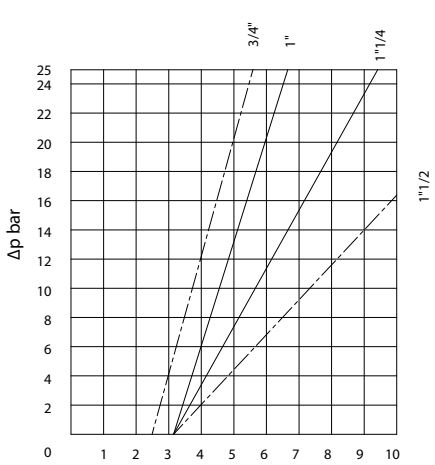
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 9
*diagram 9*
**testa *head***
**Ø50**



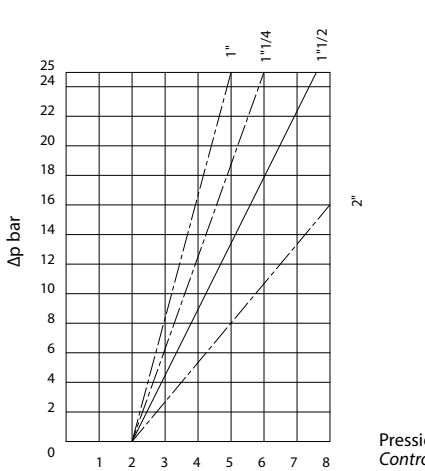

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

diagramma 10
*diagram 10*
**testa *head***
**Ø63**



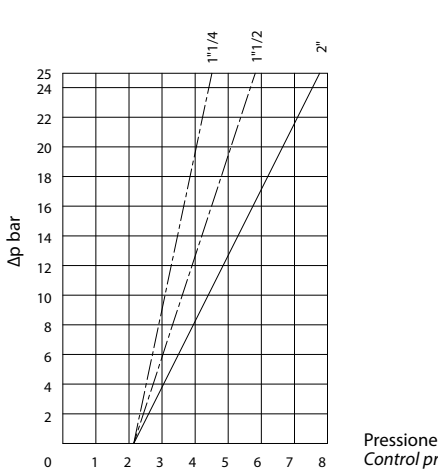

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

diagramma 11
*diagram 11*
**testa *head***
**Ø90**




aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

diagramma 12
*diagram 12*
**testa *head***
**Ø110**




aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

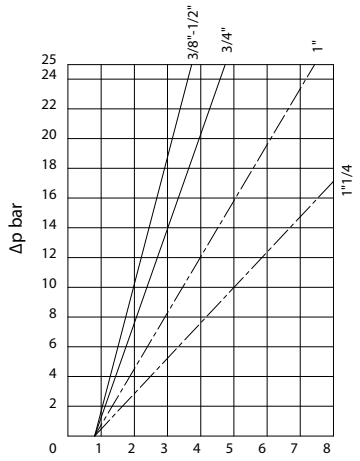
# ARES
## Doppio effetto bidirezionale
## *Double acting bidirectional*

| DN [mm] | Filettatura *Threading* | CODICE *CODE* CF8M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J4DPG1603** | 4,9 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R3** |
| 15 | 1/2" | **J4DPG1604** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 20 | 3/4" | **J4DPG1605** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 25 | 1" | **J4DPG1806** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP1006** | **J4DPG18R6** |
| 32 | 1 1/4" | **J4DPG1807** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP1007** | **J4DPG18R7** |
| 40 | 1 1/2" | **J4DPG1808** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | 1 1/2" | **J4DPG2108** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |
| 50 | 2" | **J4DPG2109** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP1009** | **J4DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

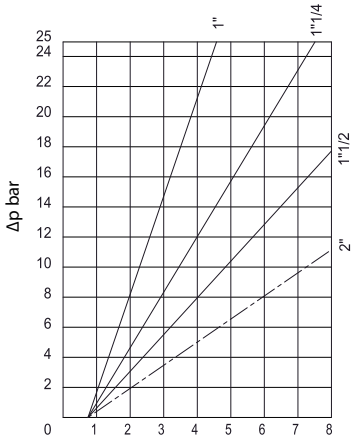
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 13
*diagram 13*
**testa *head***
**Ø50**



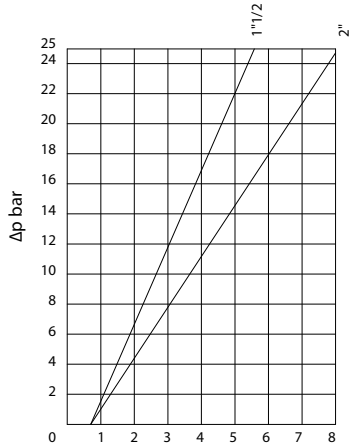

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

diagramma 14
*diagram 14*
**testa *head***
**Ø63**



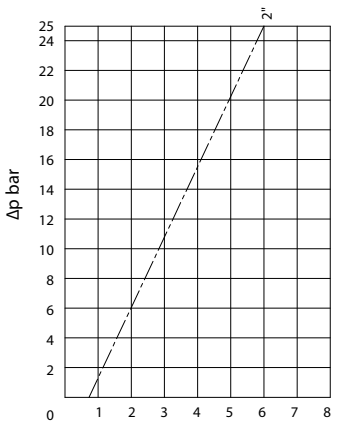

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

diagramma 15
*diagram 15*
**testa *head***
**Ø90**




aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

diagramma 16
*diagram 16*
**testa *head***
**Ø110**




aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CON ATTACCHI SPECIALI
# *ARES WITH SPECIAL ENDS*




### CARATTERISTICHE GENERALI
- Materiale del corpo valvola: A351-CF3M (316L S.S.).
- Attacchi valvola: Vedi schema di codifica.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da DN 15 a DN 50 nelle versioni doppio effetto; semplice effetto: normalmente chiusa, normalmente chiusa anticolpo d'ariete e normalmente aperta.
- Le prestazioni e i diagrammi delle pressioni sono le medesime delle versioni standard ma limitate a PN16.
- A richiesta: versioni per vuoto e per uso ossigeno.
- Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.

### *GENERAL FEATURES*
- *Body valve material: A351-CF3M (316L S.S.).*
- *Valve ends: see code plan.*
- *Assembling is possible in all positions: upright, flat or angled.*
- *Range available from DN 15 to DN 50 in the Double Acting versions, Spring Return N.C. from above and below the plug, Spring Return N.O. from below the plug.*
- *The performance and the pressure's diagrams are the same as per Standard versions but limited at PN16 .*
- *On request: versions for vacuum and oxygen service.*
- *2014/34/EU ATEX configuration to request at time of order.*

### FLUIDO DI COMANDO
- Fluido di pilotaggio: aria compressa lubrificata o secca, gas e fluidi neutri.
- Temperatura ambiente: da -10°C a +60° C .

### FLUIDO INTERCETTATO
- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc.. (comunque compatibili con CF3M (316L S.S.) e PTFE).
- Pressione di utilizzo da 0 a 16 bar (vapore a 180°C da 0 a 10 bar) in funzione della misura e della versione scelta vedi pagine seguenti.
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

### *CONTROL MEDIA*
- *Driving media: compressed air, lubricated or dry, gas or neutral media.*
- *Ambient temperature: -10°C to +60°C.*

### *OPERATING MEDIA*
- *Air, water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with CF3M (316L S.S.) or PTFE).*
- *Pressure from 0 to 16 bar (steam from 180°C, from 0 to 10 bar) depending on the size and model chosen see following pages.*
- *Temperature from –10°C to 180°C.*
- *Max. viscosity 600 cst ($mm^2/s$).*

## SCHEMA DI CODIFICA VALVOLE ARES *ARES VALVES CODE PLAN*

**J4 - PG -- - - YX**

**Versione *Version***
**S** = N.C. sottosede anticolpo d'ariete
*below the plug anti water hammer*
**C** = N.C. soprasede *above the plug*
**A** = N.A. - *N.O.*
**D** = doppio effetto - *double acting*

**ø teste di comando *ø control heads***
16 = Ø50; 18 = Ø63; 21 = Ø90; 23 = Ø110

**Tipo di connessioni *Connection types***
**9** = da saldare *weld ends* ISO 4200
**6** = flangiate *flanged* UNI EN1092-1
**U** = triclamp USA 3A - BS4825
**R=** Ricambio *Spare part*

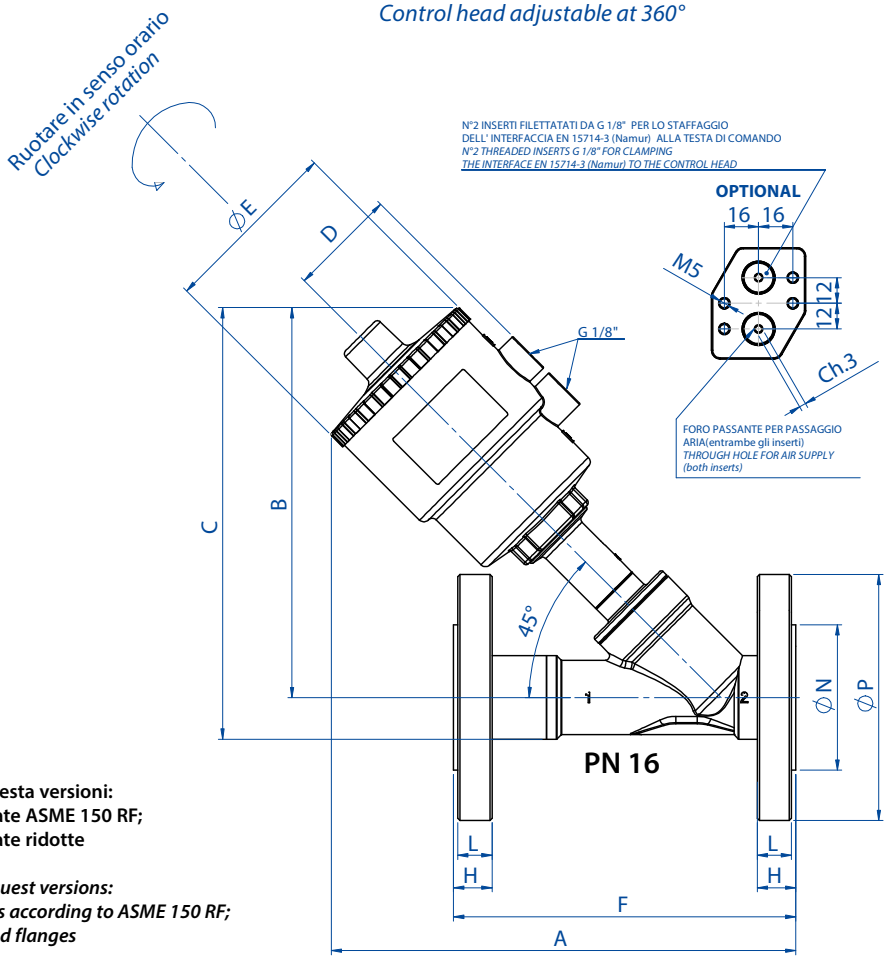
**Misura valvola *Valve size***
**4**=DN 15; **5**=DN 20; **6**=DN 25; **7**=DN 32; **8**=DN 40; **9**=DN 50

**YX solo per versioni ATEX**
***YX only for ATEX versions***

Per versioni con teste di comando differenti dallo standard contattare l'ufficio commerciale OMAL.
*For versions with control head different from standard executions, please contact our sales department*

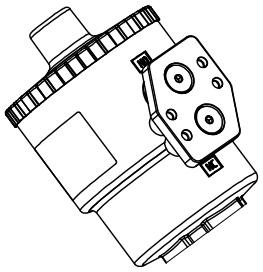
# ARES FLANGIATA UNI EN 1092-1
# *FLANGED UNI EN 1092-1*

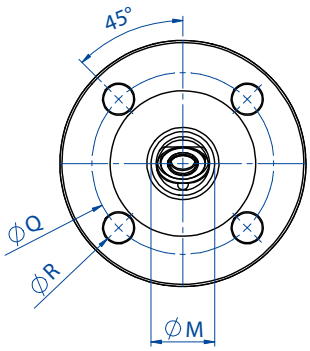
Testa di comando orientabile a 360°
*Control head adjustable at 360°*




Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*Example of NAMUR plate EN 15714-3 to be assembled on the control head*
***Available ON REQUEST once NAMUR Solenoid valve should be needed***
***Code: KBNJ0001***






**A richiesta versioni:**
**flangiate ASME 150 RF;**
**flangiate ridotte**

***On request versions:***
***flanges according to ASME 150 RF;***
***reduced flanges***

| VALVOLA FLANGIATA ANSI 150RF SCART.ASME B16.10 A1<br>*ANSI 150RF FLANGED VALVE FACE TO FACE ASME B16.10 A1* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DN [mm]** | **H** | **L** | **øN** | **øP** | **øQ** | **øR** | **F** |
| 15 | 12 | 10,4 | 35 | 89 | 61 | 16 | 108 |
| 20 | 13 | 11,4 | 43 | 98 | 70 | 16 | 117,5 |
| 25 | 15 | 13,4 | 51 | 108 | 80 | 16 | 127 |
| 32 | 16 | 14,4 | 64 | 118 | 89 | 16 | 140 |
| 40 | 18 | 16,4 | 73 | 127 | 99 | 16 | 165 |
| 50 | 19 | 17,4 | 93 | 152 | 121 | 19 | 178 |

| VALVOLA FLANGIATA RIDOTTA<br>*REDUCED FLANGES VALVES* | | | | | |
|---|---|---|---|---|---|
| **DN [mm]** | **H** | **øP** | **øQ** | **øR** | **F** |
| 15 | 7 | 70 | 50 | 7 | 104,5 |
| 20 | 8 | 75 | 55 | 9 | 119,5 |
| 25 | 9 | 80 | 60 | 9 | 134,5 |
| 32 | 9 | 90 | 70 | 9 | 149,5 |
| 40 | 10 | 100 | 80 | 9 | 164,5 |
| 50 | 10 | 110 | 90 | 11 | 179,5 |

## DIMENSIONI *DIMENSIONS*

| DN [mm] | Testa di comando *Control head* | A | B | C | D | øE | F | H | L | øM | øN | øP | øQ | øR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **15** | **Ø 50** | **182,5** | **156** | **203,5** | **44** | **70** | **130** | **16** | **14** | **18,1** | **45** | **95** | **65** | **14** |
| **20** | **Ø 50** | **192,3** | **160** | **212,5** | **44** | **70** | **150** | **18** | **16** | **23,7** | **58** | **105** | **75** | **14** |
| 20 | Ø 63 | 210,3 | 178 | 230,5 | 50,5 | 84,4 | 150 | 18 | 16 | 23,7 | 58 | 105 | 75 | 14 |
| 25 | Ø 50 | 197,36 | 164 | 221,5 | 44 | 70 | 160 | 18 | 16 | 29,7 | 68 | 115 | 85 | 14 |
| **25** | **Ø 63** | **216,36** | **182** | **239,5** | **50,5** | **84,4** | **160** | **18** | **16** | **29,7** | **68** | **115** | **85** | **14** |
| 25 | Ø 90 | 256,36 | 222 | 279,5 | 66,2 | 116,4 | 160 | 18 | 16 | 29,7 | 68 | 115 | 85 | 14 |
| 32 | Ø 50 | 202,5 | 168 | 238 | 44 | 70 | 180 | 18 | 16 | 38,4 | 78 | 140 | 100 | 18 |
| **32** | **Ø 63** | **220,5** | **186** | **256** | **50,5** | **84,4** | **180** | **18** | **16** | **38,4** | **78** | **140** | **100** | **18** |
| 32 | Ø 90 | 260,5 | 226 | 296 | 66,2 | 116,4 | 180 | 18 | 16 | 38,4 | 78 | 140 | 100 | 18 |
| 32 | Ø 110 | 296,5 | 261 | 331 | 77,4 | 140,6 | 180 | 18 | 16 | 38,4 | 78 | 140 | 100 | 18 |
| 40 | Ø 63 | 228,6 | 190 | 265 | 50,5 | 84,4 | 200 | 18 | 15 | 44,3 | 88 | 150 | 110 | 18 |
| **40** | **Ø 90** | **268,6** | **230** | **305** | **66,2** | **116,4** | **200** | **18** | **15** | **44,3** | **88** | **150** | **110** | **18** |
| 40 | Ø 110 | 304,2 | 266 | 341 | 77,4 | 140,6 | 200 | 18 | 15 | 44,3 | 88 | 150 | 110 | 18 |
| 50 | Ø 63 | 241,87 | 200 | 282,5 | 50,5 | 84,4 | 230 | 18 | 15 | 55,7 | 102 | 165 | 125 | 18 |
| 50 | Ø 90 | 281,87 | 240 | 322,5 | 66,2 | 116,4 | 230 | 18 | 15 | 55,7 | 102 | 165 | 125 | 18 |
| **50** | **Ø 110** | **317,87** | **276** | **358,5** | **77,4** | **140,6** | **230** | **18** | **15** | **55,7** | **102** | **165** | **125** | **18** |

In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta. *Suggested executions are in bold. Other combinations on request.*

# ARES FLANGIATA *FLANGED*

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

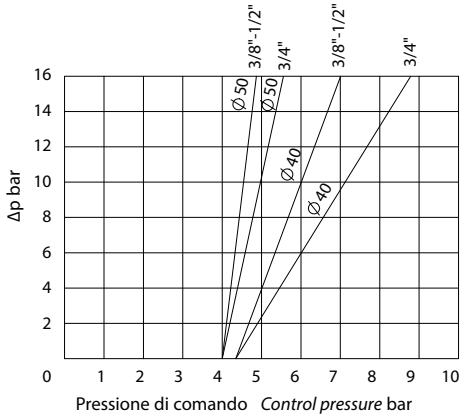
| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4SPG1664** | 5,7 | 50 | 4 | 10 | 16 | 2,4 | **KGJP1003** | **J4SPG16R4** |
| 20 | **J4SPG1665** | 10,5 | 50 | 4 | 10 | 10 | 3,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | **J4SPG1865** | 10,8 | 63 | 4 | 10 | 16 | 3,1 | **KGJP1005** | **J4SPG18R5** |
| 25 | **J4SPG1866** | 20 | 63 | 4 | 10 | 11 | 3,8 | **KGJP1006** | **J4SPG18R6** |
| 25 | **J4SPG2166** | 20 | 90 | 4 | 8 | 16 | 3,9 | **KGJP1106** | **J4SPG21R6** |
| 32 | **J4SPG2167** | 29 | 90 | 4 | 8 | 14 | 6,6 | **KGJP1107** | **J4SPG21R7** |
| 40 | **J4SPG2168** | 46 | 90 | 4 | 8 | 11 | 7,5 | **KGJP1108** | **J4SPG21R8** |
| 40 | **J4SPG2368** | 46,5 | 110 | 4 | 8 | 16 | 8,1 | **KGJP1108** | **J4SPG23R8** |
| 50 | **J4SPG2369** | 67 | 110 | 4 | 8 | 10 | 11,2 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

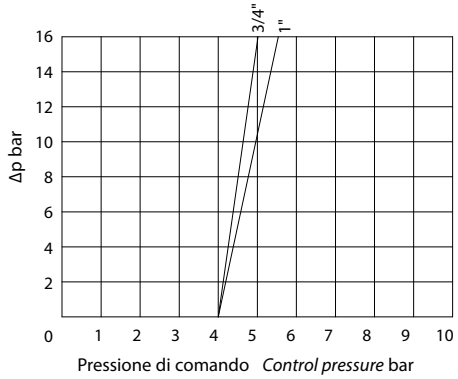
### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



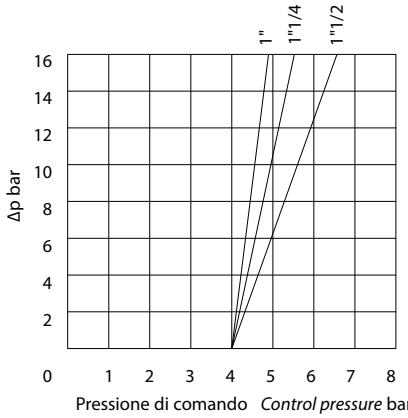

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



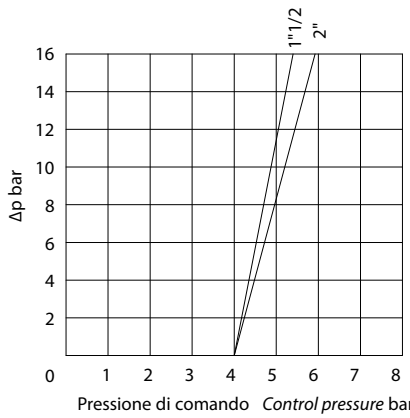

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES FLANGIATA *FLANGED*

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

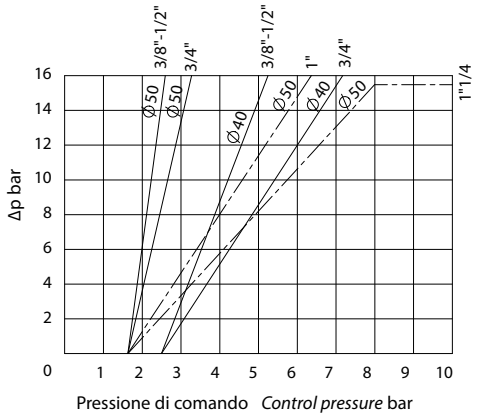
## *N.C. Normally Closed with the flow from above the plug.*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4CPG1664** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | **J4CPG1665** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | **J4CPG1866** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | **J4CPG2167** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | **J4CPG2168** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 50 | **J4CPG2169** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 40 | **J4CPG2368** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | **J4CPG2369** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

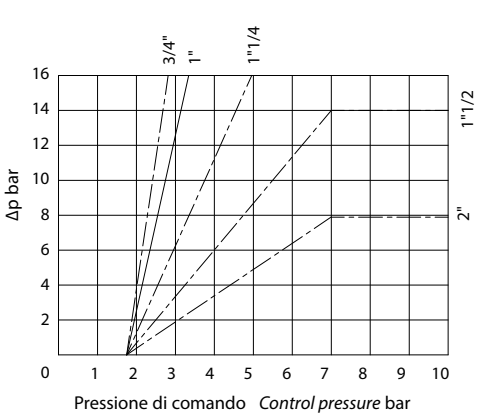
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



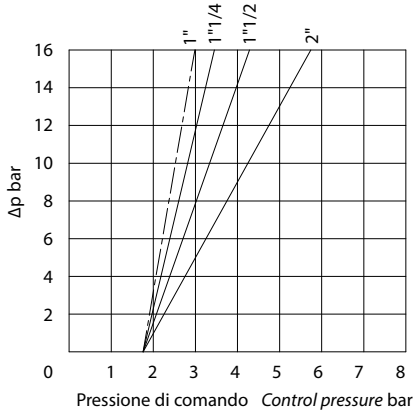

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



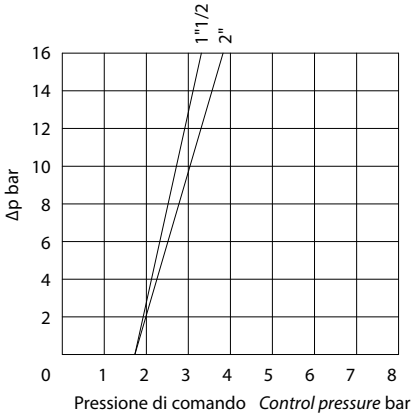

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES FLANGIATA *FLANGED*

## N.A. Normalmente Aperta con ingresso sotto l'otturatore.

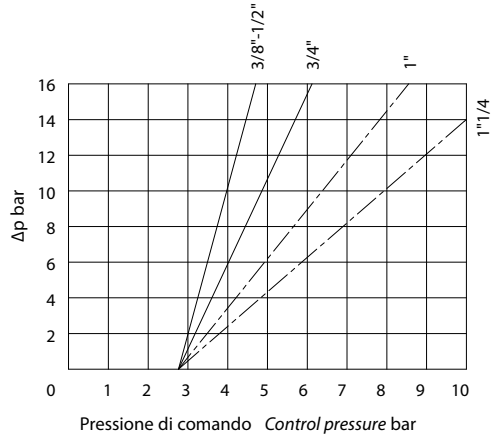
## *N.O. Normally Open with flow from below the plug.*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4APG1664** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 2,4 | **KGJP1003** | **J4APG16R4** |
| 20 | **J4APG1665** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 3,1 | **KGJP1005** | **J4APG16R5** |
| 25 | **J4APG1866** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 3,8 | **KGJP1006** | **J4APG18R6** |
| 32 | **J4APG1867** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 5,5 | **KGJP1007** | **J4APG18R7** |
| 40 | **J4APG2168** | 46 | 90 | 2 | 8 | diagram n° 11 | 7,5 | **KGJP1108** | **J4APG21R8** |
| 50 | **J4APG2369** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 11,2 | **KGJP1109** | **J4APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

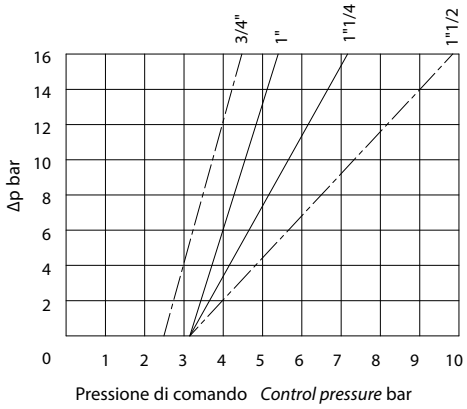
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 9
*diagram 9*
**testa *head***
**Ø50**



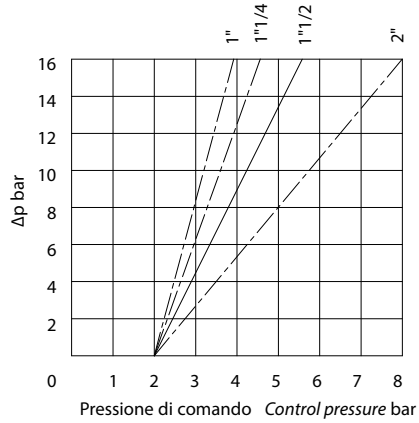

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

diagramma 10
*diagram 10*
**testa *head***
**Ø63**



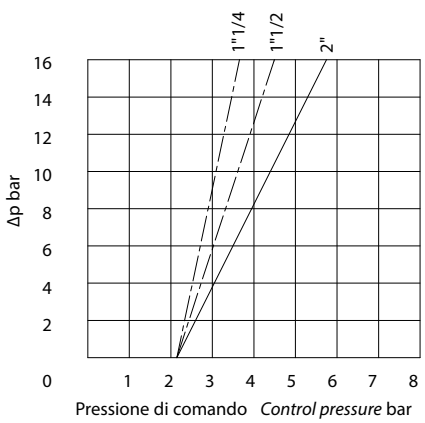

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

diagramma 11
*diagram 11*
**testa *head***
**Ø90**




aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

diagramma 12
*diagram 12*
**testa *head***
**Ø110**




aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

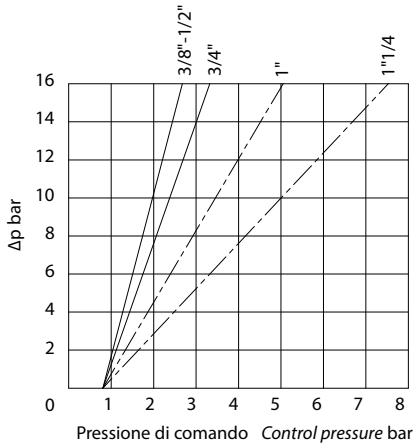
# ARES FLANGIATA *FLANGED*
## Doppio effetto bidirezionale.
## *Double Acting bidirectional.*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando Ø *Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4DPG1664** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 2,4 | **KGJP1003** | **J4DPG16R4** |
| 20 | **J4DPG1665** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 3,1 | **KGJP1005** | **J4DPG16R5** |
| 25 | **J4DPG1866** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 3,8 | **KGJP1006** | **J4DPG18R6** |
| 32 | **J4DPG1867** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 5,5 | **KGJP1007** | **J4DPG18R7** |
| 40 | **J4DPG1868** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 6,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | **J4DPG2168** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 7,5 | **KGJP1108** | **J4DPG21R8** |
| 50 | **J4DPG2169** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 9,3 | **KGJP1009** | **J4DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

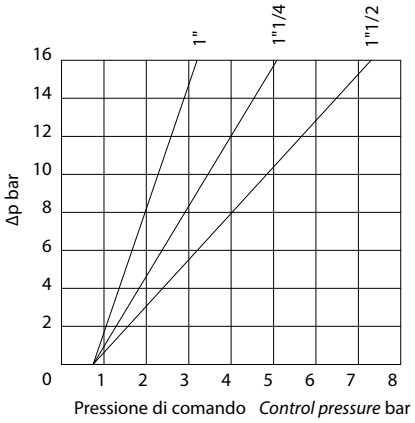
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 13
*diagram 13*
**testa *head***
**Ø50**



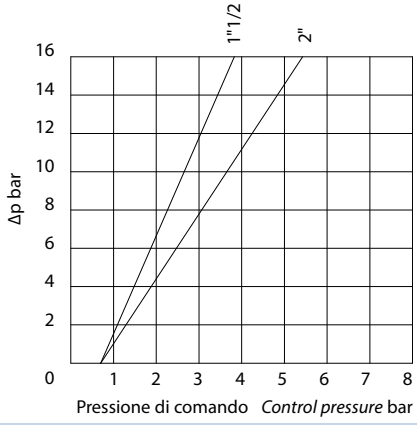

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

diagramma 14
*diagram 14*
**testa *head***
**Ø63**



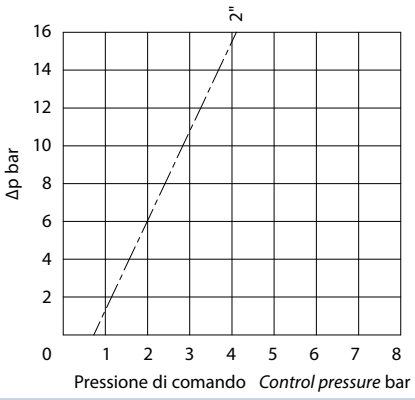

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

diagramma 15
*diagram 15*
**testa *head***
**Ø90**




aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

diagramma 16
*diagram 16*
**testa *head***
**Ø110**

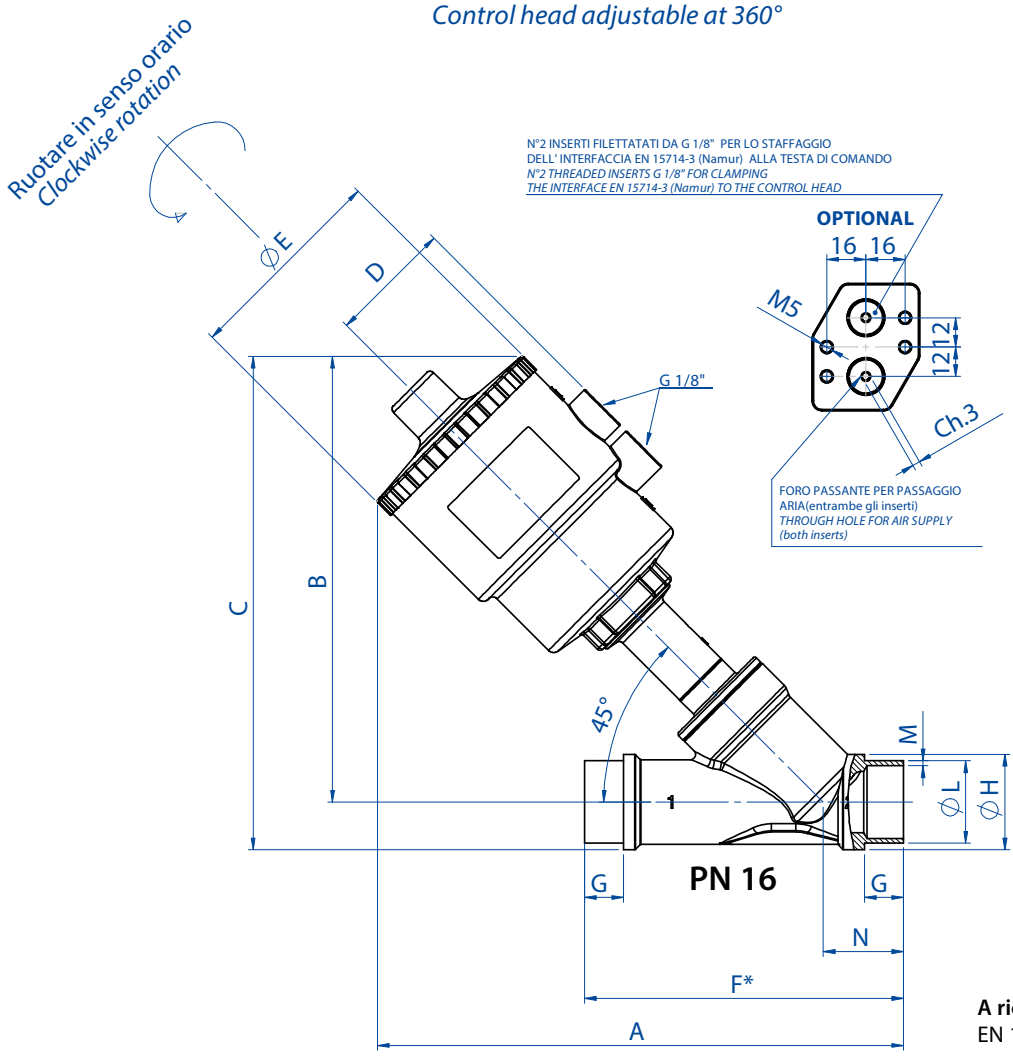



aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

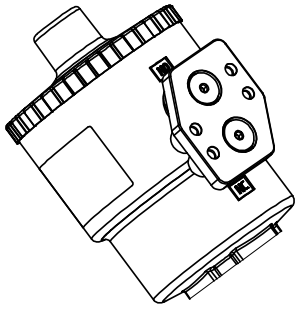
# ARES DA SALDARE UNI ISO 4200
# WELD ENDS UNI ISO 4200

Testa di comando orientabile a 360°
*Control head adjustable at 360°*




Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*Example of NAMUR plate EN 15714-3 to be assembled on the control head*
***Available ON REQUEST once NAMUR Solenoid valve should be needed***
***Code: KBNJ0001***



* esecuzioni speciali su richiesta e per quantità
* special version on request

**A richiesta versioni:**
EN 10357 seria A (ex DIN 11850 2) - ISO 2037

***On request versions:***
*EN 10357 series A (ex DIN 11850 2) - ISO 2037*

**DIMENSIONI *DIMENSIONS***

| DN [mm] | Testa di comando *Control head* | A | B | C | D | øE | F * | G | øH | øL | M | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **15** | **Ø 50** | **180** | **156** | **170** | **44** | **70** | **100** | **12** | **26,3** | **21,3** | **1,6** | **26** |
| **20** | **Ø 50** | **190** | **160** | **177** | **44** | **70** | **115** | **14** | **33** | **26,9** | **1,6** | **31** |
| 20 | Ø 63 | 208 | 178 | 195 | 50,5 | 84,4 | 115 | 14 | 33 | 26,9 | 1,6 | 31 |
| 25 | Ø 50 | 165 | 164 | 184 | 44 | 70 | 130 | 14 | 39 | 33,7 | 2 | 32,96 |
| **25** | **Ø 63** | **214** | **182** | **202** | **50,5** | **84,4** | **130** | **14** | **39** | **33,7** | **2** | **32,96** |
| 25 | Ø 90 | 254 | 222 | 242 | 66,2 | 116,4 | 130 | 14 | 39 | 33,7 | 2 | 32,96 |
| 32 | Ø 50 | 200 | 168 | 193 | 44 | 70 | 145 | 14 | 49 | 42,4 | 2 | 34 |
| **32** | **Ø 63** | **218** | **186** | **211** | **50,5** | **84,4** | **145** | **14** | **49** | **42,4** | **2** | **34** |
| 32 | Ø 90 | 258 | 226 | 251 | 66,2 | 116,4 | 145 | 14 | 49 | 42,4 | 2 | 34 |
| 32 | Ø 110 | 294 | 261 | 286 | 77,4 | 140,6 | 145 | 14 | 49 | 42,4 | 2 | 34 |
| 40 | Ø 63 | 226 | 190 | 218 | 50,5 | 84,4 | 160 | 14 | 55 | 48,3 | 2 | 37,6 |
| **40** | **Ø 90** | **266** | **230** | **258** | **66,2** | **116,4** | **160** | **14** | **55** | **48,3** | **2** | **37,6** |
| 40 | Ø 110 | 302 | 266 | 294 | 77,4 | 140,6 | 160 | 14 | 55 | 48,3 | 2 | 37,6 |
| 50 | Ø 63 | 241 | 200 | 234 | 50,5 | 84,4 | 175 | 16 | 66,5 | 60,3 | 2,3 | 41,37 |
| 50 | Ø 90 | 281 | 240 | 274 | 66,2 | 116,4 | 175 | 16 | 66,5 | 60,3 | 2,3 | 41,37 |
| **50** | **Ø 110** | **317** | **276** | **310** | **77,4** | **140,6** | **175** | **16** | **66,5** | **60,3** | **2,3** | **41,37** |

In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta.
*Suggested executions are in bold. Other combinations on request.*

# ARES DA SALDARE *WELD ENDS*

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

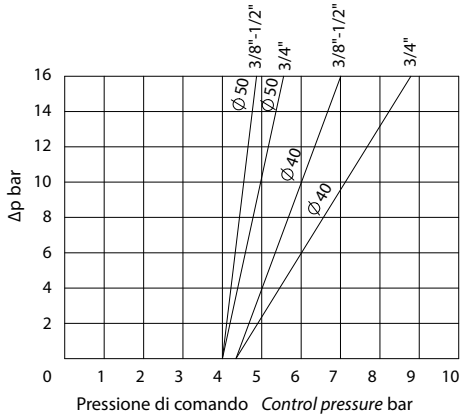
**CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE** ***WITH THE FLOW FROM BELOW THE PLUG***

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4SPG1694** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 20 | **J4SPG1695** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 20 | **J4SPG1895** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP1005** | **J4SPG18R5** |
| 25 | **J4SPG1896** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP1006** | **J4SPG18R6** |
| 25 | **J4SPG2196** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP1106** | **J4SPG21R6** |
| 32 | **J4SPG2197** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 40 | **J4SPG2198** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 40 | **J4SPG2398** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |
| 50 | **J4SPG2399** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP1109** | **J4SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

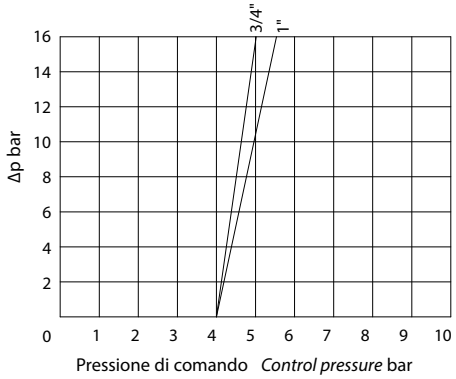
**CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE** ***WITH THE FLOW FROM ABOVE THE PLUG***

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



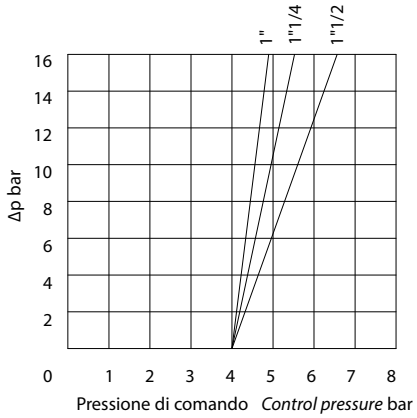

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



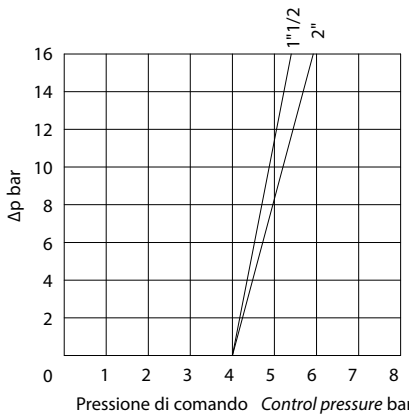

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*

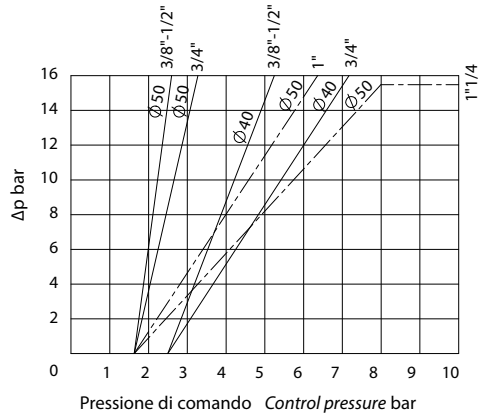
## N.C. Normalmente Chiusa con ingresso sopra l'otturatore

## *N.C. Normally Closed with the flow from above the plug*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4CPG1694** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 20 | **J4CPG1695** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 25 | **J4CPG1896** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP1006** | **J4CPG18R6** |
| 32 | **J4CPG2197** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 40 | **J4CPG2198** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 50 | **J4CPG2199** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP1109** | **J4CPG21R9** |
| 40 | **J4CPG2398** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |
| 50 | **J4CPG2399** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP1109** | **J4CPG23R9** |

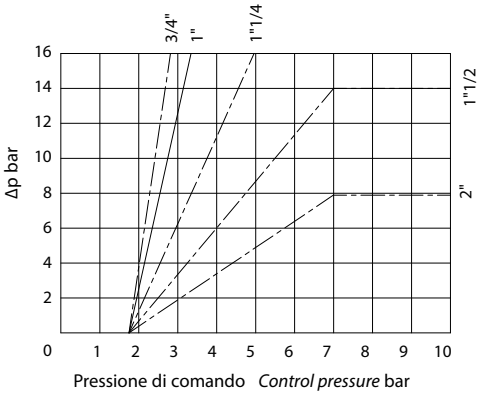
Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



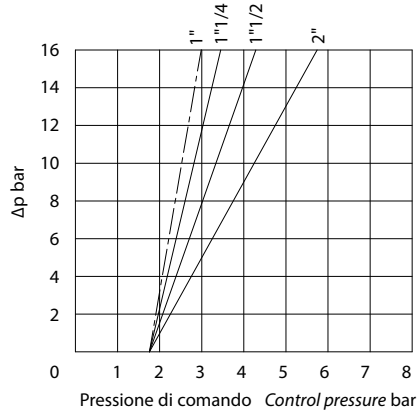

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



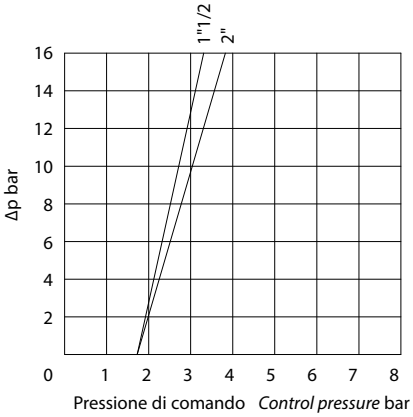

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*

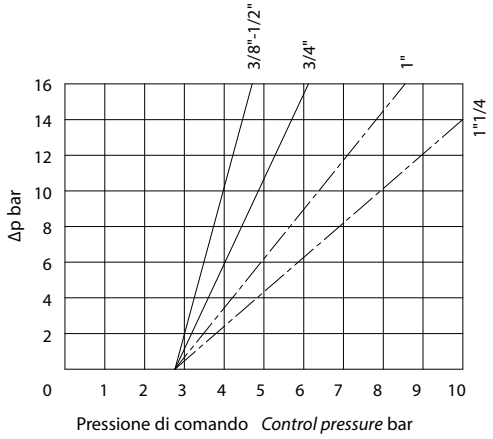
## N.A. Normalmente Aperta con ingresso sotto l'otturatore

## *N.O. Normally Open with flow from below the plug*

| DN [mm] | CODICE *CODE* CF3M | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4APG1694** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 20 | **J4APG1695** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 25 | **J4APG1896** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP1006** | **J4APG18R6** |
| 32 | **J4APG1897** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP1007** | **J4APG18R7** |
| 40 | **J4APG2198** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |
| 50 | **J4APG2399** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP1109** | **J4APG23R9** |

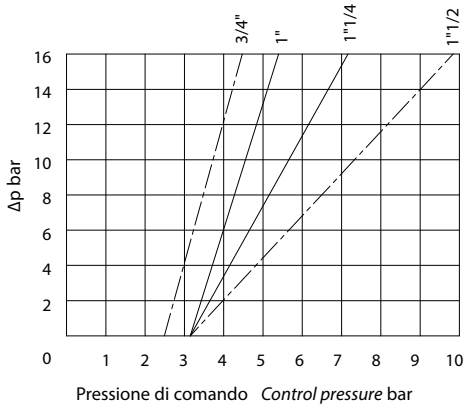
Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

diagramma 9
*diagram 9*
**testa *head***
**Ø50**



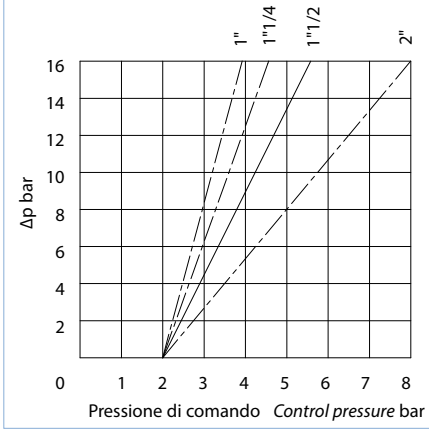

aria 0,089 dm³/cilclo
*air 0,089 dm³/cycle*

diagramma 10
*diagram 10*
**testa *head***
**Ø63**



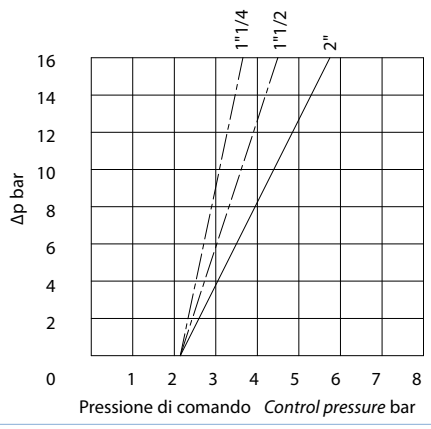

aria 0,194 dm³/cilclo
*air 0,194 dm³/cycle*

diagramma 11
*diagram 11*
**testa *head***
**Ø90**




aria 0,499 dm³/cilclo
*air 0,499 dm³/cycle*

diagramma 12
*diagram 12*
**testa *head***
**Ø110**




aria 1,08 dm³/cilclo
*air 1,08 dm³/cycle*

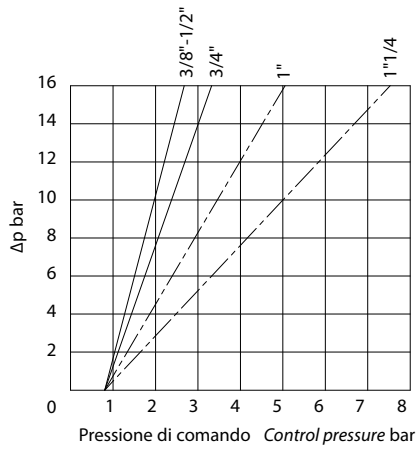
Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES DA SALDARE *WELD ENDS*
## Doppio effetto bidirezionale
## *Double Acting bidirectional*

| DN [mm] | CODICE *CODE* CF3M | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|
| 15 | **J4DPG1694** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 20 | **J4DPG1695** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 25 | **J4DPG1896** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP1006** | **J4DPG18R6** |
| 32 | **J4DPG1897** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP1007** | **J4DPG18R7** |
| 40 | **J4DPG1898** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 40 | **J4DPG2198** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |
| 50 | **J4DPG2199** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP1009** | **J4DPG21R9** |

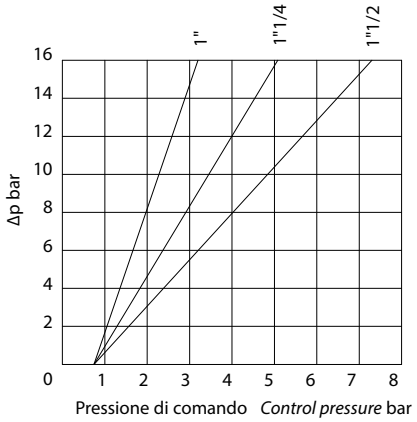
Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

diagramma 13
*diagram 13*
**testa *head***
**Ø50**



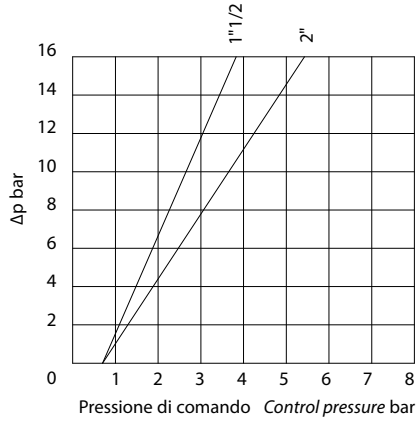

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

diagramma 14
*diagram 14*
**testa *head***
**Ø63**



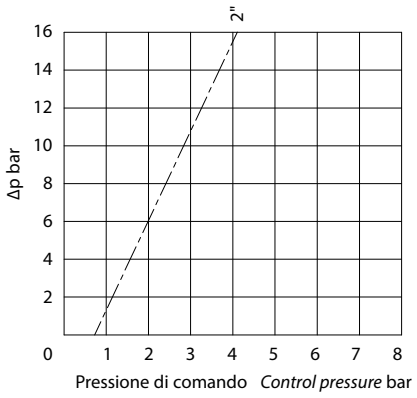

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

diagramma 15
*diagram 15*
**testa *head***
**Ø90**




aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

diagramma 16
*diagram 16*
**testa *head***
**Ø110**

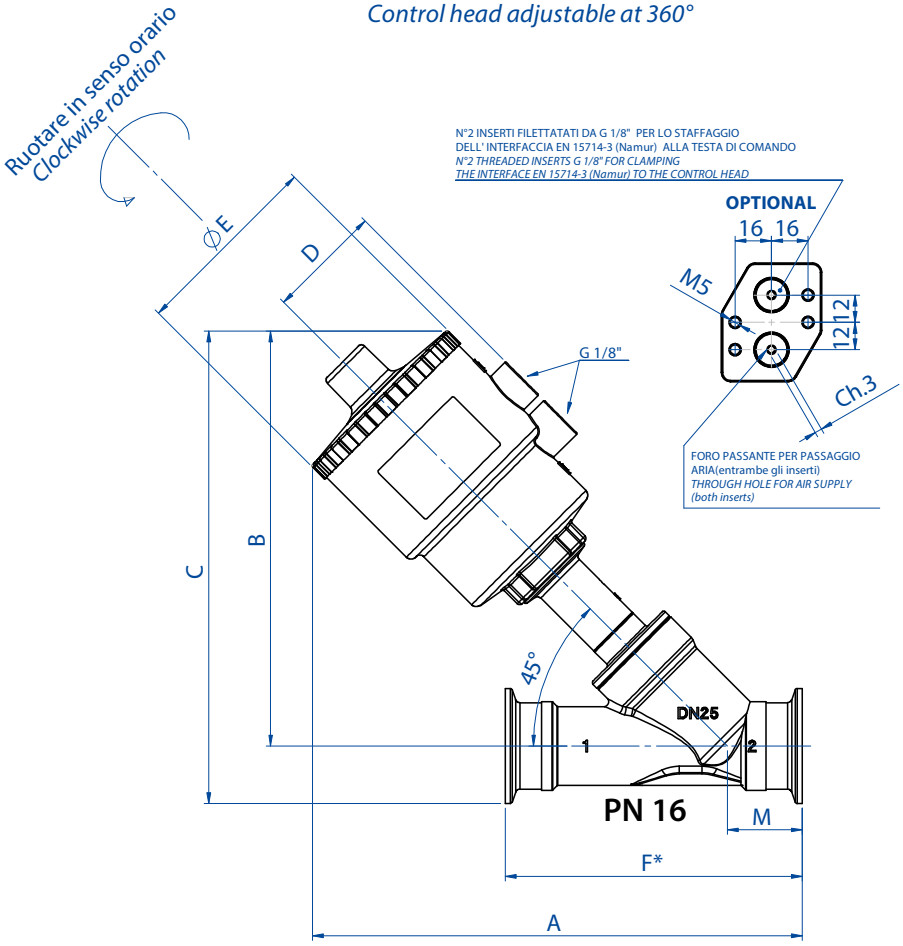



aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

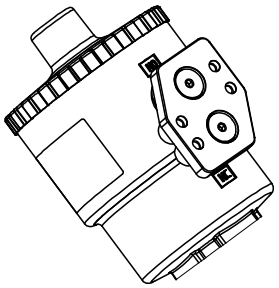
# ARES CONNESSIONI CLAMP 3A
# *TRICLAMP ENDS 3A*

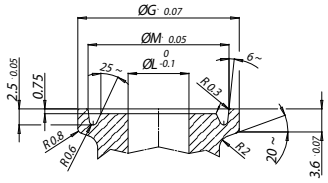
Testa di comando orientabile a 360°
*Control head adjustable at 360°*



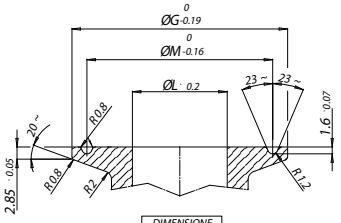

Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*Example of NAMUR plate EN 15714-3 to be assembled on the control head*
***Available ON REQUEST once NAMUR Solenoid valve should be needed***
***Code: KBNJ0001***





DIMENSIONE DIMENSION 1/2"-3/4"



DIMENSIONE DIMENSION da 1" a 2"

* esecuzioni speciali su richiesta e per quantità
* special version on request

**A richiesta versioni** ISO 2852
*ISO 2852 version on request*

**Pressione di utilizzo fino a 16 bar (per il dettaglio vedere relativi diagrammi).** ***Working pressure up to 16 bar (for details see diagrams).***

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CLAMP** ***Size*** | **Testa di comando** ***Control head*** | **Passaggio** ***Bore*** **(mm)** | **A** | **B** | **C** | **D** | **øE** | **F *** | **øG** | **øH** | **øL** | **M** |
| **1/2"** | **Ø 50** | **9,5(*)** | **179** | **156** | **168,6** | **44** | **70** | **88,9** | **25,2** | **19** | **9,5** | **22** |
| **3/4"** | **Ø 50** | **15** | **181,5** | **156** | **168,6** | **44** | **70** | **101,6** | **25,2** | **19** | **15,8** | **22** |
| **1"** | **Ø 50** | **20** | **189,3** | **160** | **185,3** | **44** | **70** | **114,3** | **50,5** | **32** | **22,2** | **43,5** |
| 1" | Ø 63 | 20 | 207,3 | 178 | 203,3 | 50,5 | 84,4 | 114,3 | 50,5 | 23 | 22,2 | 43,5 |
| 1"1/2 | Ø 63 | 32 | 214,6 | 186 | 211,3 | 50,5 | 84,4 | 139,7 | 50,5 | 38 | 34,9 | 43,5 |
| **1"1/2** | **Ø 90** | **32** | **254,6** | **226** | **251,3** | **66,2** | **116,4** | **139,7** | **50,5** | **38** | **34,9** | **43,5** |
| 1"1/2 | Ø 110 | 32 | 290,6 | 261 | 286,3 | 77,4 | 140,6 | 139,7 | 50,5 | 38 | 34,9 | 43,5 |
| 2" | Ø 63 | 40 | 224,7 | 190 | 222 | 50,5 | 84,4 | 158,8 | 64 | 54 | 47,6 | 56,5 |
| **2"** | **Ø 90** | **40** | **264,7** | **230** | **262** | **66,2** | **116,4** | **158,8** | **64** | **54** | **47,6** | **56,5** |
| 2" | Ø 110 | 40 | 300,7 | 266 | 298 | 77,4 | 140,6 | 158,8 | 64 | 54 | 47,6 | 56,5 |

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore***
In neretto gli accoppiamenti consigliati. Altre combinazioni a richiesta. *Suggested executions are in bold. Other combinations on request.*

# ARES CLAMP 3A

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4SPG16U4** | 9,5(*) | 3,4 | 50 | 4 | 10 | 16 | 1 | **KGJP1003** | **J4SPG16R4** |
| 3/4" | **J4SPG16U5** | 15 | 5,7 | 50 | 4 | 10 | 16 | 1,1 | **KGJP1004** | **J4SPG16R4** |
| 1" | **J4SPG16U6** | 20 | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP1005** | **J4SPG16R5** |
| 1" | **J4SPG18U6** | 20 | 10,5 | 63 | 4 | 10 | 16 | 1,4 | **KGJP1005** | **J4SPG18R5** |
| 1 1/2" | **J4SPG21U8** | 32 | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP1107** | **J4SPG21R7** |
| 1 1/2" | **J4SPG23U8** | 32 | 29,5 | 110 | 4 | 8 | 16 | 3,3 | **KGJP1107** | **J4SPG23R7** |
| 2" | **J4SPG21U9** | 40 | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP1108** | **J4SPG21R8** |
| 2" | **J4SPG23U9** | 40 | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP1108** | **J4SPG23R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1 *diagram 1* **testa *head* Ø50**

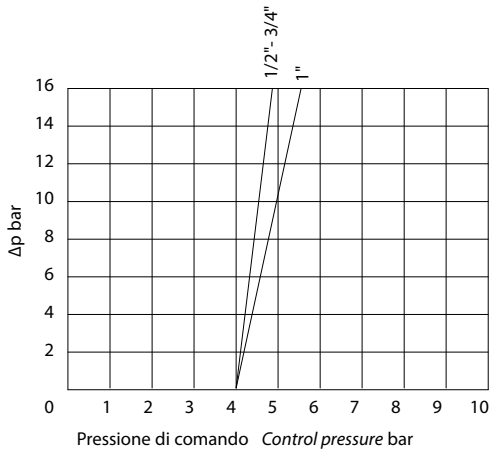



diagramma 2 *diagram 2* **testa *head* Ø63**

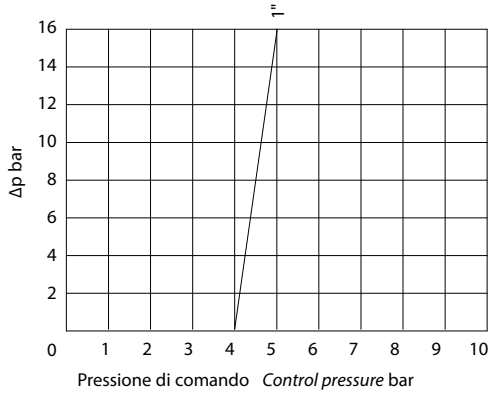



diagramma 3 *diagram 3* **testa *head* Ø90**

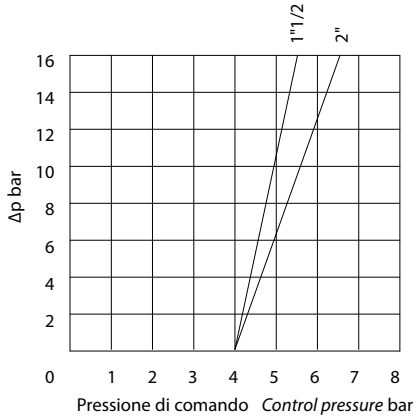
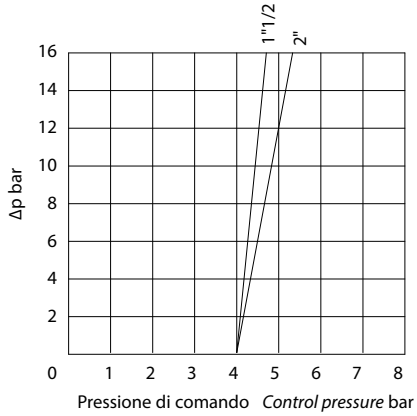



diagramma 4 *diagram 4* **testa *head* Ø110**




Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

## *N.C. Normally Closed with the flow from above the plug.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4CPG16U4** | 9,5(*) | 3,4 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP1003** | **J4CPG16R4** |
| 3/4" | **J4CPG16U5** | 15 | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1,1 | **KGJP1004** | **J4CPG16R4** |
| 1" | **J4CPG16U6** | 20 | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP1005** | **J4CPG16R5** |
| 1" | **J4CPG18U6** | 20 | 10,5 | 63 | 1,8 | 10 | diagram n° 6 | 1,4 | **KGJP1005** | **J4CPG18R5** |
| 1 1/2" | **J4CPG18U8** | 32 | 28,5 | 63 | 1,8 | 10 | diagram n° 6 | 2,6 | **KGJP1007** | **J4CPG18R7** |
| 1 1/2" | **J4CPG21U8** | 32 | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP1107** | **J4CPG21R7** |
| 2" | **J4CPG21U9** | 40 | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP1108** | **J4CPG21R8** |
| 2" | **J4CPG23U9** | 40 | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP1108** | **J4CPG23R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

diagramma 5
*diagram 5*
**testa *head***
**Ø50**

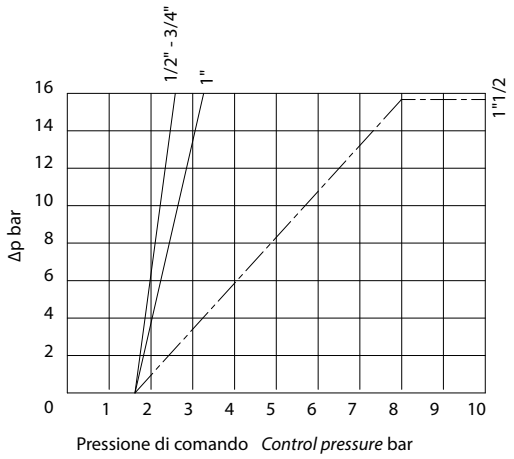



diagramma 6
*diagram 6*
**testa *head***
**Ø63**

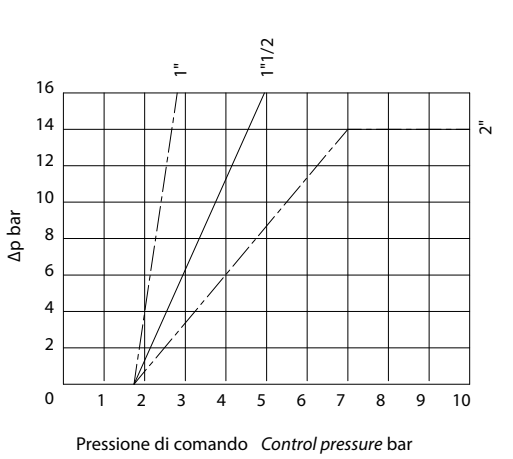



diagramma 7
*diagram 7*
**testa *head***
**Ø90**

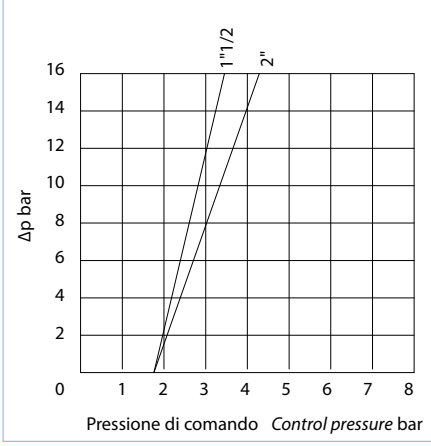
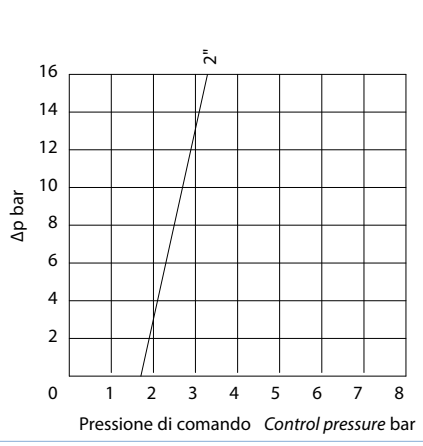



diagramma 8
*diagram 8*
**testa *head***
**Ø110**




Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A

## N.A. Normalmente Aperta con ingresso sotto l'otturatore.

## *N.O. Normally Open with flow from below the plug.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4APG16U4** | 9,5(*) | 3,4 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP1003** | **J4APG16R4** |
| 3/4" | **J4APG16U5** | 15 | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1,1 | **KGJP1004** | **J4APG16R4** |
| 1" | **J4APG16U6** | 20 | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP1005** | **J4APG16R5** |
| 1 1/2" | **J4APG18U8** | 32 | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2,6 | **KGJP1007** | **J4APG18R7** |
| 2" | **J4APG21U9** | 40 | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP1108** | **J4APG21R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

diagramma 9
*diagram 9*
**testa *head***
**Ø50**

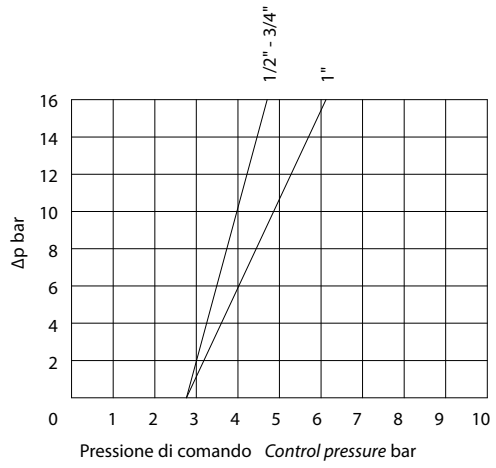



diagramma 10
*diagram 10*
**testa *head***
**Ø63**

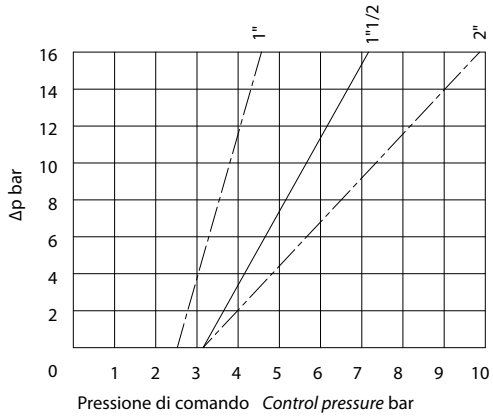
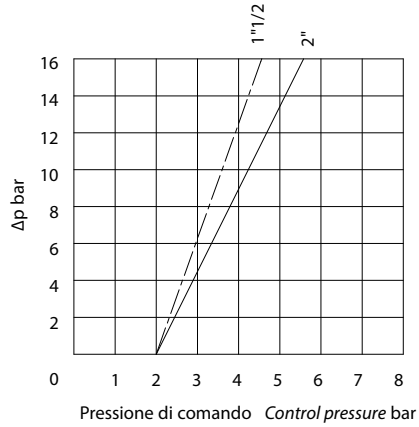



diagramma 11
*diagram 11*
**testa *head***
**Ø90**




Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES CLAMP 3A
## Doppio effetto bidirezionale.
## *Double Acting bidirectional.*

| CLAMP *SIZE* | CODICE *CODE* CF3M | Passaggio *Bore* mm | Kv m³/h | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 1/2" | **J4DPG16U4** | 9,5(*) | 3,4 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP1003** | **J4DPG16R4** |
| 3/4" | **J4DPG16U5** | 15 | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1,1 | **KGJP1004** | **J4DPG16R4** |
| 1" | **J4DPG16U6** | 20 | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP1005** | **J4DPG16R5** |
| 1 1/2" | **J4DPG18U8** | 32 | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 2 | **KGJP1007** | **J4DPG18R7** |
| 2" | **J4DPG18U9** | 40 | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP1008** | **J4DPG18R8** |
| 2" | **J4DPG21U9** | 40 | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP1108** | **J4DPG21R8** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

**(*) Il passaggio valvola è 15 mm, la riduzione a 9,5 mm è dovuta al passaggio del clamp.**
***(*) The valve bore is 15 mm, reduction to 9,5 mm is due to clamp bore.***

**Misure riferite alla dimensione Clamp.** ***Refer to Clamp size.***

diagramma 13
*diagram 13*
**testa *head***
**Ø50**

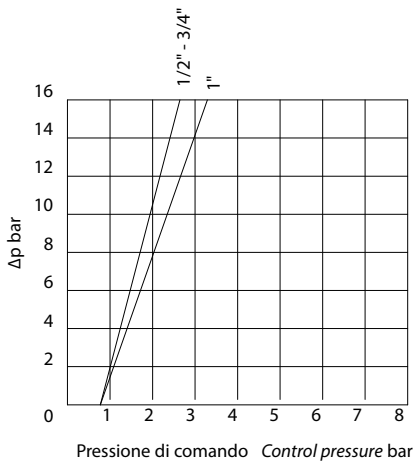



diagramma 14
*diagram 14*
**testa *head***
**Ø63**

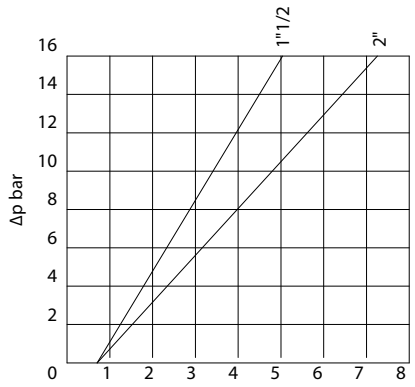
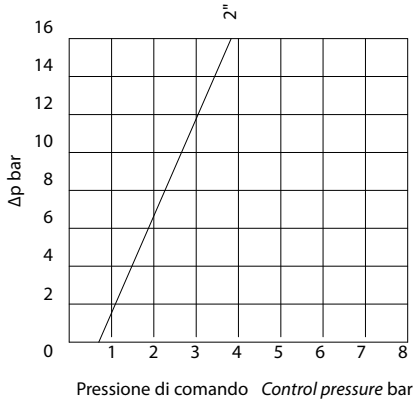



diagramma 15
*diagram 15*
**testa *head***
**Ø90**




Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ARES MANUALE
# *ARES MANUAL DRIVE*



**PN 25**

### CARATTERISTICHE GENERALI:
- Materiale del corpo valvola: A351-CF8M (316 S.S.).
- Attacchi valvola: vedi schema di codifica.
- Montaggio in ogni posizione: orizzontale, verticale, obliqua.
- Gamma disponibile da DN 10 a DN 50.
- Disponibile anche versione con dispositivo di bloccaggio.
- Configurazione ATEX 2014/34/UE da richiedere in fase d'ordine.
- A richiesta: versioni per vuoto e per uso ossigeno.

### *GENERAL FEATURES:*
- *Body valve material: A351-CF8M (316 S.S.).*
- *Valve ends: see code plan.*
- *Assembling is possible in all positions: upright, flat or angled.*
- *Range available from DN 10 to DN 50.*
- *Locking device version available.*
- *2014/34/EU ATEX configuration to request at time of order.*
- *On request: versions for vacuum and oxygen service.*

### FLUIDO INTERCETTATO:
- Aria, acqua, alcool, olii, carburanti, soluzioni saline, vapore, ecc..(comunque compatibili con A 351 CF8M (316 S.S.) e PTFE).
- Pressione di utilizzo da 0 a 25 bar (vapore a 180°C da 0 a 10 bar) in funzione della versione scelta.
- Temperatura da -10°C a +180°C.
- Viscosità massima 600 cst ($mm^2/s$).

### *OPERATING MEDIA:*
- *Air, water, alcohol, oil, petroleum products, saline solutions, steam, etc. (as long as compatible with A 351 CF8M (316 S.S.) e PTFE).*
- *Pressure from 0 to 25 bar (steam from 180°C, from 0 to 10 bar) depending on the model chosen.*
- *Temperature from –10°C to 180°C.*
- *Max. viscosity 600 cst ($mm^2$ /s).*

## SCHEMA DI CODIFICA ARES MANUALI
## *ARES MANUAL DRIVE CODE PLAN*

**J4 M0 G 0 - - - YX**

**YX solo per versioni ATEX**
***YX only for ATEX versions***

**0 =** Manuale *Manual drive;*
**B =** Manuale con dispositivo di bloccaggio
*Manual drive with locking device*

**Misura valvola *Valve size***

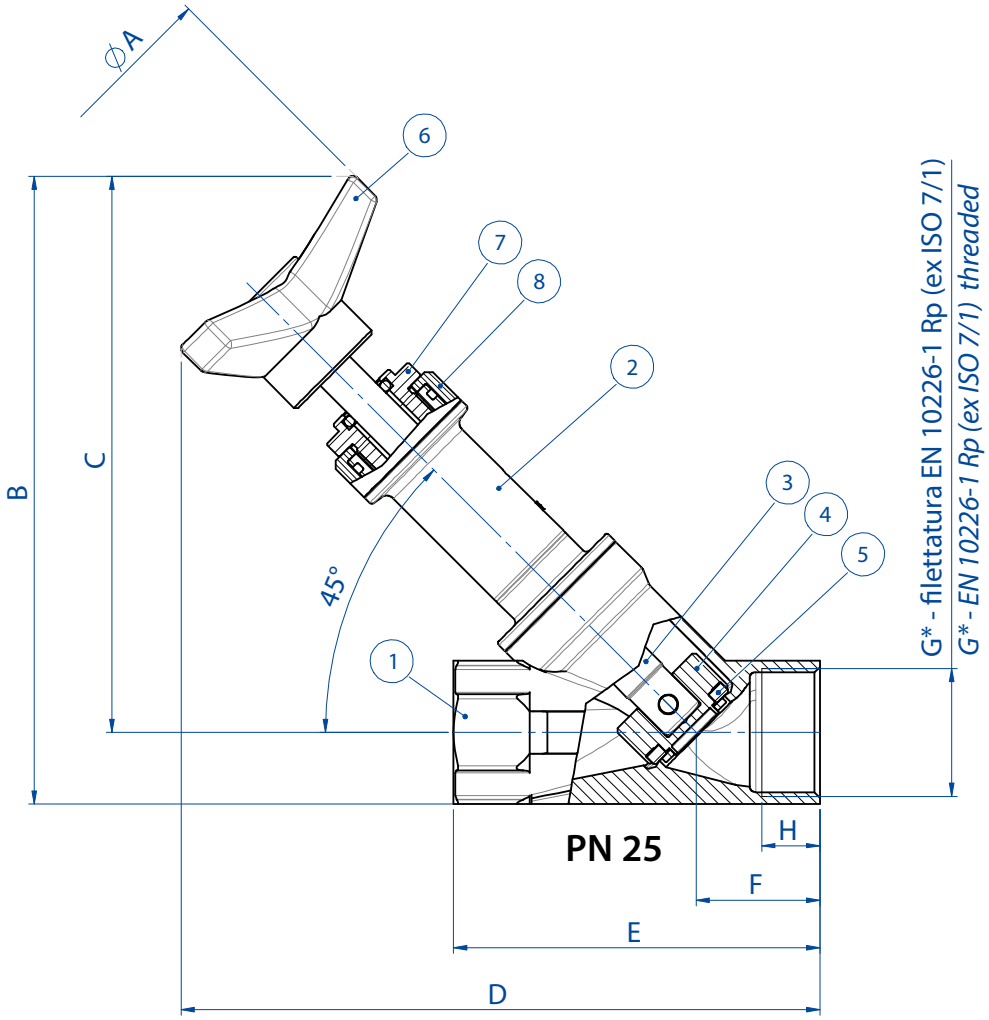
| | |
|---|---|
| **3** = 3/8" | |
| **4** = 1/2" | **4** = DN 15 |
| **5** = 3/4" | **5** = DN 20 |
| **6** = 1" | **6** = DN 25 |
| **7** = 1" 1/4 | **7** = DN 32 |
| **8** = 1" 1/2 | **8** = DN 40 |
| **9** = 2" | **9** = DN 50 |

**Connessioni a richiesta *Ends on request***

| | |
|---|---|
| **0** = Filettate *Threaded ends* EN 10226-1 Rp (ex ISO 7/1); | **6** = flangiate *flanged* EN 1092-1; |
| **4** = Filettate *Threaded ends* NPT; | **A** = flangiate *flanged* ANSI 150 RF; |
| **9** = da saldare *weld ends* ISO 4200; | **B** = flangiate ridotte *reduced flanges;* |
| **I** = da saldare *weld ends* ISO 2037; | **T** = triclamp ISO 2852; |
| **D** = da saldare *weld ends* DIN 11852 2; | **U** = triclamp USA 3A. |

# ARES MANUALE *ARES MANUAL DRIVE*

## ATTACCHI FILETTATI *THREADED VALVE ENDS* EN 10226-1 RP (EX ISO 7/1)




*A richiesta filetto NPT *NPT on request*

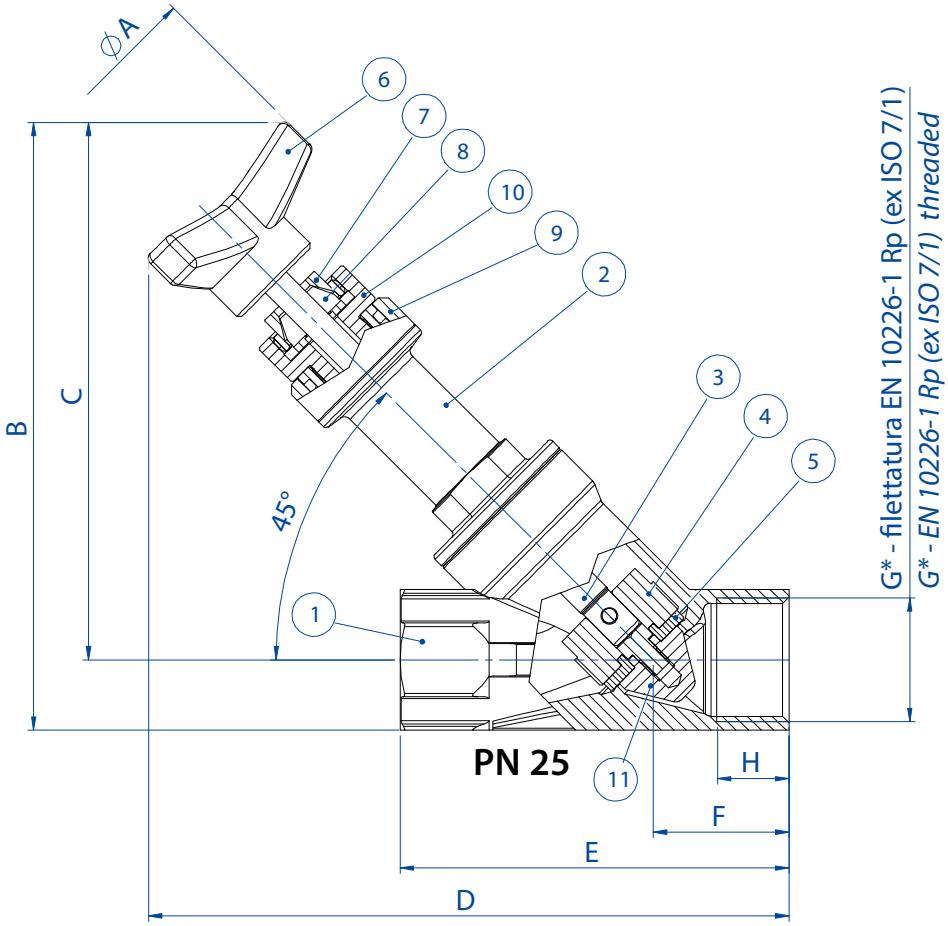
| DIMENSIONI *DIMENSIONS* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G * [inch]** | **øA** | **B** | **C** | **D** | **E** | **F** | **H** |
| 15 | 3/8" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 12 |
| 15 | 1/2" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 15 |
| 20 | 3/4" | 63 | 148,5 | 133 | 176,2 | 95 | 34,7 | 16,3 |
| 25 | 1" | 63 | 152 | 133 | 178,1 | 105 | 36,6 | 19,5 |
| 32 | 11/4" | 100 | 191,5 | 168 | 222,5 | 120 | 40,5 | 19 |
| 40 | 11/2" | 100 | 197 | 170 | 225 | 130 | 41 | 18 |
| 50 | 2" | 100 | 213 | 180 | 239,5 | 150 | 45,5 | 20 |

* A richiesta filetto NPT *NPT on request*

| MATERIALI *MATERIALS* | | |
|---|---|---|
| **N°** | **Descrizione *Description*** | **Materiali *Materials*** |
| 1 | Corpo valvola *Valve body* | CF8M (316 S.S.) |
| 2 | Cannotto premistoppa *Sleeve* | CF8M (316 S.S.) |
| 3 | Stelo *Stem* | 316L S.S. |
| 4 | Otturatore *Plug* | 316L S.S. |
| 5 | Guarnizione otturatore *Plug seals* | PTFE |
| 6 | Manopola *Hand grip* | Tecnoplimero *Tecnopolymer* |
| 7 | Premiguarnizione *Gland Nut* | 304 S.S. |
| 8 | Bussola *Bush* | Lega di alluminio *Aluminium Alloy* |

# ARES MANUALE CON DISPOSITIVO DI BLOCCAGGIO
# *ARES MANUAL DRIVE WITH BLOCKING DEVICE*

## ATTACCHI FILETTATI *THREADED VALVE ENDS* EN 10226-1 RP (EX ISO 7/1)




*a richiesta filetto NPT *NPT on request*

**DIMENSIONI *DIMENSIONS***

| DN [mm] | G * [inch] | øA | B | C | D | E | F | H |
|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 12 |
| 15 | 1/2" | 63 | 138,5 | 126 | 169 | 85 | 34,5 | 15 |
| 20 | 3/4" | 63 | 148,5 | 133 | 176,2 | 95 | 34,7 | 16,3 |
| 25 | 1" | 63 | 152 | 133 | 178,1 | 105 | 36,6 | 19,5 |
| 32 | 11/4" | 100 | 191,5 | 168 | 222,5 | 120 | 40,5 | 19 |
| 40 | 11/2" | 100 | 197 | 170 | 225 | 130 | 41 | 18 |
| 50 | 2" | 100 | 213 | 180 | 239,5 | 150 | 45,5 | 20 |

* A richiesta filetto NPT *NPT on request*

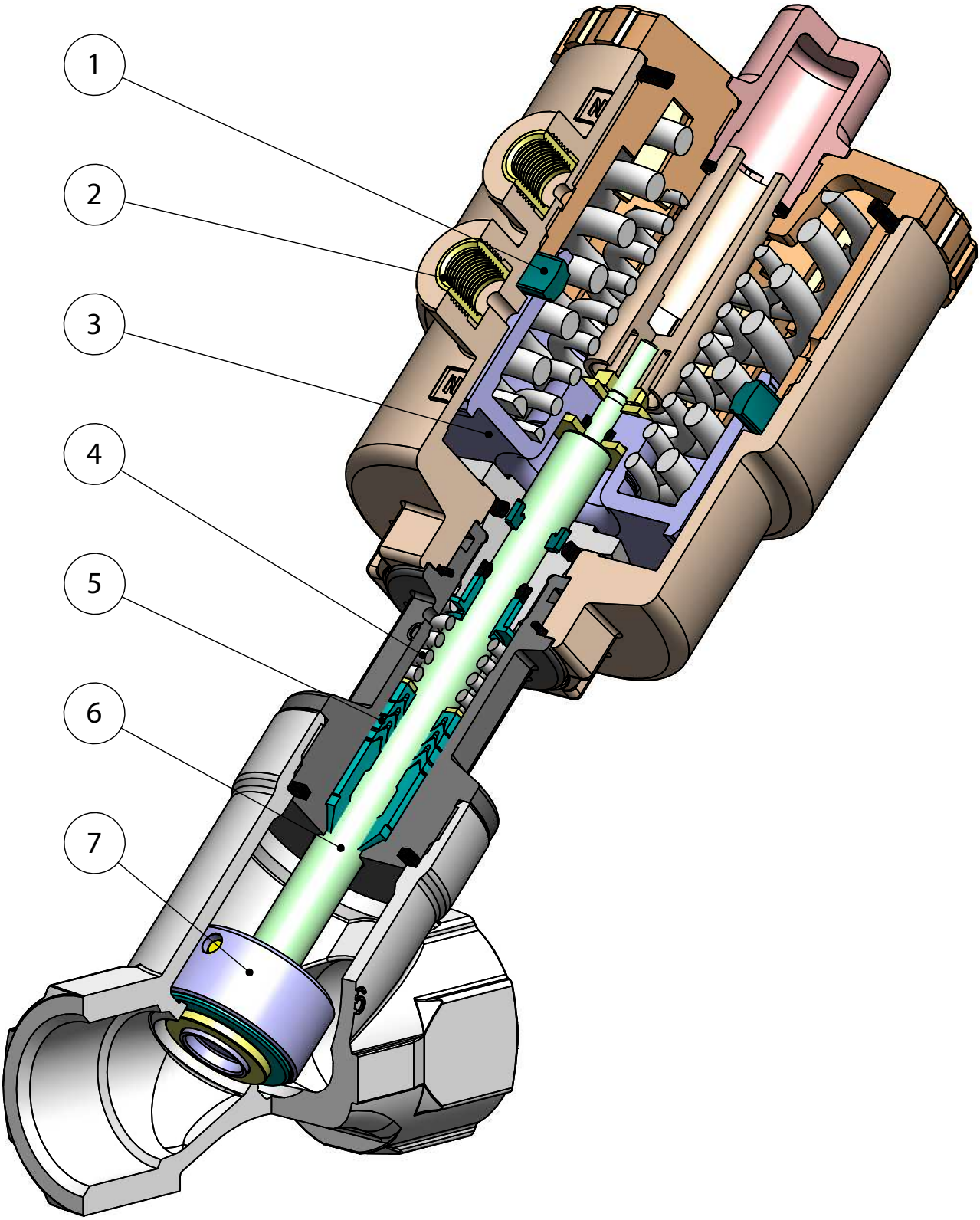
**MATERIALI *MATERIALS***

| N° | Descrizione *Description* | Materiali *Materials* |
|---|---|---|
| 1 | Corpo valvola *Valve body* | CF8M |
| 2 | Cannotto premistoppa *Sleeve* | CF8M |
| 3 | Stelo *Stem* | 316L S.S. |
| 4 | Otturatore *Plug* | 316L S.S. |
| 5 | Guarnizione otturatore *Plug seals* | PTFE |
| 6 | Manopola *Hand grip* | Tecnoplimero *Tecnopolymer* |
| 7 | Ghiera di bloccaggio *Locking nut* | 304 S.S. |
| 8 | Pinza *Pliers* | Ottone *Brass* |
| 9 | Bussola *Bush* | Lega di alluminio *Aluminium Alloy* |
| 10 | Premiguarnizione *Gland Nut* | 304 S.S. |
| 11 | Ogiva *Ogive* | 304 S.S. |

# ZEUS

## VALVOLA INCLINATA

## *ANGLE SEAT VALVE*

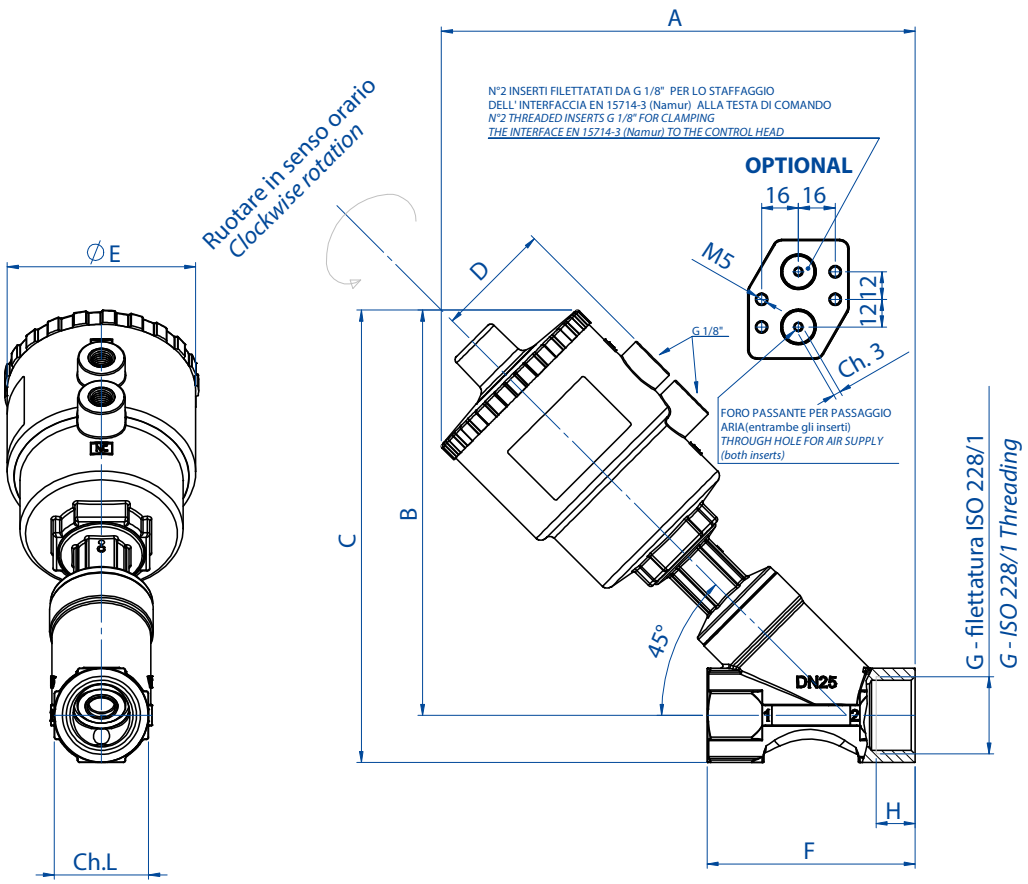


## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Guarnizione posizionata nel cilindro anziché sul pistone<br>*Seal placed in the cylinder rather than on the piston* | Si ottiene una maggiore corsa dell'attuatore e dell'otturatore ad esso collegato garantendo grandi aperture del passaggio sulla sede (minor perdita di carico)<br>*Longer stroke of the actuator and shutter will be achieved, granting higher flow rate (less flow loss)* |
| | | Minor usura della guarnizione<br>*Less wear of the seal* |
| 2 | Inserti della testa di comando in 303 S.S..<br>*Piloting head inserts in 303 S.S..* | Aumenta considerevolmente la resistenza alla corrosione causata da agenti esterni.<br>*Increases considerably the corrosion resistance caused by external agents.* |
| 3 | Dal DN63 pistone metallico con rivestimento in NICHEL-CHIMICO (10-15 micron)<br>*Starting from DN63 metal piston with CHEMICAL NICKEL coating (10-15 micron)* | Si riduce l'usura del pistone grazie al raggiungimento di una maggior durezza superficiale(700-750 HV)<br>*Reduces the wear of the piston due to the achievement of a greater surface hardness (700-750 HV)* |
| 4 | Guarnizioni precaricate da molla<br>*Seals pre-loaded by spring* | Garantiscono il recupero dei giochi dovuti all'usura causata dallo scorrimento lineare dell'albero evitando perdite vero l'esterno<br>*Guarantee of the recovery of the gap due to the wear caused by the sliding of the shaft avoiding leakage towards the outside part.* |
| | | Consentono di mantenere energizzati le guarnizioni "chevron" (a V) compensandone le variazioni dimensionali anche a fronte di notevoli escursioni termiche<br>*Allow to maintain energized the "chevron" seals (V) compensating the dimensional changes even in case of huge temperature excursions* |
| 5 | Guarnizioni tipo "chevron" (a "v") con 4 guarnizioni nella parte inferiore<br>*CHEVRON seals (V shape) with 4 seals in the lower part* | Si garantisce una perfetta tenuta anche dopo un numero elevato di cicli<br>*It ensures a perfect tightness even after a high number of cycles* |
| 6 | Albero rullato<br>*Rolled shaft* | Minor usura delle guarnizioni grazie alla bassa rugosità (0,1 micron Ra) dell'albero che facilita lo scorrimento<br>*Less wear of the seals due to the low roughness (0,1 micron Ra) which facilitate the sliding of the shaft* |
| 7 | Otturatore oscillante/autoallineante<br>*Oscillating / self-aligning shutter* | Si adatta perfettamente alla sede sul corpo valvola garantendo una massima tenuta<br>*It fits perfectly to the valve body ensuring the maximum tightness* |
| | Certificato ATEX<br>*ATEX Certificate* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo<br>*Installation is allowed in a potential explosive environment* |
| | Certificato PED<br>*PED Certificate* | Piena conformità alle norme di sicurezza europee per i dispositivi in pressione<br>*Full compliance with European Safety Standards for Pressure Equipment* |

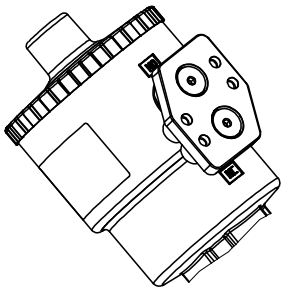
# ZEUS

Testa di comando orientabile a 360°
*Control head adjustable at 360°*




Esempio dell'interfaccia EN 15714-3 (Namur) assemblata alla testa di comando
**Disponibile A RICHIESTA nel caso di pilotaggio di elettrovalvola NAMUR**
**Codice: KBNJ0001**

*Example of NAMUR plate EN 15714-3 to be assembled on the control head*
***Available ON REQUEST once NAMUR Solenoid valve should be needed***
***Code: KBNJ0001***

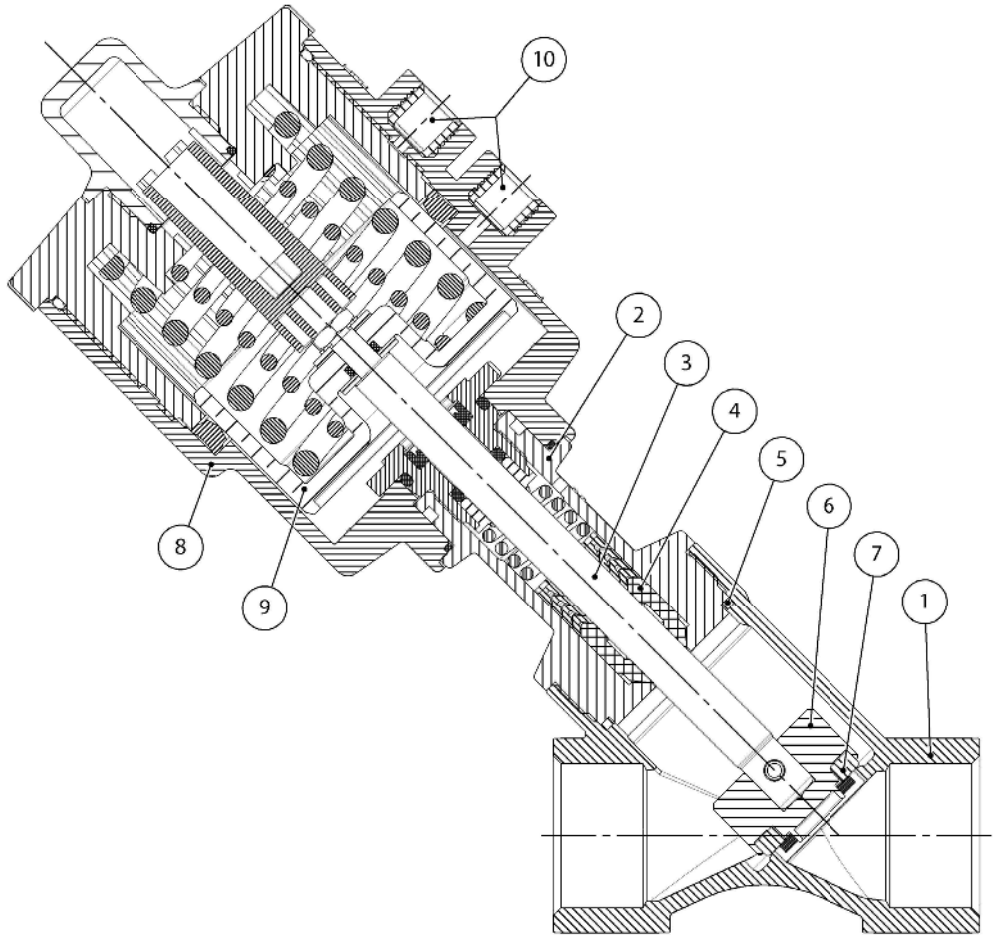


## DIMENSIONI *DIMENSIONS*

| DN [mm] | G * [inch] | Attuatore *Actuator* | A | B | C | D | øE | F | ch. L | H |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | Ø 50 | 166 | 143 | 156,5 | 44 | 70 | 65 | 27 | 12 |
| 15 | 1/2" | Ø 50 | 166 | 143 | 156,5 | 44 | 70 | 65 | 27 | 13 |
| 20 | 3/4" | Ø 50 | 174 | 148,5 | 165 | 44 | 70 | 75 | 33 | 14,3 |
| 20 | 3/4" | Ø 63 | 192,5 | 167 | 183,5 | 50,5 | 84,4 | 75 | 33 | 14,3 |
| 25 | 1" | Ø 50 | --- | 175,5 | --- | --- | --- | --- | --- | 17,5 |
| 25 | 1" | Ø 63 | 206 | 225 | 196 | 50,5 | 84,4 | 90 | 41 | 17,5 |
| 25 | 1" | Ø 90 | 254,5 | 180 | 245,5 | 66,2 | 116,4 | 90 | 41 | 19 |
| 32 | 1 1/4" | Ø 50 | --- | 231 | --- | --- | --- | --- | --- | 19 |
| 32 | 1 1/4" | Ø 63 | 215 | 235 | 205 | 50,5 | 84,4 | 110 | 50 | 18 |
| 32 | 1 1/4" | Ø 90 | 267 | 271 | 256 | 66,2 | 116,4 | 110 | 50 | 18 |
| 32 | 1 1/4" | Ø 110 | --- | 240 | --- | --- | --- | --- | --- | 20 |
| 40 | 1 1/2" | Ø 63 | --- | 276 | --- | --- | --- | --- | --- | 20 |
| 40 | 1 1/2" | Ø 90 | 270 | | 264 | 66,2 | 116,4 | 120 | 58 | |
| 40 | 1 1/2" | Ø 110 | 306 | | 300 | 77,4 | 140,6 | 120 | 58 | |
| 50 | 2" | Ø 63 | --- | | --- | --- | --- | --- | --- | |
| 50 | 2" | Ø 90 | 280 | | 275 | 66,2 | 116,4 | 150 | 70 | |
| 50 | 2" | Ø 110 | 316 | | 311 | 77,4 | 140,6 | 150 | 70 | |

* A richiesta la versione con filettatura NPT *On request NPT-threading*

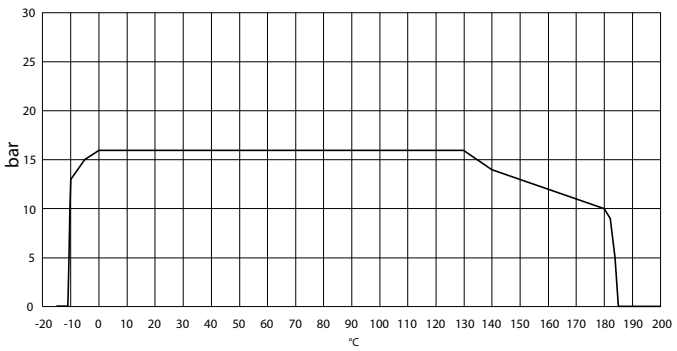
# ZEUS



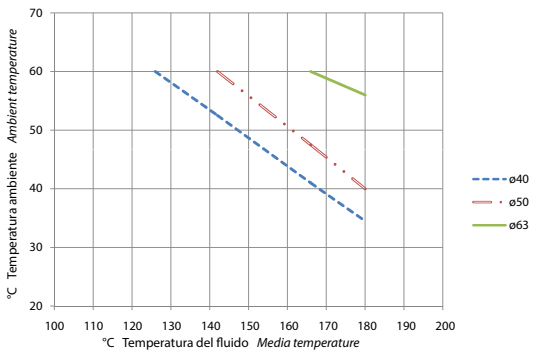

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | Bronzo *Bronze* CuSn5Zn5Pb5-B |
| 2 | Cannotto premistoppa *Sleeve* | Ottone EN 12165 CW617N *Brass EN 12165 CW617N* |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | Ottone nichel chimico *Brass chem-nickel* (PBT + GF 20% testa/head ø50) |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

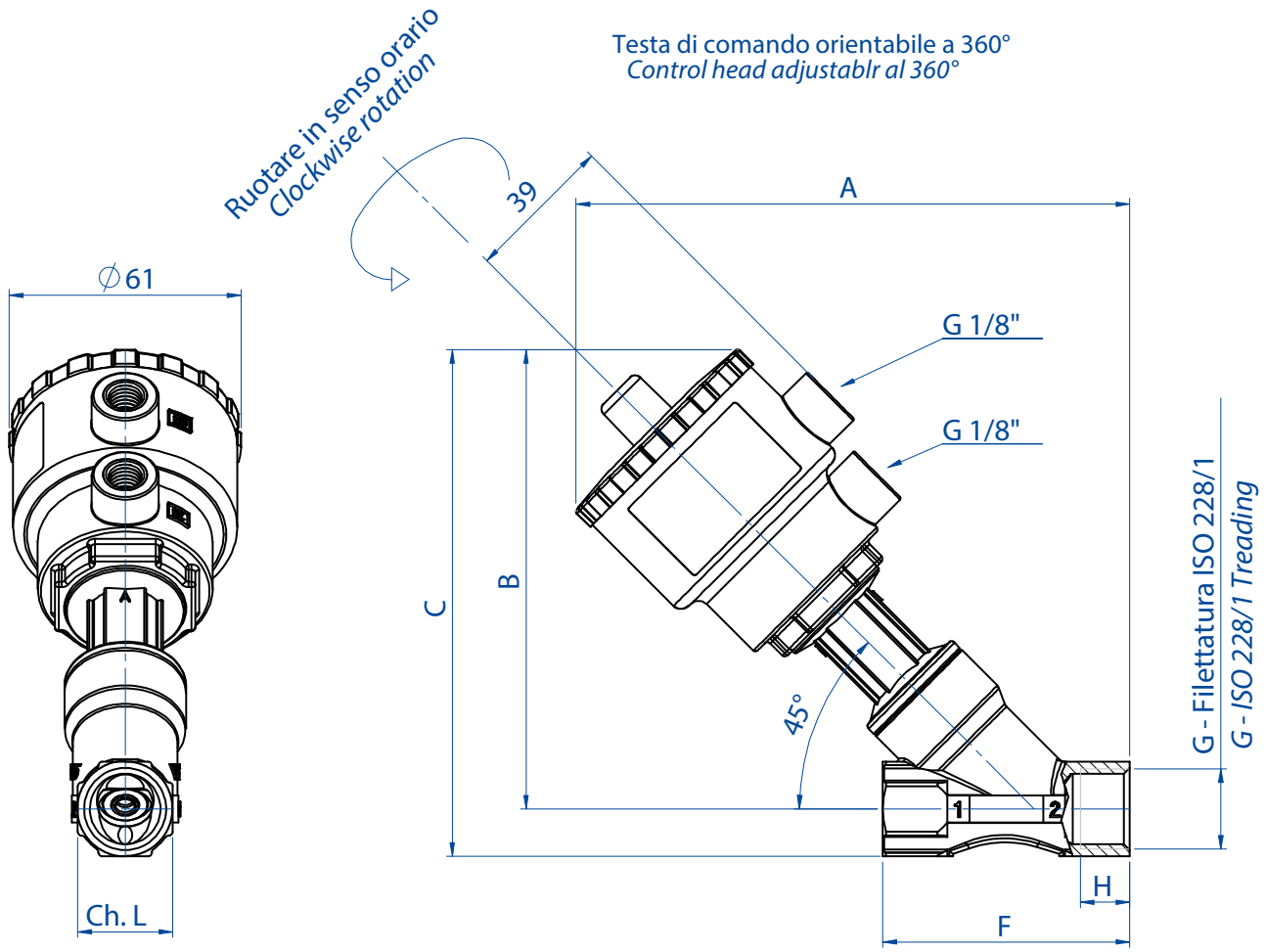
## DIAGRAMMA PRESSIONE/TEMPERATURA
## *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
## *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ZEUS TESTA ⌀40 *HEAD ⌀40*

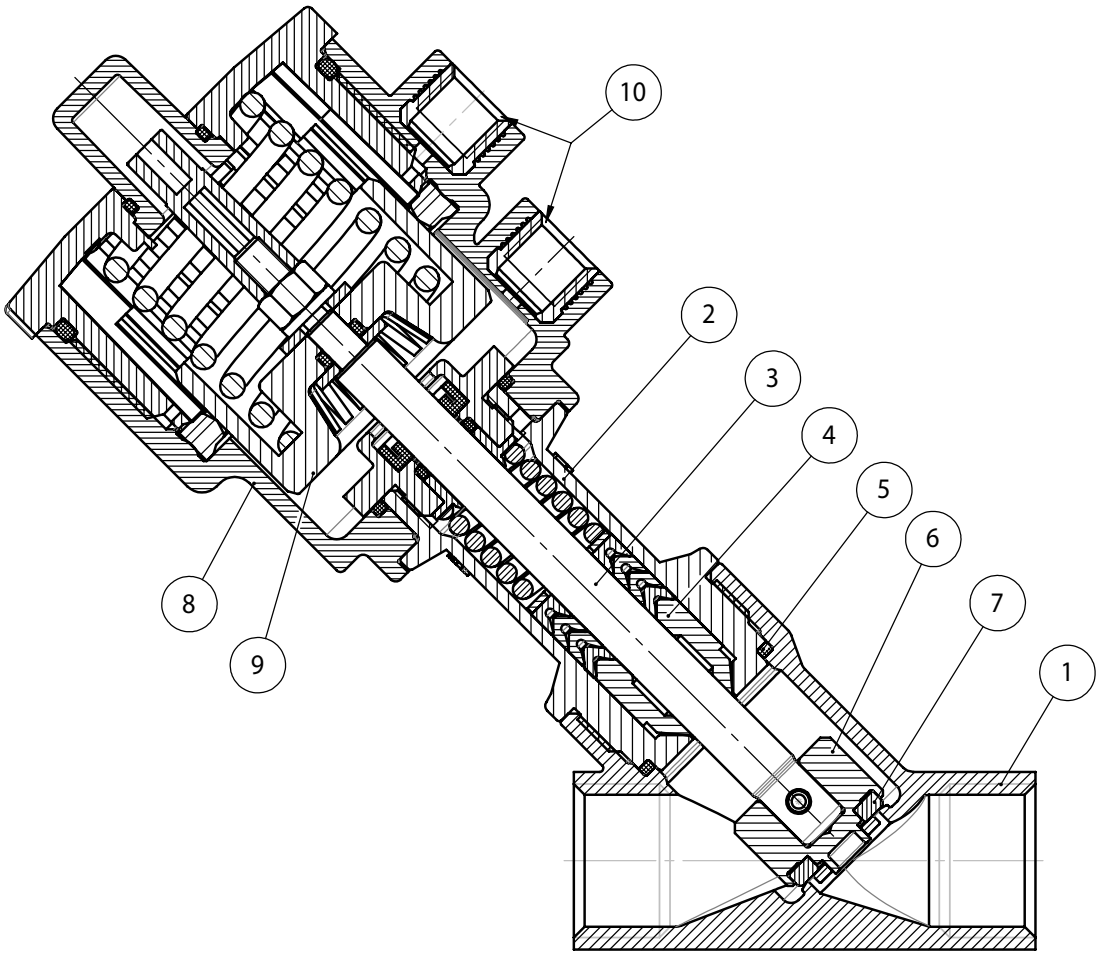



## DIMENSIONI *DIMENSIONS*

| | | | Versione in Bronzo *Bronze version* | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DN [mm]** | **G * [inch]** | **Attuatore *Actuator*** | **A** | **B** | **C** | **H** | **39** | **ø61** | **F** | **ch. L** |
| 15 | 3/8" | Ø 40* | 144 | 120,5 | 134 | 12 | 39 | 61 | 65 | 27 |
| 15 | 1/2" | Ø 40* | 144 | 120,5 | 134 | 13 | 39 | 61 | 65 | 27 |
| 20 | 3/4" | Ø 40* | 151 | 127,5 | 142,5 | 14,3 | 39 | 61 | 75 | 33 |

* A richiesta la versione con filettatura NPT *On request NPT-threading*

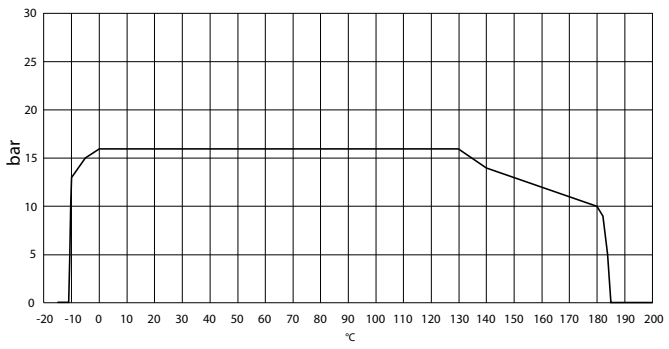
# ZEUS TESTA ø40 *HEAD ø40*



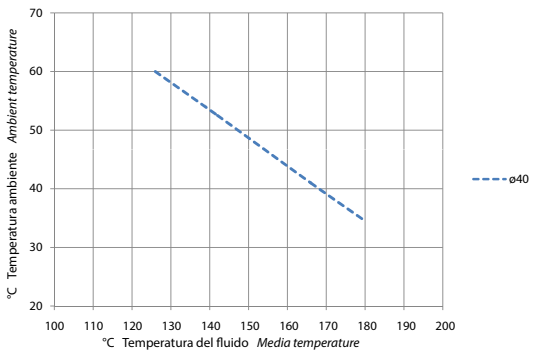

| N° | MATERIALI *MATERIALS* | |
|---|---|---|
| 1 | Corpo valvola *Valve body* | Bronzo *Bronze* CuSn5Zn5Pb5-B |
| 2 | Cannotto premistoppa *Sleeve* | Ottone EN 12165 CW617N *Brass EN 12165 CW617N* |
| 3 | Stelo *Stem* | 316L S.S. |
| 4* | Guarnizioni stelo *Stem seals* | PTFE-CF |
| 5* | Guarnizione corpo *Body seal* | GRAPHITE |
| 6 | Otturatore *Plug* | 316L S.S. |
| 7 | Guarnizione otturatore *Plug seal* | PTFE |
| 8 | Testa di comando *Actuator cylinder* | Poliammide PA 66 + GF 30% |
| 9 | Pistone *Piston* | PBT + GF 20% |
| 10 | Inserti di pilotaggio *Threading inserts* | 303 S.S. |

* Per applicazioni alta purezza sono disponibili guarnizioni stelo in PTFE vergine e guarnizione corpo in Peek
*For high purity application are allowable stem seals in virgin PTFE and body seals in Peek*

## DIAGRAMMA PRESSIONE/TEMPERATURA
### *TEMPERATURE/PRESSURE DIAGRAM*




## DIAGRAMMA T AMBIENTE/T FLUIDO INTERCETTABILE
### *AMBIENT TEMPERATURE/MEDIA TEMPERATURE DIAGRAM*



# ZEUS

## N.C. Normalmente Chiusa bidirezionale (Con ingresso sotto l'otturatore si evita il colpo d'ariete).

## *N.C. Normally Closed bidirectional (With the flow coming from below the plug you avoid water hammering).*

### CON INGRESSO DEL FLUIDO SOTTO L'OTTURATORE *WITH THE FLOW FROM BELOW THE PLUG*

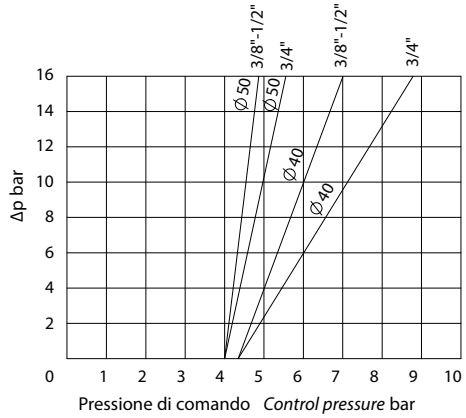
| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9SPG1403** | 4,5 | 40 | 4,2 | 10 | 16 | 1,1 | **KGJP2303** | **J9SPG14R3** |
| 15 | 3/8" | **J9SPG1603** | 4,9 | 50 | 4 | 10 | 16 | 1,1 | **KGJP2003** | **J9SPG16R3** |
| 15 | 1/2" | **J9SPG1404** | 5,3 | 40 | 4,2 | 10 | 16 | 1 | **KGJP2303** | **J9SPG14R4** |
| 15 | 1/2" | **J9SPG1604** | 5,7 | 50 | 4 | 10 | 16 | 1 | **KGJP2003** | **J9SPG16R4** |
| 20 | 3/4" | **J9SPG1405** | 9,2 | 40 | 4,2 | 10 | 8 | 1,2 | **KGJP2305** | **J9SPG14R5** |
| 20 | 3/4" | **J9SPG1605** | 10,5 | 50 | 4 | 10 | 10 | 1,2 | **KGJP2005** | **J9SPG16R5** |
| 20 | 3/4" | **J9SPG1805** | 10,8 | 63 | 4 | 10 | 16 | 1,2 | **KGJP2005** | **J9SPG18R5** |
| 25 | 1" | **J9SPG1806** | 20 | 63 | 4 | 10 | 11 | 1,6 | **KGJP2006** | **J9SPG18R6** |
| 25 | 1" | **J9SPG2106** | 20 | 90 | 4 | 8 | 16 | 1,7 | **KGJP2106** | **J9SPG21R6** |
| 32 | 1 1/4" | **J9SPG2107** | 29 | 90 | 4 | 8 | 14 | 3 | **KGJP2107** | **J9SPG21R7** |
| 40 | 1 1/2" | **J9SPG2108** | 46 | 90 | 4 | 8 | 11 | 3,4 | **KGJP2108** | **J9SPG21R8** |
| 40 | 1 1/2" | **J9SPG2308** | 46,5 | 110 | 4 | 8 | 16 | 4 | **KGJP2108** | **J9SPG23R8** |
| 50 | 2" | **J9SPG2309** | 67 | 110 | 4 | 8 | 10 | 5,8 | **KGJP2109** | **J9SPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

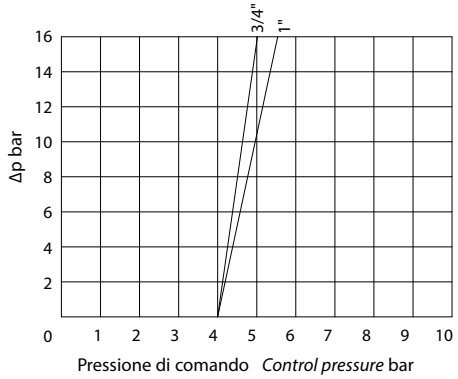
### CON INGRESSO DEL FLUIDO SOPRA L'OTTURATORE *WITH THE FLOW FROM ABOVE THE PLUG*

diagramma 1
*diagram 1*
**testa *head***
**Ø40-Ø50**



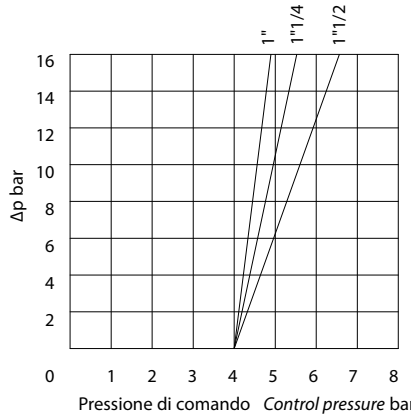

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 2
*diagram 2*
**testa *head***
**Ø63**



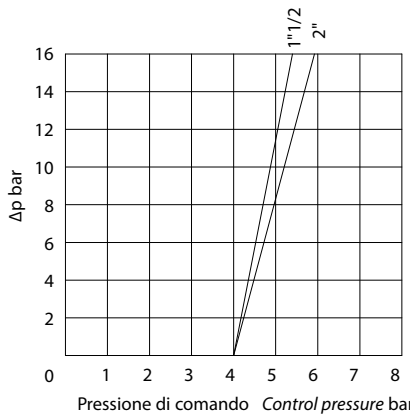

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 3
*diagram 3*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 4
*diagram 4*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ZEUS

## N.C. Normalmente Chiusa con ingresso sopra l'otturatore.

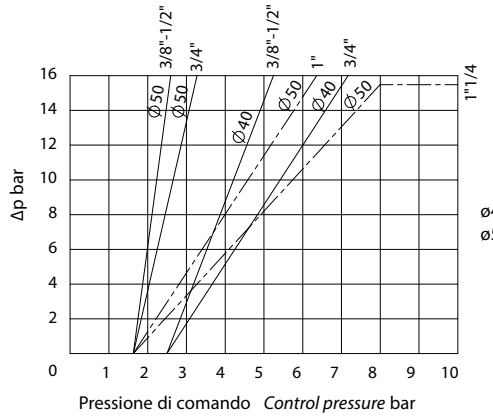
## *N.C. Normally Closed with the flow from above the plug.*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9CPG1403** | 4,5 | 40 | 2,5 | 10 | diagram n° 5 | 1 | **KGJP2303** | **J9CPG14R3** |
| 15 | 3/8" | **J9CPG1603** | 4,9 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP2003** | **J9CPG16R3** |
| 15 | 1/2" | **J9CPG1404** | 5,3 | 40 | 2,,5 | 10 | diagram n° 5 | 1 | **KGJP2303** | **J9CPG14R4** |
| 15 | 1/2" | **J9CPG1604** | 5,7 | 50 | 1,8 | 10 | diagram n° 5 | 1 | **KGJP2003** | **J9CPG16R4** |
| 20 | 3/4" | **J9CPG1405** | 9,2 | 40 | 2,5 | 10 | diagram n° 5 | 1,2 | **KGJP2305** | **J9CPG14R5** |
| 20 | 3/4" | **J9CPG1605** | 10,5 | 50 | 1,8 | 10 | diagram n° 5 | 1,2 | **KGJP2005** | **J9CPG16R5** |
| 25 | 1" | **J9CPG1806** | 20 | 63 | 1,8 | 10 | diagram n° 6 | 1,6 | **KGJP2006** | **J9CPG18R6** |
| 32 | 1 1/4" | **J9CPG2107** | 29 | 90 | 1,8 | 8 | diagram n° 7 | 3 | **KGJP2107** | **J9CPG21R7** |
| 40 | 1 1/2" | **J9CPG2108** | 46 | 90 | 1,8 | 8 | diagram n° 7 | 3,7 | **KGJP2108** | **J9CPG21R8** |
| 40 | 1 1/2" | **J9CPG2308** | 46,5 | 110 | 1,8 | 8 | diagram n° 8 | 4,6 | **KGJP2108** | **J9CPG23R8** |
| 50 | 2" | **J9CPG2109** | 59 | 90 | 1,8 | 8 | diagram n° 7 | 4,4 | **KGJP2109** | **J9CPG21R9** |
| 50 | 2" | **J9CPG2309** | 67 | 110 | 1,8 | 8 | diagram n° 8 | 5,6 | **KGJP2109** | **J9CPG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

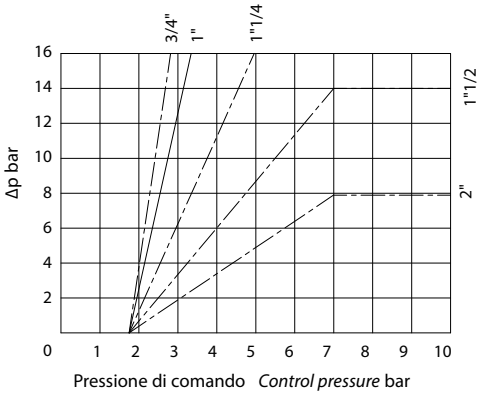
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 5
*diagram 5*
**testa *head***
**Ø40-Ø50**



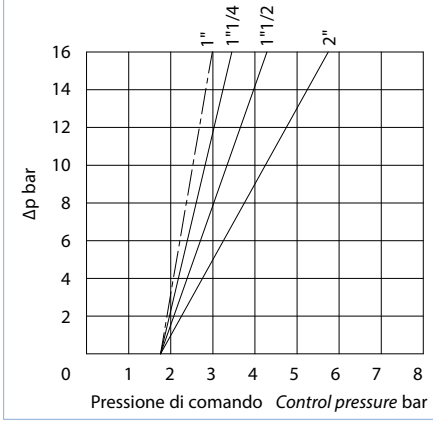

ø40: aria 0,031 $dm^3$/cilclo
ø50: aria 0,051 $dm^3$/cilclo
*ø40: air 0,031 $dm^3$/cycle*
*ø50: air 0,051 $dm^3$/cycle*

diagramma 6
*diagram 6*
**testa *head***
**Ø63**



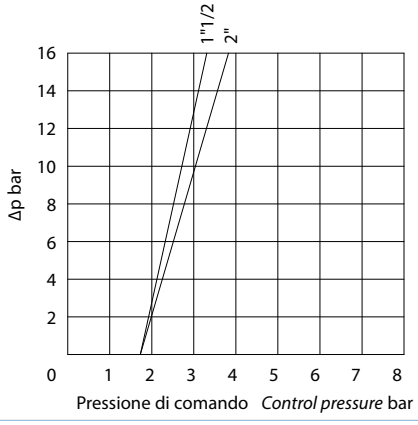

aria 0,108 $dm^3$/cilclo
*air 0,108 $dm^3$/cycle*

diagramma 7
*diagram 7*
**testa *head***
**Ø90**




aria 0,238 $dm^3$/cilclo
*air 0,238 $dm^3$/cycle*

diagramma 8
*diagram 8*
**testa *head***
**Ø110**




aria 0,505 $dm^3$/cilclo
*air 0,505 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ZEUS

## N.A. Normalmente Aperta con ingresso sotto l'otturatore

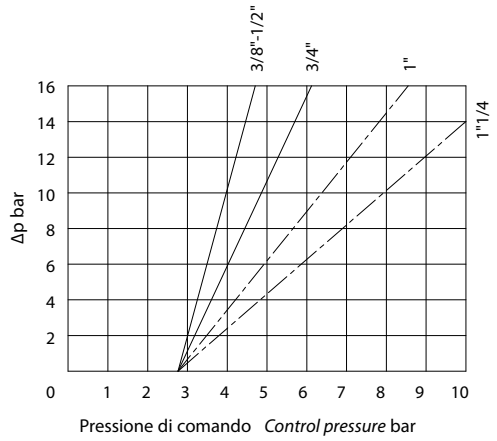
## *N.O. Normally Open with flow from below the plug*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9APG1603** | 4,9 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP2003** | **J9APG16R3** |
| 15 | 1/2" | **J9APG1604** | 5,7 | 50 | 2,8 | 10 | diagram n° 9 | 1 | **KGJP2003** | **J9APG16R4** |
| 20 | 3/4" | **J9APG1605** | 10,5 | 50 | 2,8 | 10 | diagram n° 9 | 1,2 | **KGJP2005** | **J9APG16R5** |
| 25 | 1" | **J9APG1806** | 20 | 63 | 3,2 | 10 | diagram n° 10 | 1,6 | **KGJP2006** | **J9APG18R6** |
| 32 | 1 1/4" | **J9APG1807** | 28,5 | 63 | 3,2 | 10 | diagram n° 10 | 2 | **KGJP2007** | **J9APG18R7** |
| 40 | 1 1/2" | **J9APG2108** | 46 | 90 | 2 | 8 | diagram n° 11 | 3,7 | **KGJP2108** | **J9APG21R8** |
| 50 | 2" | **J9APG2309** | 67 | 110 | 2,2 | 8 | diagram n° 12 | 5,6 | **KGJP2109** | **J9APG23R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

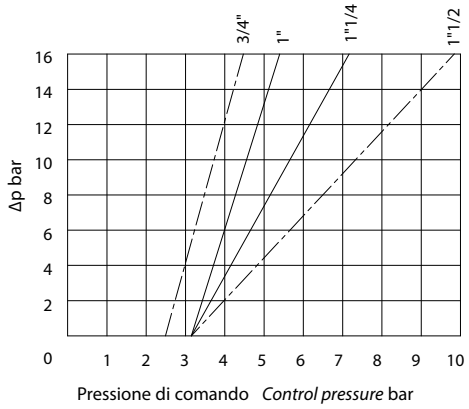
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 9
*diagram 9*
**testa *head***
**Ø50**



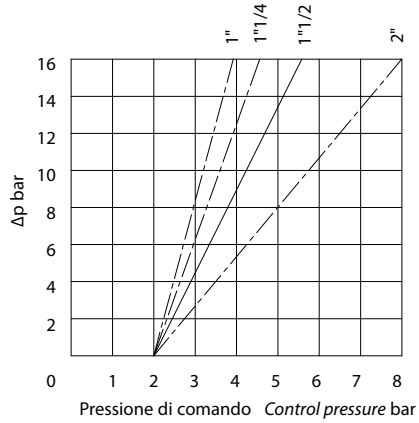

aria 0,089 $dm^3$/cilclo
*air 0,089 $dm^3$/cycle*

diagramma 10
*diagram 10*
**testa *head***
**Ø63**



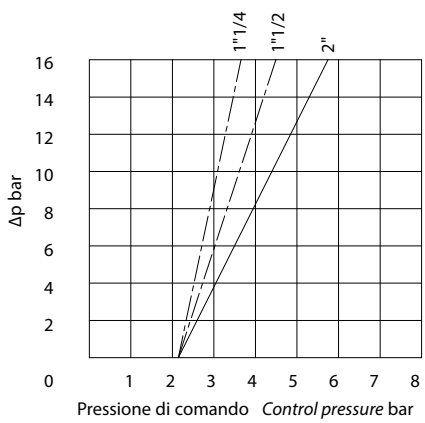

aria 0,194 $dm^3$/cilclo
*air 0,194 $dm^3$/cycle*

diagramma 11
*diagram 11*
**testa *head***
**Ø90**




aria 0,499 $dm^3$/cilclo
*air 0,499 $dm^3$/cycle*

diagramma 12
*diagram 12*
**testa *head***
**Ø110**




aria 1,08 $dm^3$/cilclo
*air 1,08 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

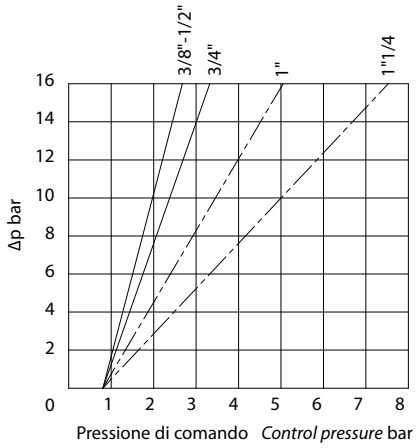
# ZEUS
## Doppio effetto bidirezionale
## *Double acting bidirectional*

| DN [mm] | Filettatura *Threading* | CODICE BRONZO *CODE BRONZE* | Kv $m^3/h$ | Ø Testa comando *Ø Control head* | P comando bar *P control bar* Min | Max | P intercettata *P operating* ΔP max. bar | Peso *Weight* Kg. | KIT OTTURATORE DI RICAMBIO *PLUG SPARE KIT* | KIT TESTA DI RICAMBIO *HEAD SPARE KIT* |
|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 3/8" | **J9DPG1603** | 4,9 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP2003** | **J9DPG16R3** |
| 15 | 1/2" | **J9DPG1604** | 5,7 | 50 | 0,8 | 8 | diagram n° 13 | 1 | **KGJP2003** | **J9DPG16R4** |
| 20 | 3/4" | **J9DPG1605** | 10,5 | 50 | 0,8 | 8 | diagram n° 13 | 1,2 | **KGJP2005** | **J9DPG16R5** |
| 25 | 1" | **J9DPG1806** | 20 | 63 | 0,8 | 8 | diagram n° 14 | 1,6 | **KGJP2006** | **J9DPG18R6** |
| 32 | 1 1/4" | **J9DPG1807** | 28,5 | 63 | 0,8 | 8 | diagram n° 14 | 1,9 | **KGJP2007** | **J9DPG18R7** |
| 40 | 1 1/2" | **J9DPG1808** | 35 | 63 | 0,8 | 8 | diagram n° 14 | 2,3 | **KGJP2008** | **J9DPG18R8** |
| 40 | 1 1/2" | **J9DPG2108** | 46 | 90 | 0,8 | 8 | diagram n° 15 | 3,6 | **KGJP2108** | **J9DPG21R8** |
| 50 | 2" | **J9DPG2109** | 59 | 90 | 0,8 | 8 | diagram n° 15 | 4,3 | **KGJP2009** | **J9DPG21R9** |

Il kit testa di ricambio comprende tutto l'articolo meno il corpo valvola.
*The "piloting head replacement Kit" includes the complete item without the valve body only.*

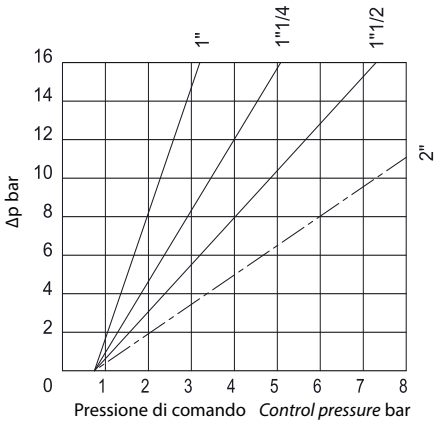
Il kit otturatore di ricambio comprende l'otturatore e le guarnizioni necessarie.
*The shutter "replacement Kit" includes the shutter and the necessary seals.*

diagramma 13
*diagram 13*
**testa *head***
**Ø50**



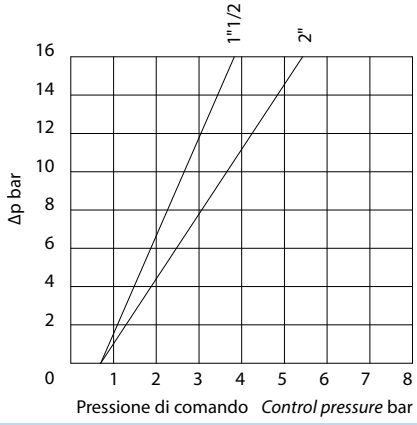

aria 0,14 $dm^3$/cilclo
*air 0,14 $dm^3$/cycle*

diagramma 14
*diagram 14*
**testa *head***
**Ø63**



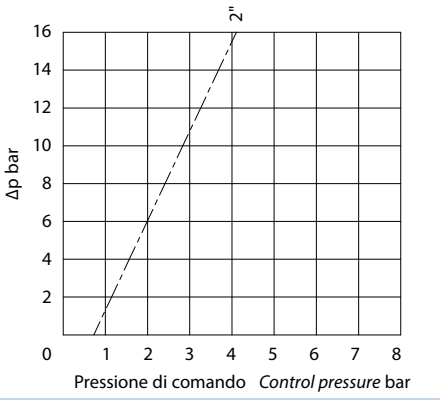

aria 0,302 $dm^3$/cilclo
*air 0,302 $dm^3$/cycle*

diagramma 15
*diagram 15*
**testa *head***
**Ø90**




aria 0,737 $dm^3$/cilclo
*air 0,737 $dm^3$/cycle*

diagramma 16
*diagram 16*
**testa *head***
**Ø110**



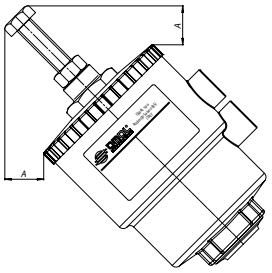

aria 1,585 $dm^3$/cilclo
*air 1,585 $dm^3$/cycle*

Nei diagrammi le linee tratteggiate indicano le versioni disponibili a richiesta. *In the diagrams, the dash lines indicate versions available on request.*

# ACCESSORI ARES E ZEUS *ARES AND ZEUS ACCESSORIES*

**Limitatore della corsa**
Consente di limitare la corsa dell'otturatore valvola in apertura e quindi di regolare la portata.
Disponibile per tutte le versioni. Nelle versioni semplice effetto normalmente aperte può essere utilizzato anche come comando manuale di emergenza.

***Stroke limiter***
*It allows to limit the plug run in opening phase, therefore it regulates the flow. Available on all versions. In spring return normally open version it can be used as an emergency control*

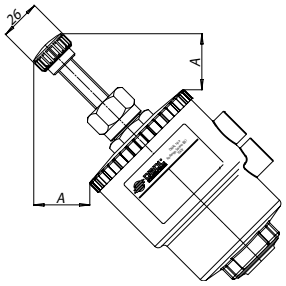


| Comando *Control* | A mm | Codice *Code* |
|---|---|---|
| Ø 50 | 25,5 | KLJL0016 |
| Ø 63 | 21,5 | KLJL0018 |
| Ø 90 | 5,2 | KLJL0021 |
| Ø 110 | 5,9 | KLJL0023 |

Non disponibile con testa Ø 40
*Not available with Ø 40 head*

**Comando manuale di emergenza**
Consente di effettuare l'apertura della valvola in caso di emergenza (mancanza di fluido di pilotaggio, guasto all'impianto, mancanza di segnale di pilotaggio ecc..)
Disponibile per tutte le valvole nelle versioni normalmente chiuse.

***Emergency manual override***
*It allows to open the valve in emergency cases (lack of pilot fluid, machinery damaged, lack of piloting signal)*
*It is available on all normally closed valves.*

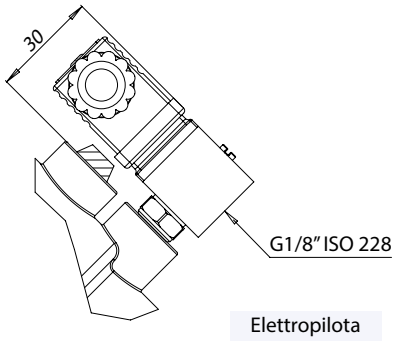


| Comando *Control* | A mm | Codice *Code* |
|---|---|---|
| Ø 50 | 35,8 | KLJA0016 |
| Ø 63 | 35,8 | KLJA0018 |
| Ø 90 | 29,5 | KLJA0021 |
| Ø 110 | 29,5 | KLJA0023 |

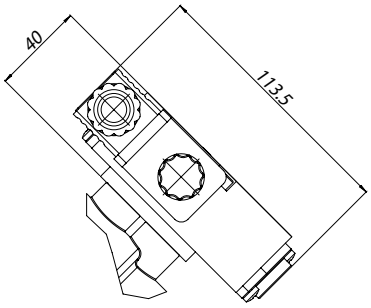
Non disponibile con testa Ø 40
*Not available with Ø 40 head*

**Elettrovalvola di comando**
Elettropilota 3/2 per il montaggio diretto.
Corpo e bobina orientabili sui 360°
Comando manuale standard.
Elettrovalvola (NAMUR) predisposta per la selezione tra la funzione 5/2 e 3/2 che si realizza ruotando di 180° la piastra di interfacciamento dell'elettrovalvola.
Comando manuale standard.
Temperatura ambiente da -10°C a +50°C

***Control solenoid valve***
*Electro-pilot 3/2 for direct assembling.*
*Body and reel positionable at 360°.*
*Standard manual control.*
*Solenoid valve (NAMUR) sets for selection between function 5/3 or 3/2, achievable by rotating the interconnecting plate to 180°.*
*Room temperature: from –10°c to +50°C.*




Elettropilota
*Electro-pilot*
**3/2**




Elettrovalvola
*Solenoid valve*
**3/2 - 5/2**

| Voltaggio *Voltage* | 24 Vac | 115 Vac | 230 Vac | 12 Vdc | 24 Vdc |
|---|---|---|---|---|---|
| Elettropilota *Electro-pilot* | EP415024 | EP415110 | EP415220 | EP412010 | EP412024 |

| Voltaggio *Voltage* | 24 Vac | 115 Vac | 230 Vac | 12 Vdc | 24 Vdc |
|---|---|---|---|---|---|
| Elettrovalvola NAMUR* *NAMUR Solenoid valve** | ER8188A2 | ER8188A4 | ER8188A5 | ER8188C1 | ER8188C2 |
| *Interfaccia NAMUR NAMUR interface* | KBNJ0001 | | | | |

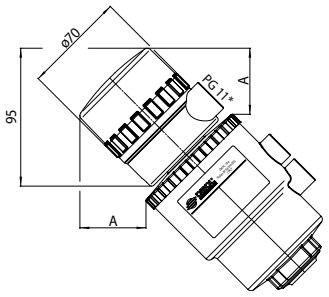
* Da utilizzare solo con interfaccia NAMUR *To be usedy with NAMUR interface only*

# ACCESSORI ARES E ZEUS *ARES AND ZEUS ACCESSORIES*

**Box di segnalazione**
Il box di segnalazione per il controllo della posizione aperto o chiuso con due finecorsa meccanici o induttivi é adatto al montaggio su tutta la serie di valvole con attuatori Ø50 - Ø63 - Ø90 - Ø110.
A richiesta sono disponibili i morsetti per collegare l'elettrovalvola e indicatori visivi tramite led.
Grado di protezione IP 65
Temperatura ambiente da -20°C a +70°C
Accesso cavo n°1 PG11
Materiale dell'involucro in poliammide con coperchio in polimetacrilato trasparente.

***Limit switch box***
*The control box to check the open/close positions with two mechanical limit switches is suitable for assembling on all the range of valves with actuators Ø50 - Ø63 - Ø90 - Ø110.*
*The terminals to connect the solenoid valve and the visual indicators provided with led are optional.*
*Level of protection: IP 65.*
*Room temperature: from –20° C to +70°C.*
*Access lead nr. 1 PG11.*
*Body material: polyamide (cap in trasparent polymethacrylate ).*

Posizione orientabile sui 360°
*Positionable at 360°*



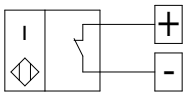

* M16x1,5 optional
* M20x1,5 optional

| Comando *Control* | A mm |
|---|---|
| Ø 50 | 52,1 |
| Ø 63 | 47,5 |
| Ø 90 | 37,7 |
| Ø 110 | 29,5 |

## TIPI DI FINECORSA DISPONIBILI *AVAILABLE LIMIT SWITCH*

**Interruttori di finecorsa induttivi NAMUR EExia**
Tensione nominale: 8 Vdc
Consumo: azionato ≤1 mA; rilasciato ≥3 mA
Temperatura di funzionamento: da -20° C a +70 C

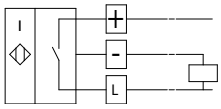
***Inductive limit switches NAMUR EExia***
*Nominal voltage: 8 Vdc*
*Consumes: working ≤1mA; resting ≥3 mA*
*Working temperature: from –20°C to +70°C*




| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 1 finecorsa: alto in posizione di valvola aperta<br>*1 Limit switch at the top: open valve* | KSIN9A0xx |
| 1 finecorsa: basso in posizione di valvola chiusa<br>*1 Limit switch at the bottom: close valve.* | KSIN9C0xx |
| 2 finecorsa valvola aperta e chiusa<br>*2 Limit switch open and close valve* | KSIN920xx |

**Interruttori finecorsa di prossimità**
Tensione nominale: 10÷30 Vdc
Consumo: 15 mA;
Temperatura di funzionamento: da -20° C a +70° C

***Proximity limit switches***
*Nominal voltage: 10÷30 Vdc*
*Consumes: 15mA;*
*Working temperature: from –20°C to +70°C*



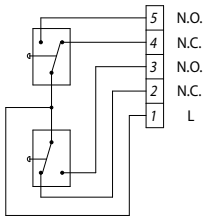

| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 1 finecorsa: alto in posizione di valvola aperta<br>*1 Limit switch at the top: open valve* | KSI09A0xx |
| 1 finecorsa: basso in posizione di valvola chiusa<br>*1 Limit switch at the bottom: close valve.* | KSI09C0xx |
| 2 finecorsa valvola aperta e chiusa<br>*2 Limit switch open and close valve* | KSI0920xx |

**Interruttori di finecorsa meccanici**
***Mechanical limit switches***

Finecorsa alto: valvola aperta
*Limit switch at the top: open valve*

Finecorsa basso: valvola chiusa
*Limit switch at the bottom: close valve*

Carico max. 5A 250 Vac; 1A 250 Vdc
*Max. capacity 5A 250 Vac; 1A 250 Vdc*




| Configurazione *Configuration* | Codice *Code* |
|---|---|
| 2 finecorsa<br>*2 Limit switch* | KSM0C20xx |

**xx** = Ø testa di comando *Ø control heads*
16 = Ø 50
18 = Ø 63
21 = Ø 90
23 = Ø 110



CERTIFICATO DI CONFORMITA'
CONFORMITY CERTIFICATE
N. 00004PED04D01HH Rev. 01

Consorzio PASCAL s.r.l. a socio unico, quale Organismo Notificato n. 1115
Consortio PASCAL s.r.l. a socio unico, acting as Notified Body n. 1115

ATTESTA
ATTESTS
che il sistema qualità adottato da
that the quality system operated by

FABBRICANTE / MANUFACTURER: OMAL S.p.A.
Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS) - ITALIA
Indirizzo Sede Operativa / Operational Office Address: Via Brognolo, 12 - 25050 Passirano (BS) - ITALIA

per la progettazione, la fabbricazione, l'ispezione finale ed il collaudo delle attrezzature a pressione di seguito identificate è stato esaminato in accordo alle prescrizioni dell'Allegato III, **modulo H**, della **Direttiva 2014/68/UE**.
*for design, manufacture, final inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of Annex III, module H, of the Pressure Equipment Directive 2014/68/UE.*

AUTORIZZA
AUTHORIZES
ad apporre, sui prodotti di seguito specificati, il marchio CE 1115
*to provide the above mentioned products, the mark*

ACCESSORI A PRESSIONE / PRESSURE ACCESSORIES: VALVOLE A SFERA, A FARFALLA E AD AZIONAMENTO PNEUMATICO
*BALL VALVES, BUTTERFLY VALVES, PNEUMATIC VALVES*

Modelli coperti / Covered models: Vedere elenco riportato in Appendice A / *See list in Appendix A*
Rapporti di valutazione / Evaluation Reports: 004_ROD_2018_07_23 ; 004_RAO_2018_08_13

CONDIZIONI DI VALIDITA' / VALIDITY TERMS AND CONDITIONS

| Prima Emissione / First Issue | Emissione corrente / Current Issue | Data di Scadenza / Expiring date |
|---|---|---|
| 16/08/2007 | 16/08/2019 | 17/08/2022 |

ACCREDIA

**▲ PED**

Certificazione del Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali in accordo con i requisiti della Direttiva PED.

*OMAL operated Quality Management System Certificate for the design, manufacture, final inspection and tests of industrial valves in accordance with PED Directives*



INERIS

Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura : PNEUMATIC VALVES

Type(s) / Type(s) / Tipo(i) : ANGLE SEAT VALVES ARES-ATENA-ZEUS / PNEUMATIC COAXIAL VALVES VIP-VIP EVO

Marquage / Marking / Marcatura : Ex II 2 GD

Déposant / Applicant / Richiedente : OMAL S.p.A. Via Ponte Nuovo 11 - 25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié n° 0080, identifié sous le numéro conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body n° 0080, identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 february 2014, acknowledges receipt of file according to the procedure described chapter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato n° 0080, identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformità alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : VAP-19 dated 10/10/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 035242/19.

The technical documentation referenced : VAP-19 dated 10/10/2019 is consigned under the reference : no INERIS-EQEN 035242/19.

La documentazione tecnica di riferimento : VAP-19 dated 10/10/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 035242/19.

Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.

Within the scope of the recording, INERIS did not examine the contain of the technical documentation.

Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.

Date de fin de validité : 2029.11.07

Validity completion date : 2029.11.07

Data di fine di validità : 2029.11.07

Verneuil-en-Halatte, le 2019.11.07

Le Directeur Général de l'INERIS, Par délégation,

The Chief Executive Officer of INERIS, By delegation,

Il Direttore generale dell' INERIS, Per Delega,

**▲ ATEX**

Dichiarazione che il Sistema di Qualità applicato per la progettazione, fabbricazione, ispezione finale e la prova di valvole industriali è in accordo con i requisiti della Direttiva ATEX per apparecchiature destinate all'impiego in ambienti con atmosfera potenzialmente esplosiva.

*Declaration that the Quality Management System operated by OMAL for the design, manufacture, final inspection and tests of industrial valves is in compliance with the Directive ATEX for equipment intended to be used in potentially explosive atmospheres.*



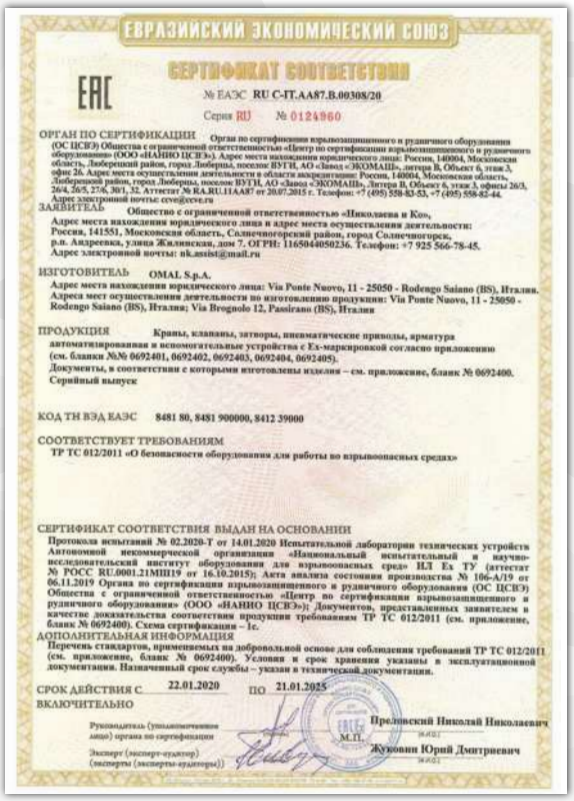
EAC

ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко". ОГРН: 1165044050236.
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +79255667845. Адрес электронной почты: nk.assist@mail.ru.
**в лице** генерального директора Николаевой Нины Сергеевны
**заявляет, что** Арматура промышленная трубопроводная: клапаны пневматические отсечные, серия VIP, типы VNC, VDA, VNA; клапаны пневматические седельные отсечные, серия ZEUS, тип J9, серия ARES, типы J4, J4MO, серия ATENA, типы J4, J4MO; клапаны пневмоприводные, серии D, F, G, I, S, T, U, X в комплектации по приложению (см. Приложение № 1 на 1 листе).
**изготовитель** "OMAL S.p.A".
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia
Код ТН ВЭД ЕАЭС 8481809907. Серийный выпуск.
**соответствует требованиям**
Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)
**Декларация о соответствии принята на основании**
Протоколы испытаний Испытательной лаборатории изготовителя № ОМ 001321 от 13.05.2015, № ВМ 004370 от 06.11.2017.
Обоснование безопасности VAP.13 ОБ.
Технический паспорт пневматического клапана VAP.VAP.13.
Руководства по установке и эксплуатации rif. 8_0489(VIP) VAP13, rif. 8_0843.
Чертежи 1_1061, 1_1062, 1_1603, 1_1589.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 №236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д
**Дополнительная информация**
Применяемые стандарты: ГОСТ Р 53672-2009 "Арматура трубопроводная. Общие требования безопасности". Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев. Срок службы – 10 лет.
Общество с ограниченной ответственностью "Николаева и Ко" (уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017)
**Декларация о соответствии действительна с даты регистрации по 18.07.2020 включительно**

Николаева Нина Сергеевна

**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10625**
**Дата регистрации декларации о соответствии: 19.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ

EAC
№ ЕАЭС RU C-IT.AA87.B.00308/20
Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСЭЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № RA.RU.11AA87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: csve@csve.ru

ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru

ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия

ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск

КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000

СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»

СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ех ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСЭЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукции требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.

ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.

СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО

Руководитель (уполномоченное лицо) органа по сертификации — Прелинский Николай Николаевич

М.П.

Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФИКАТ ЭКСПЕРТИЗЫ ТИПА / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2321-17

Термін дії з 25.07.2017 р. до 03.09.2020 р.

Сертифікат видано 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Продукція Клапани (без електричного обладнання): сідельні відсічні: серія ZEUS, тип J9; серія ARES, типи J4, J4M; серія ATENA, типи J4, J4M; пневматичні відсічні: серія VIP, типи VNC- VNA- VDA. В комплектації з ручним дублюванням типу KLJA, обмежувачем ходу типу KLJL, блоками вимикачів, типів: KSIN, KSMOC

Відповідає вимогам ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT) Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі

Виробник 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Місце виробництва Via Brognolo 12, 25050 Passirano (BS), Італія

Додаткова інформація

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ"
Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.

На підставі Звіту про оцінювання [illegible] від 22.07.2017 р. ООВ "ПРОМТЕСТ"

Керівник органу з оцінки відповідності Семотой В.І

М.П./M.U./Stamp

**▲ UKR**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.
*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*





4.

# ATTUATORI PNEUMATICI

# *PNEUMATIC ACTUATORS*

# ATTUATORI PNEUMATICI · INDICE 1/3

Pag:

4 · **Attuatori pneumatici** **542**



4.1 · **Attuatore pneumatico doppio effetto “DA” in alluminio** **544**

Doppio effetto misura: DA 08 (Nm) 546

Doppio effetto misure: DAN 15 (Nm) ÷ DAN 60 (Nm) 547

Doppio effetto misure: DAN 106 (Nm) ÷ DAN 720 (Nm) 548

Doppio effetto misure: DAN 960 (Nm) ÷ DAN 1920 (Nm) 549

Doppio effetto misura: DA 2880 (Nm) 550

Doppio effetto misura: DA 3840 (Nm) 551

Doppio effetto misura: DA 5760 (Nm) 552

Doppio effetto misura: DA 8000 (Nm) 553



4.2 · **Attuatore pneumatico semplice effetto “SR” in alluminio** **554**

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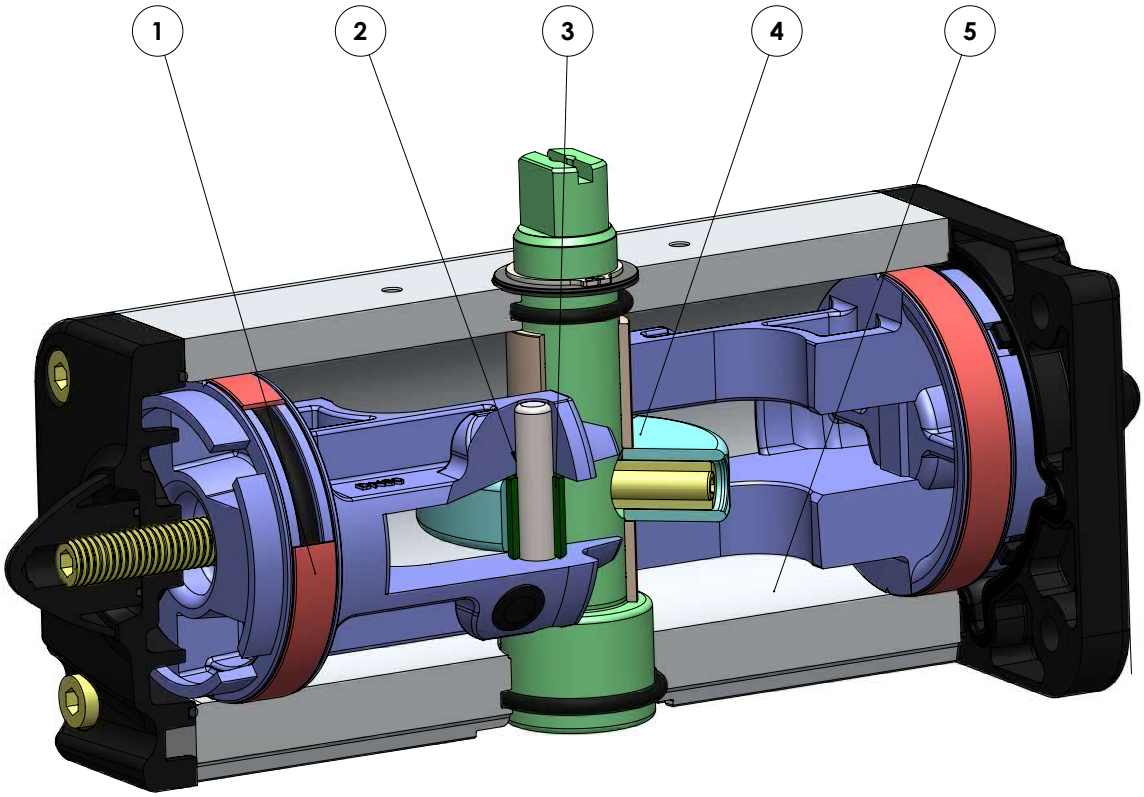
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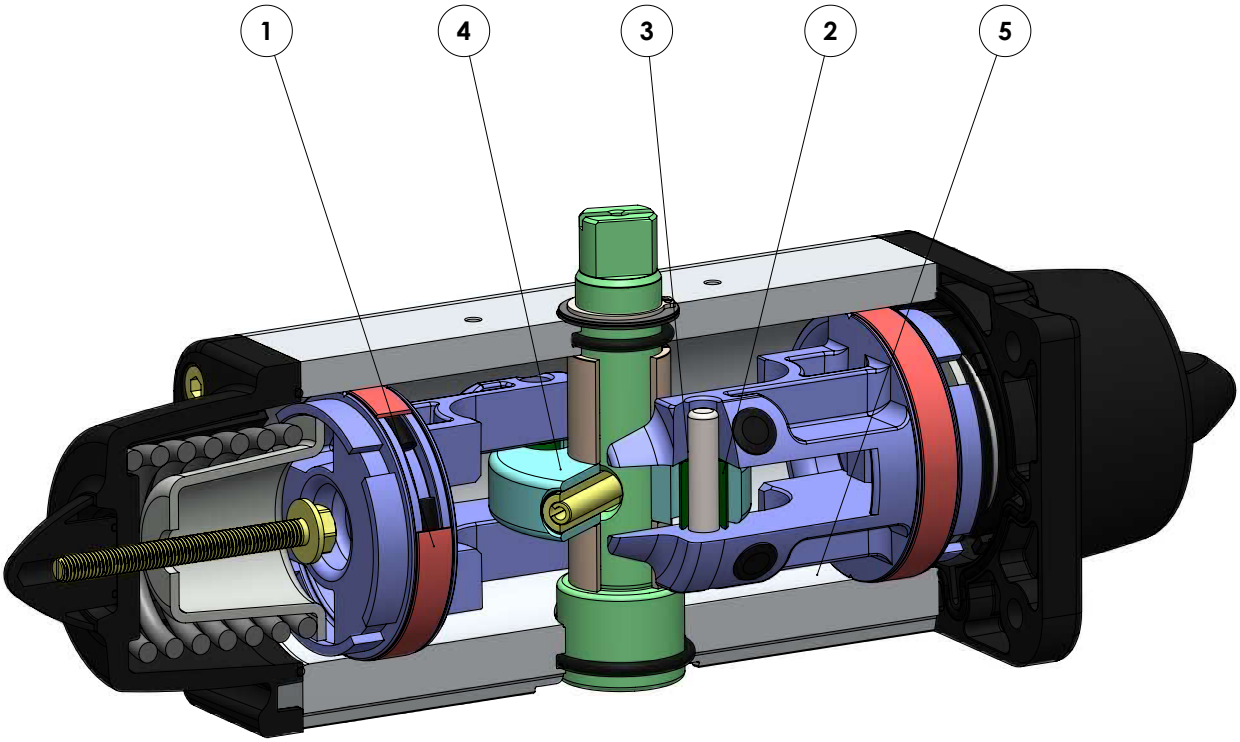
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# ATTUATORI PNEUMATICI
# *PNEUMATIC ACTUATORS*

## **DA** DOPPIO EFFETTO *DOUBLE ACTING*




## **SR** SEMPLICE EFFETTO *SPRING RETURN*



## FEATURES & BENEFITS

| | | |
|---|---|---|
| 1 | Fasce di tenuta e scorrimento energizzate autolubrificanti.<br>*Energized and self-lubricated strips.* | Minor attrito tra pistone e cilindro.<br>Less friction between piston and cylinder. |
| | | Si evita l'incollaggio della guarnizione al cilindro anche dopo lunghi periodi di fermo.<br>*It prevents the bonding of the seal to the cylinder even after long periods of inactivity.* |
| 2 | Slot, bussole e spine con acciaio con durezza maggiore a 50 HRC.<br>*Slots, bushes and pins made by steel with hardness higher than 50 HRC.* | Maggior resistenza alle forze presenti all' interno dell'attuatore.<br>*Higher resistance to the forces inside the actuator.* |
| 3 | Attrito volvente tra slot e pistone.<br>*Rolling friction between piston and slot.* | Minor attrito.<br>*Less friction.* |
| 4 | Scotch yoke con attrito volvente( trasformazione del movimento lineare in movimento rotatorio mediante pistone e albero privo di ingranaggi).<br>*Scotch yoke with rolling friction (transforming rotary motion into linear motion using piston and shaft without teeths/gears).* | Minor attrito tra pistone e albero con conseguente minor usura dei pezzi.<br>*Reduced friction between piston and shaft with consequently less wear on the relevant parts.* |
| | | Momento torcente potenziato in fase di apertura e chiusura.<br>*Empowered Breakaway Torque (BTO & BTC).* |
| | | Minor ingombro rispetto agli attuatori pignone e cremagliera con conseguente minor spazio necessario.<br>*Smaller volume/size than rack and pinion actuators (with the same torque) therefore less space required for installation.* |
| | | Minor peso rispetto agli attuatori pignone e cremagliera (-30% Kg/Nm) con conseguenti risparmi sulla realizzazione della struttura dell'impianto.<br>*Less weight than the rack and pinion (-30% kg / Nm), with consequent savings on the construction sizing of the plant/equipment.* |
| | | Minor consumo d'aria rispetto agli attuatori pignone e cremagliera (-40% aria cm3/Nm doppio effetto e -20% aria cm3/Nm semplice effetto) con conseguente minor carico di lavoro del compressore o possibilità di utilizzo di un compressore con dimensioni ridotte.<br>*Lower air consumption compared to the rack and pinion actuators (-40% air cm3/Nm for Double Acting and -20% air cm3/Nm for Spring Return) therefore less load on the compressor or the possibility of using a smaller compressor's size.* |
| 5 | Cilindro rullato.<br>*Rolled cylinder.* | Minor usura delle fascette energizzate grazie alla bassa rugosità della superficie (0,15 micron Ra).<br>*Less wear of the energized ties thanks to the low roughness of the surface (0.15 micron Ra).* |
| | Interfaccia per elettrovalvole NAMUR integrata dal DAN15.<br>*From sizes bigger than DAN15, NAMUR interface for solenoid valve is already integrated.* | Non richiede alcuna basetta supplementare.<br>*No need for extra plate.* |
| | Processo produttivo interamente eseguito in OMAL.<br>*100% in- house manufacturing process technology.* | Massimo controllo in tutte le fasi di lavorazione.<br>*Maximum control and accuracy in all the stages of the manufacturing process.* |
| | Certificato ATEX.<br>*ATEX Certificate.* | Ne consente l'installazione in presenza di ambiente potenzialmente esplosivo.<br>*Installation is allowed in a potential explosive environment.* |
| | *Certificato SIL 3.*<br>*SIL 3 Certified.* | Elevato livello di sicurezza funzionale garantito.<br>*Guarantee of the high level of functional safety.* |

# ATTUATORE PNEUMATICO DOPPIO EFFETTO "DA" IN ALLUMINIO

# *ALUMINIUM DOUBLE ACTING PNEUMATIC ACTUATOR "DA" TYPE*




## DATI TECNICI

- Coppia da 8 Nm a 8000 Nm.
- Flangia d'attacco: EN ISO 5211
  F03 - F04 - F05 - F07 - F10 - F12 - F14 - F16 - F25.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Direttamente proporzionale alla pressione di alimentazione; vedi tabella.
- In ciascun attuatore la cifra che segue la sigla DA corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

- *Torque from 8 Nm to 8000 Nm.*
- *Mounting flange according to* EN ISO 5211
  *F03 - F04 - F05 - F07 - F10 - F12 - F14 - F16 - F25.*
- *In accordance with* EN 15714-3
- *Rotation angle: 92° (-1°, +91°)*
- *Torque: directly proportional to the air supply (see table).*
- *The code numbers after the DA letters, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

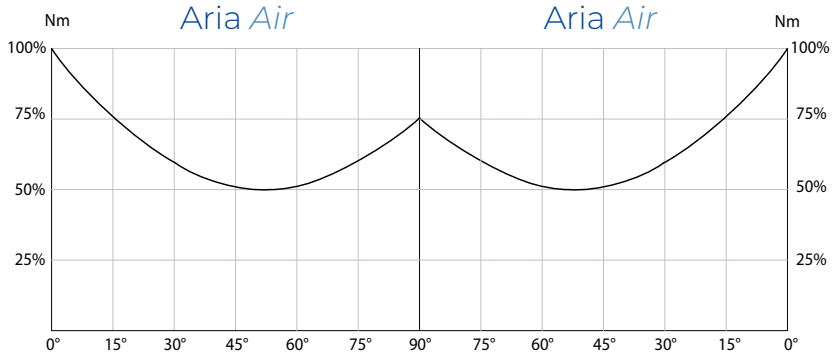
## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C. (Versioni speciali: alta temperatura: -20°C +150°C; bassa temperatura: -50°C +60°C).
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar (7 bar per DA8000).
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata.
- In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITIONS*

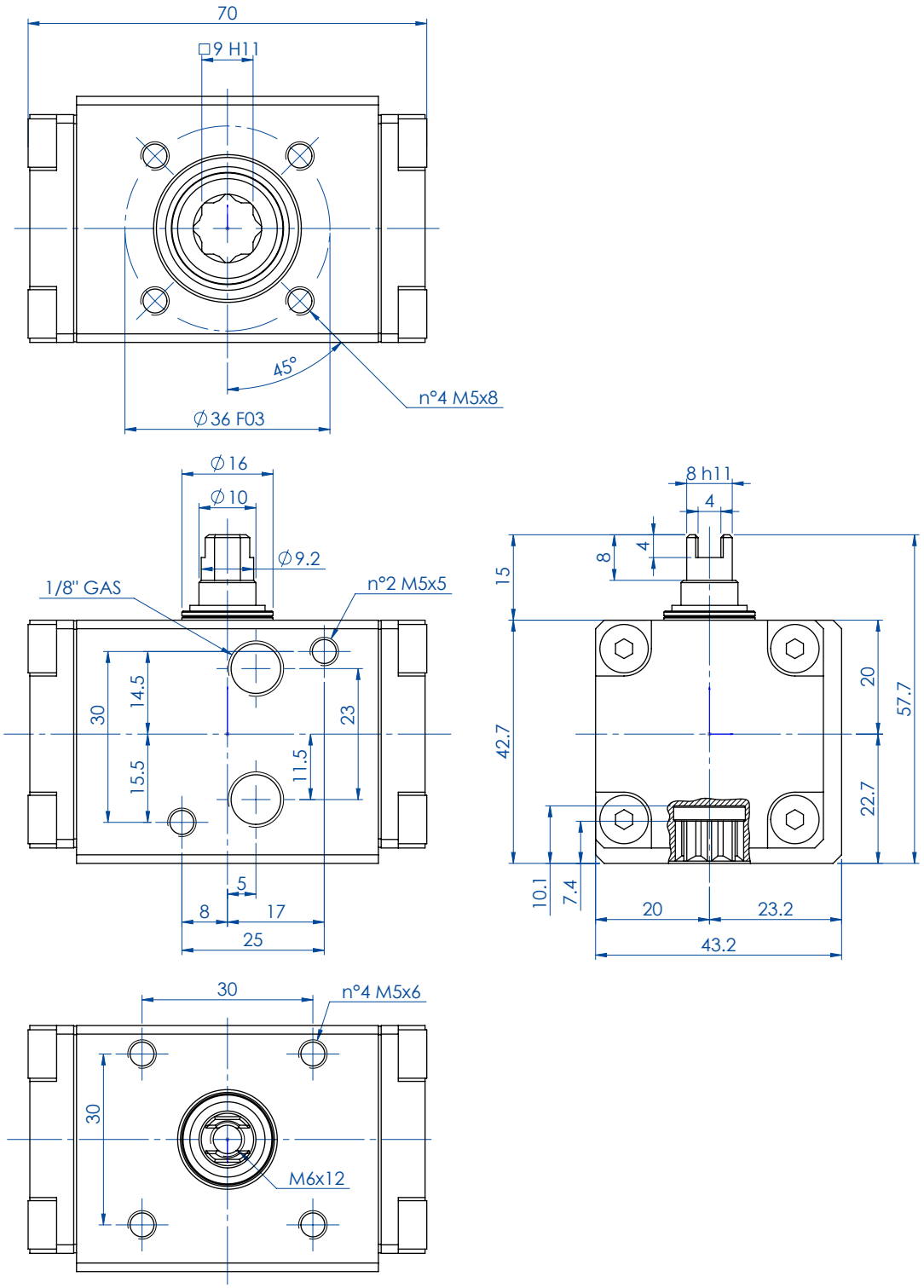
- *Temperature: from -20°C to +80°C. (Special versions: high temperature:-20°C +150°C; low temperature: -50°C +60°).*
- *Air supply: 5,6 bar; maximum 8,4 bar (7 bar for DA8000).*
- *Actuating media: filtered dry compressed air, not necessarily lubricated.*
- *In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

## DIAGRAMMA DEL MOMENTO TORCENTE IN FUNZIONE DELL'ANGOLO DI ROTAZIONE
## *OUTPUT TORQUE DIAGRAM RELATED TO ROTATION ANGLE*




| TABELLA DEL MOMENTI TORCENTI (Nm) *OUTPUT TORQUE TABLE (Nm)* | α° = ANGOLO DI ROTAZIONE *α° = ROTATION ANGLE* | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MISURA *SIZE* | *α°* | *3 bar* | *4 bar* | *5 bar* | *5,6 bar* | *6 bar* | *7 bar* | *8 bar* |
| **DA 08** | 0° | 3,8 | 5 | 6,3 | 7 | 7,5 | 8,8 | 10 |
| | 45° | 1,9 | 2,5 | 3,1 | 3,5 | 3,8 | 4,4 | 5 |
| | 90° | 3,8 | 5 | 6,3 | 7 | 7,5 | 8,8 | 10 |
| **DAN 15** | 0° | 8 | 10,7 | 13,4 | 15 | 16,1 | 18,8 | 21,4 |
| | 50° | 4 | 5,4 | 6,7 | 7,5 | 8 | 9,4 | 10,7 |
| | 90° | 6,1 | 8,1 | 10,1 | 11,3 | 12,1 | 14,1 | 16,1 |
| **DAN 30** | 0° | 16,1 | 21,4 | 26,8 | 30 | 32,1 | 37,5 | 42,9 |
| | 50° | 8 | 10,7 | 13,4 | 15 | 16,1 | 18,8 | 21,4 |
| | 90° | 12,1 | 16,1 | 20,1 | 22,5 | 24,1 | 28,1 | 32,1 |
| **DAN 45** | 0° | 24,1 | 32,1 | 40,2 | 45 | 48,2 | 56,3 | 64,3 |
| | 50° | 12,1 | 16,1 | 20,1 | 22,5 | 24,1 | 28,1 | 32,1 |
| | 90° | 18,1 | 24,1 | 30,1 | 33,8 | 36,2 | 42,2 | 48,2 |
| **DAN 60** | 0° | 32,1 | 42,9 | 53,6 | 60 | 64,3 | 75 | 85,7 |
| | 50° | 16,1 | 21,4 | 26,8 | 30 | 32,1 | 37,5 | 42,9 |
| | 90° | 24,1 | 32,1 | 40,2 | 45 | 48,2 | 56,3 | 64,3 |
| **DAN 106** | 0° | 56,8 | 75,7 | 94,6 | 106 | 113,6 | 132,5 | 151,4 |
| | 50° | 28,4 | 37,9 | 47,3 | 53 | 56,8 | 66,3 | 75,7 |
| | 90° | 42,9 | 57,1 | 71,4 | 80 | 85,7 | 100 | 114,3 |
| **DAN 120** | 0° | 64,3 | 85,7 | 107,1 | 120 | 128,6 | 150 | 171,4 |
| | 50° | 32,1 | 42,9 | 53,6 | 60 | 64,3 | 75 | 85,7 |
| | 90° | 48,2 | 64,3 | 80,4 | 90 | 96,4 | 112,5 | 128,6 |
| **DAN 180** | 0° | 96,4 | 128,4 | 160,7 | 180 | 192,9 | 225 | 257,1 |
| | 50° | 48,2 | 64,3 | 80,4 | 90 | 96,4 | 112,5 | 128,6 |
| | 90° | 72,3 | 96,4 | 120,5 | 135 | 144,6 | 168,8 | 192,9 |
| **DAN 240** | 0° | 128,6 | 171,4 | 214,3 | 240 | 257,1 | 300 | 342,9 |
| | 50° | 64,3 | 85,7 | 107,1 | 120 | 128,6 | 150 | 171,4 |
| | 90° | 96,4 | 128,6 | 160,7 | 180 | 192,9 | 225 | 257,1 |
| **DAN 360** | 0° | 192,9 | 257,1 | 321,4 | 360 | 385,7 | 450 | 514,3 |
| | 50° | 96,4 | 128,6 | 160,7 | 180 | 192,9 | 225 | 257,1 |
| | 90° | 144,6 | 192,9 | 241,1 | 270 | 289,3 | 337,5 | 385,7 |
| **DAN 480** | 0° | 257,1 | 342,9 | 428,6 | 480 | 514,3 | 600 | 685,7 |
| | 50° | 128,6 | 171,4 | 214,3 | 240 | 257,1 | 300 | 342,9 |
| | 90° | 192,9 | 257,1 | 321,4 | 360 | 385,7 | 450 | 514,3 |
| **DAN 720** | 0° | 385,7 | 514,3 | 642,9 | 720 | 771,4 | 900 | 1028,6 |
| | 50° | 192,9 | 257,1 | 321,4 | 360 | 385,7 | 450 | 514,3 |
| | 90° | 289,3 | 385,7 | 482,1 | 540 | 578,6 | 675 | 771,4 |
| **DAN 960** | 0° | 514,3 | 685,7 | 857,1 | 960 | 1028,6 | 1200 | 1371,4 |
| | 50° | 257,1 | 342,9 | 428,6 | 480 | 514,3 | 600 | 685,7 |
| | 90° | 385,7 | 514,3 | 642,9 | 720 | 771,4 | 900 | 1028,6 |
| **DAN 1440** | 0° | 771,4 | 1028,6 | 1285,7 | 1440 | 1542,9 | 1800 | 2057,1 |
| | 50° | 385,7 | 514,3 | 642,9 | 720 | 771,4 | 900 | 1028,6 |
| | 90° | 578,6 | 771,4 | 964,3 | 1080 | 1157,1 | 1350 | 1542,9 |
| **DAN 1920** | 0° | 1028,6 | 1371,4 | 1714,3 | 1920 | 2057,1 | 2400 | 2742,9 |
| | 50° | 514,3 | 685,7 | 857,1 | 960 | 1028,6 | 1200 | 1371,4 |
| | 90° | 771,4 | 1028,6 | 1285,7 | 1440 | 1542,9 | 1800 | 2057,1 |
| **DA 2880** | 0° | 1542,9 | 2057,1 | 2571,4 | 2880 | 3085,7 | 3600 | 4114,3 |
| | 50° | 771,4 | 1028,6 | 1285,7 | 1440 | 1542,9 | 1800 | 2057,1 |
| | 90° | 1157,1 | 1542,9 | 1928,6 | 2160 | 2314,3 | 2700 | 3085,7 |
| **DA 3840** | 0° | 2057,1 | 2742,9 | 3428,6 | 3840 | 4114,3 | 4800 | 5485,7 |
| | 50° | 1028,6 | 1371,4 | 1714,3 | 1920 | 2057,1 | 2400 | 2742,9 |
| | 90° | 1542,9 | 2057,1 | 2571,4 | 2880 | 3085,7 | 3600 | 4114,3 |
| **DA 5760** | 0° | 3085,7 | 4114,3 | 5142,9 | 5760 | 6171,4 | 7200 | 8228,6 |
| | 50° | 1542,9 | 2057,1 | 2571,4 | 2880 | 3085,7 | 3600 | 4114,3 |
| | 90° | 2314,3 | 3085,7 | 3857,1 | 4320 | 4628,6 | 5400 | 6171,4 |
| **DA 8000** | 0° | 4285,7 | 5714,3 | 7142,9 | 8000 | 8571,4 | 10000 | --- |
| | 50° | 2142,9 | 2857,1 | 3571,4 | 4000 | 4285,7 | 5000 | --- |
| | 90° | 3214,3 | 4285,7 | 5357,1 | 6000 | 6428,6 | 7500 | --- |

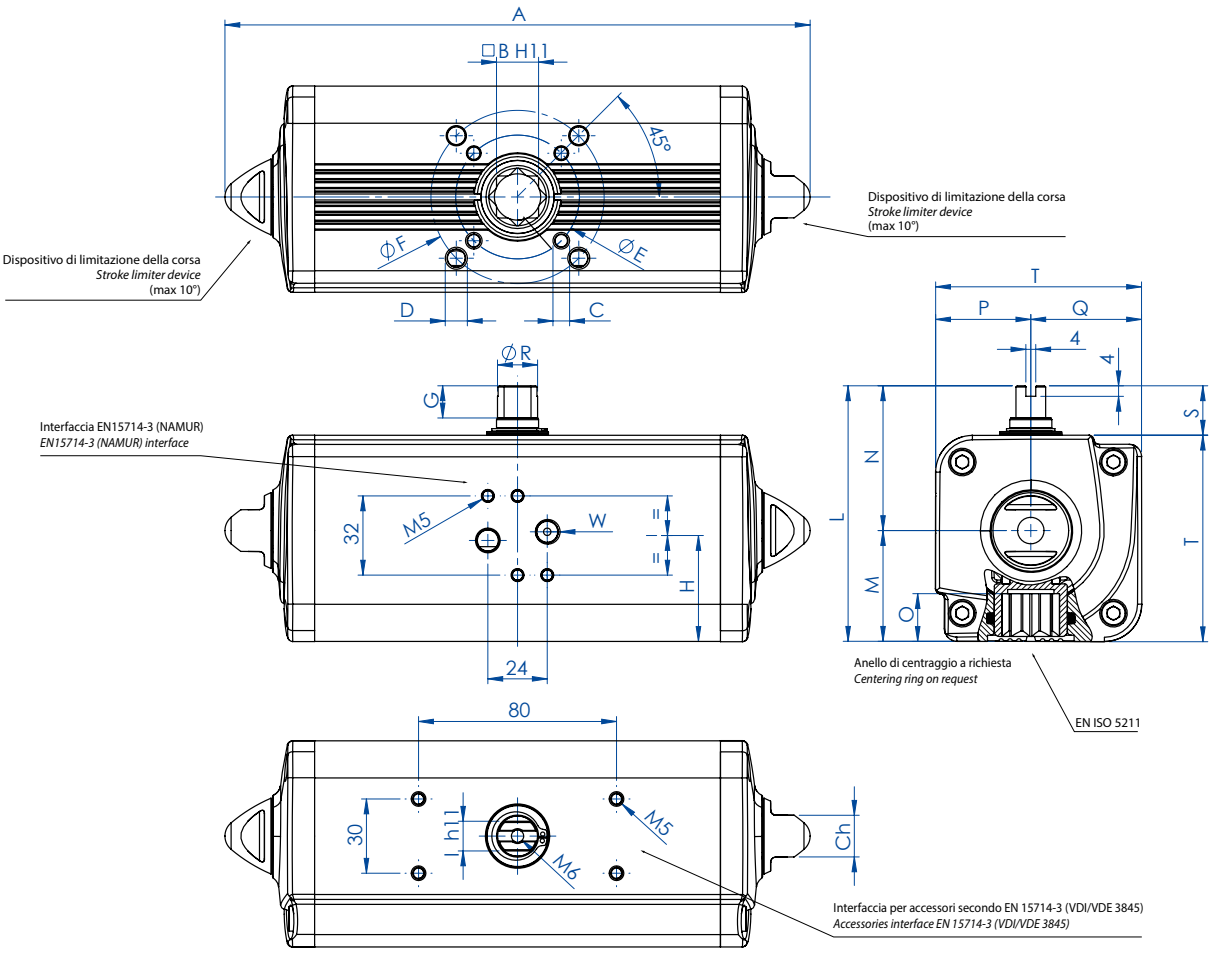
# Doppio effetto misura: DA 08 (Nm)
## *Double acting size: DA 08 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | | |
|---|---|---|
| **Codice *Code*** | | **DA008401S** |
| Peso *Weight* | Kg | 0,29 |
| Volume aria *Air volume* | $dm^3$/cycle | 0,034 |
| Guarnizioni di ricambio *Spare seals* | | KGDI0010 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Doppio effetto misure: DAN 15 (Nm) ÷ DAN 60 (Nm)
## *Double acting sizes: DAN 15 (Nm) ÷ DAN 60 (Nm)*

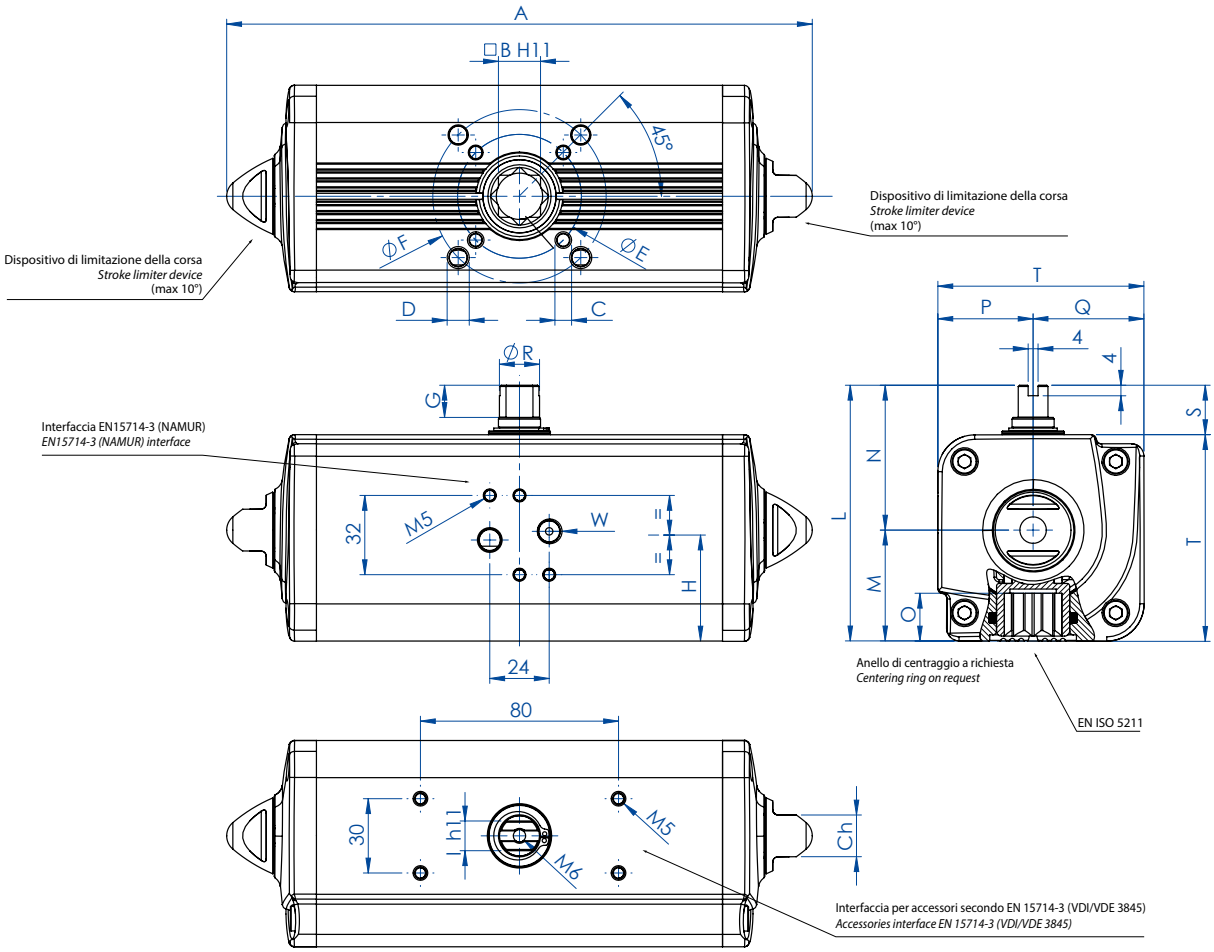



| SCHEDA TECNICA *DATA SHEET* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Codice *Code*** | **DAN0015411S** | **DAN0015412S** | **DAN0030411S** | **DAN0030412S** | **DAN0045411S** | **DAN0045412S** | **DAN0060411S** | **DAN0060412S** |
| *Spare seals* | KGGI0012 | | KGGI0014 | | KGGI0015 | | KGGI0016 | |
| **Misura *Size*** | **DAN 15** | | **DAN 30** | | **DAN 45** | | **DAN 60** | |
| ISO | F03 | F04 | F03/F05 | F04 | F04 | F03/F05 | F04 | F05/F07 |
| A | 159,1 | 159,1 | 174,3 | 174,3 | 188,5 | 188,5 | 198,1 | 198,1 |
| B | 11 | 11 | 11 | 11 | 11 | 11 | 14 | 14 |
| C x depth | M5x8 | M5x8 | M5x8 | M5x8 | M5x8 | M5x8 | M5x8 | M6x9 |
| D x depth | - | - | M6x9 | - | - | M6x9 | - | M8x12 |
| E | 36 | 42 | 36 | 42 | 42 | 36 | 42 | 50 |
| F | - | - | 50 | - | - | 50 | - | 70 |
| G | 10 | 10 | 10 | 10 | 13 | 13 | 13 | 13 |
| H | 26,8 | 26,8 | 30,3 | 30,3 | 32,5 | 32,5 | 35,7 | 35,7 |
| I | 8 | 8 | 9 | 9 | 10 | 10 | 10 | 10 |
| L | 72,2 | 72,2 | 79,2 | 79,2 | 84,5 | 84,5 | 90,4 | 90,4 |
| M | 28 | 28 | 31,5 | 31,5 | 34,5 | 34,5 | 37,7 | 37,7 |
| N | 44,2 | 44,2 | 47,7 | 47,7 | 50 | 50 | 52,7 | 52,7 |
| O | 13,2 | 13,2 | 13,2 | 13,2 | 13,2 | 13,2 | 16,5 | 16,5 |
| P | 24,2 | 24,2 | 27,7 | 27,7 | 30 | 30 | 32,7 | 32,7 |
| Q | 28 | 28 | 31,5 | 31,5 | 34,5 | 34,5 | 37,7 | 37,7 |
| R | 9,2 | 9,2 | 10,9 | 10,9 | 12,7 | 12,7 | 14,5 | 14,5 |
| S | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| T | 52,2 | 52,2 | 59,2 | 59,2 | 64,5 | 64,5 | 70,4 | 70,4 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" |
| Ch | 13 | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Weight (Kg) | 0,75 | 0,75 | 1 | 1 | 1,2 | 1,2 | 1,6 | 1,6 |
| Air (dm3/cycle) | 0,08 | 0,08 | 0,15 | 0,15 | 0,22 | 0,22 | 0,3 | 0,3 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Doppio effetto misure: DAN 106 (Nm) ÷ DAN 720 (Nm)
## *Double acting sizes: DAN 106 (Nm) ÷ DAN 720 (Nm)*

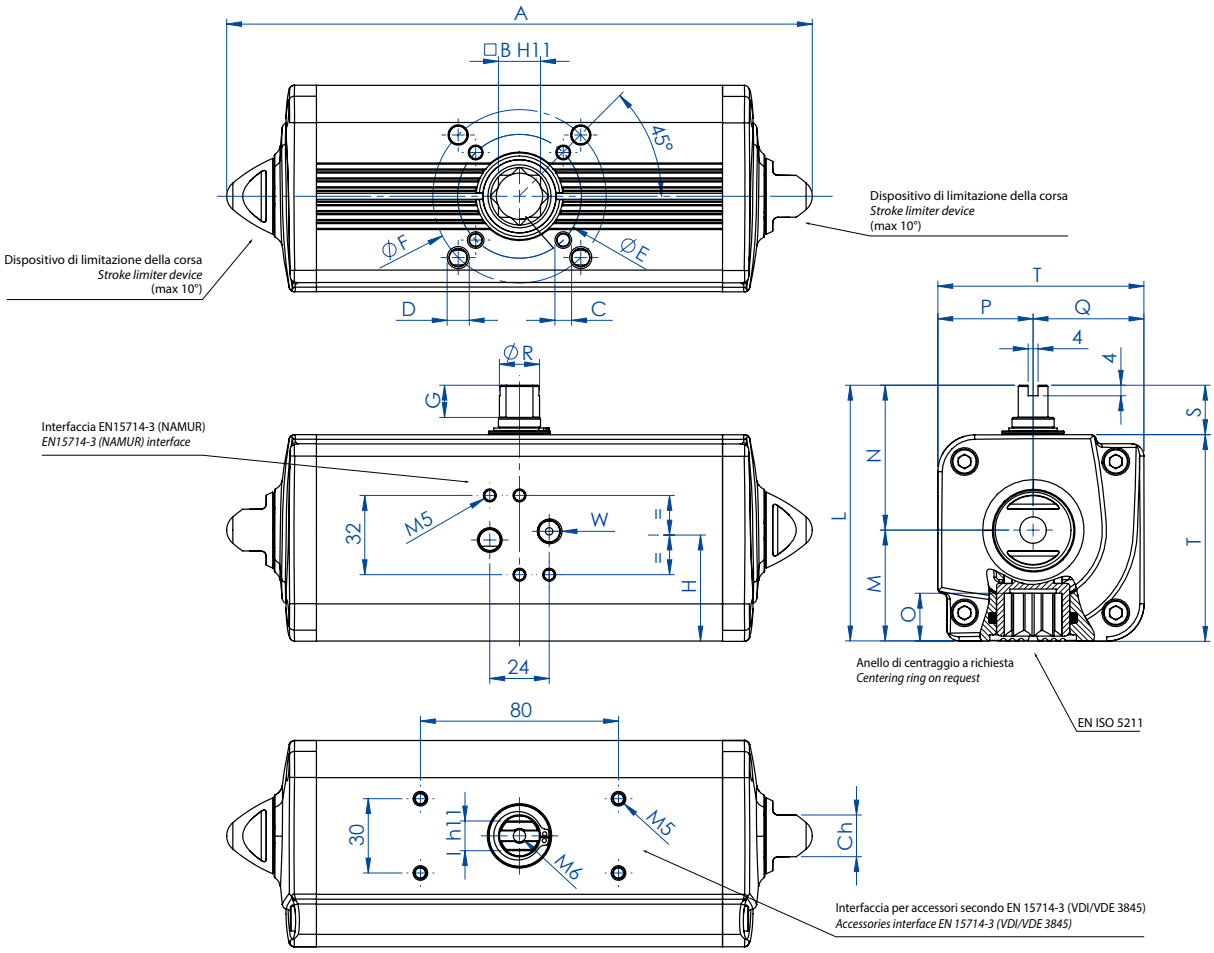



| SCHEDA TECNICA *DATA SHEET* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Codice *Code*** | **DAN0106411S** | **DAN0120411S** | **DAN0180411S** | **DAN0240411S** | **DAN0360411S** | **DAN0480411S** | **DAN0720411S** |
| *Spare seals* | KGGI0060 | KGGI0018 | KGGI0019 | KGGI0020 | KGGI0021 | KGGI0022 | KGGI0023 |
| **Misura *Size*** | **DAN 106** | **DAN 120** | **DAN 180** | **DAN 240** | **DAN 360** | **DAN 480** | **DAN 720** |
| ISO | F05/F07 | F05/F07 | F07/F10 | F07/F10 | F07/F10 | F10/F12 | F10/F12 |
| A | 237,1 | 257,4 | 289,9 | 313,6 | 339,3 | 387,7 | 433 |
| B | 17 | 17 | 22 | 22 | 22 | 27 | 27 |
| C x depth | M6x9 | M6x9 | M8x12 | M8x12 | M8x12 | M10x15 | M10x15 |
| D x depth | M8x12 | M8x12 | M10x15 | M10x15 | M10x15 | M12x18 | M12x18 |
| E | 50 | 50 | 70 | 70 | 70 | 102 | 102 |
| F | 70 | 70 | 102 | 102 | 102 | 125 | 125 |
| G | 13 | 13 | 16 | 17 | 19 | 19 | 19,5 |
| H | 42,8 | 44,8 | 54,5 | 58,1 | 60 | 57,4 | 61,5 |
| I | 12 | 12 | 15 | 15 | 19 | 19 | 22 |
| L | 103,3 | 107 | 137,5 | 141,1 | 148 | 164,9 | 178 |
| M | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 | 78,5 |
| N | 58,5 | 60,2 | 81 | 81 | 86 | 92 | 99,5 |
| O | 19,3 | 19,3 | 24,8 | 24,8 | 24,3 | 29,5 | 29,5 |
| P | 38,5 | 40,2 | 51 | 51 | 56 | 62 | 69,5 |
| Q | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 | 78,5 |
| R | 16,2 | 18 | 20,2 | 22,5 | 25,5 | 29 | 31,8 |
| S | 20 | 20 | 30 | 30 | 30 | 30 | 30 |
| T | 83,3 | 87 | 107,5 | 111,1 | 118 | 134,9 | 148 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/4" | 1/4" |
| Ch | 17 | 17 | 22 | 22 | 22 | 27 | 27 |
| Weight (Kg) | 2,5 | 2,6 | 4,6 | 5,4 | 6,5 | 9,6 | 12 |
| Air (dm3/cycle) | 0,55 | 0,59 | 0,95 | 1,3 | 1,8 | 2,6 | 3,5 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Doppio effetto misure: DAN 960 (Nm) ÷ DAN 1920 (Nm)
## *Double acting sizes: DAN 960 (Nm) ÷ DAN 1920 (Nm)*

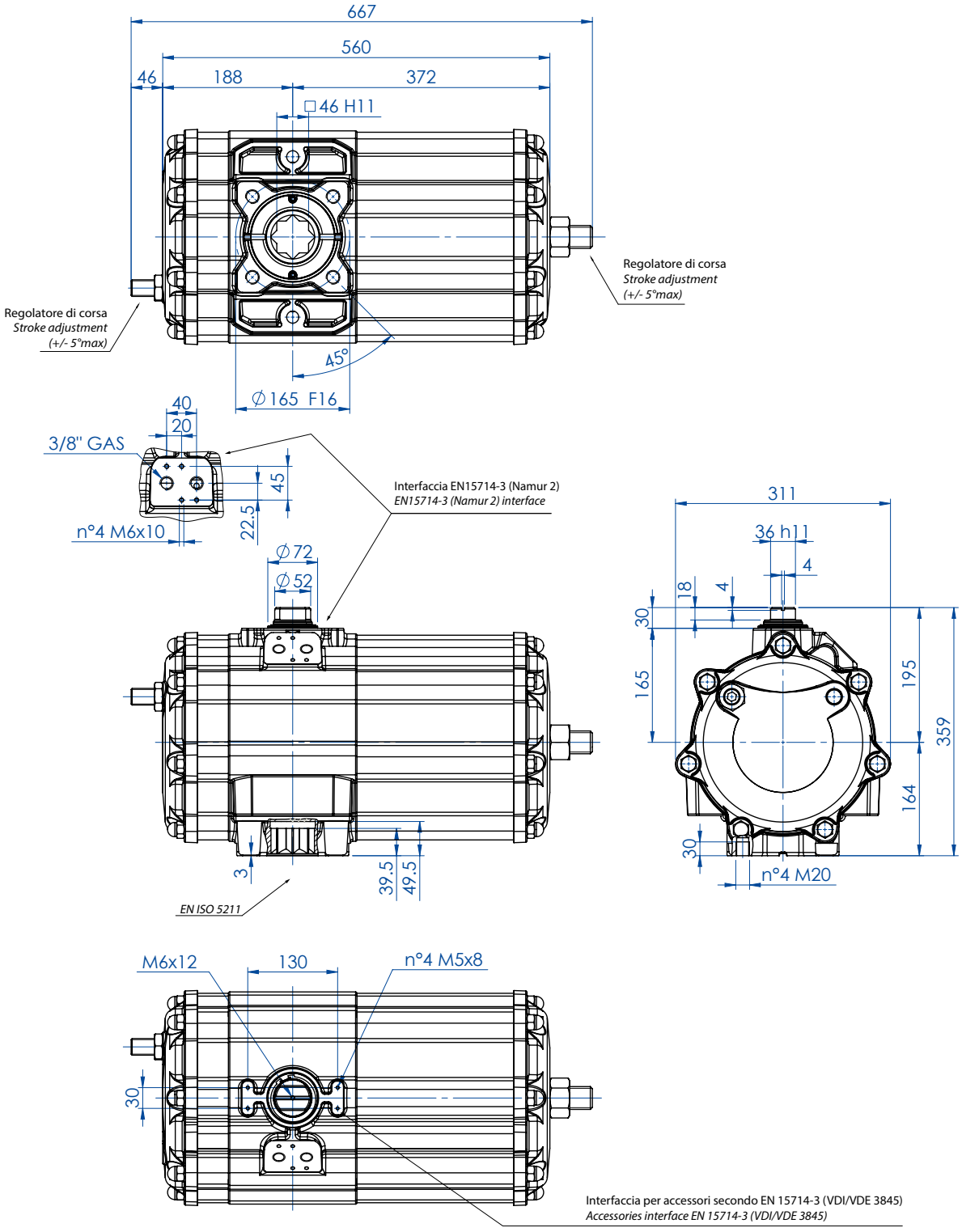



| SCHEDA TECNICA *DATA SHEET* | | | | | | |
|---|---|---|---|---|---|---|
| **Codice *Code*** | **DAN0960411S** | **DAN0960412S** | **DAN1440412S** | **DAN1440411S** | **DAN1920412S** | **DAN1920411S** |
| *Spare seals* | KGGI0024 | | KGGI0025 | | KGGI0026 | |
| **Misura *Size*** | **DAN 960** | | **DAN 1440** | | **DAN 1920** | |
| ISO | F10/F12 | F14 | F12 | F14 | F12/F16 | F14 |
| A | 479,4 | 479,4 | 567 | 567 | 601 | 601 |
| B | 36 | 36 | 36 | 36 | 46 | 46 |
| C x depth | M10x15 | M16x24 | M12x18 | M16x24 | M12x18 | M16x24 |
| D x depth | M12x18 | - | - | - | M20x30 | - |
| E | 102 | 140 | 125 | 140 | 125 | 140 |
| F | 125 | - | - | - | 165 | - |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 | 18,5 |
| H | 78 | 78 | 86,5 | 86,5 | 99,2 | 99,2 |
| I | 24 | 24 | 27 | 27 | 32 | 32 |
| L | 198 | 198 | 216 | 216 | 237,7 | 237,7 |
| M | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| N | 104,5 | 104,5 | 114,5 | 114,5 | 123 | 123 |
| O | 38,5 | 38,5 | 38,5 | 38,5 | 48,5 | 48,5 |
| P | 74,5 | 74,5 | 84,5 | 84,5 | 93 | 93 |
| Q | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| R | 36,5 | 36,5 | 41 | 41 | 46 | 46 |
| S | 30 | 30 | 30 | 30 | 30 | 30 |
| T | 168 | 168 | 186 | 186 | 207,7 | 207,7 |
| W (Gas) | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| Ch | 27 | 27 | 36 | 36 | 36 | 36 |
| Weight (Kg) | 17,4 | 17,4 | 23,4 | 23,4 | 32 | 32 |
| Air (dm3/cycle) | 4,9 | 4,9 | 7,6 | 7,6 | 10,2 | 10,2 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

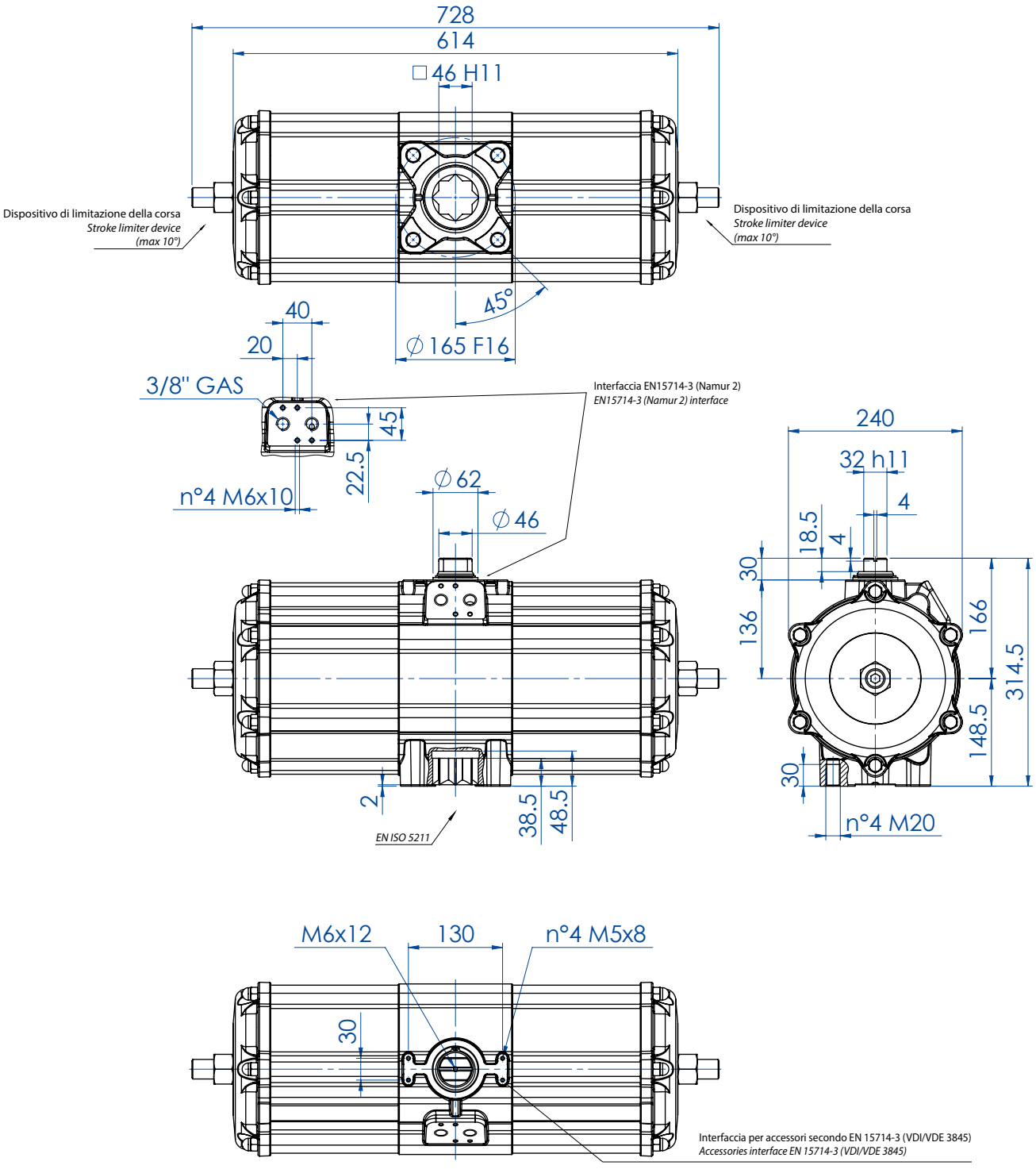
# Doppio effetto misura: DA 2880 (Nm)
## *Double acting size: DA 2880 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **DA2880E16D0A** |
| Peso *Weight* Kg | 55,4 |
| Volume aria *Air volume* $dm^3$/cycle | 20,0 |
| Guarnizioni di ricambio *Spare seals* | KGDI1035 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Doppio effetto misura: DA 3840 (Nm)
## *Double acting size: DA 3840 (Nm)*

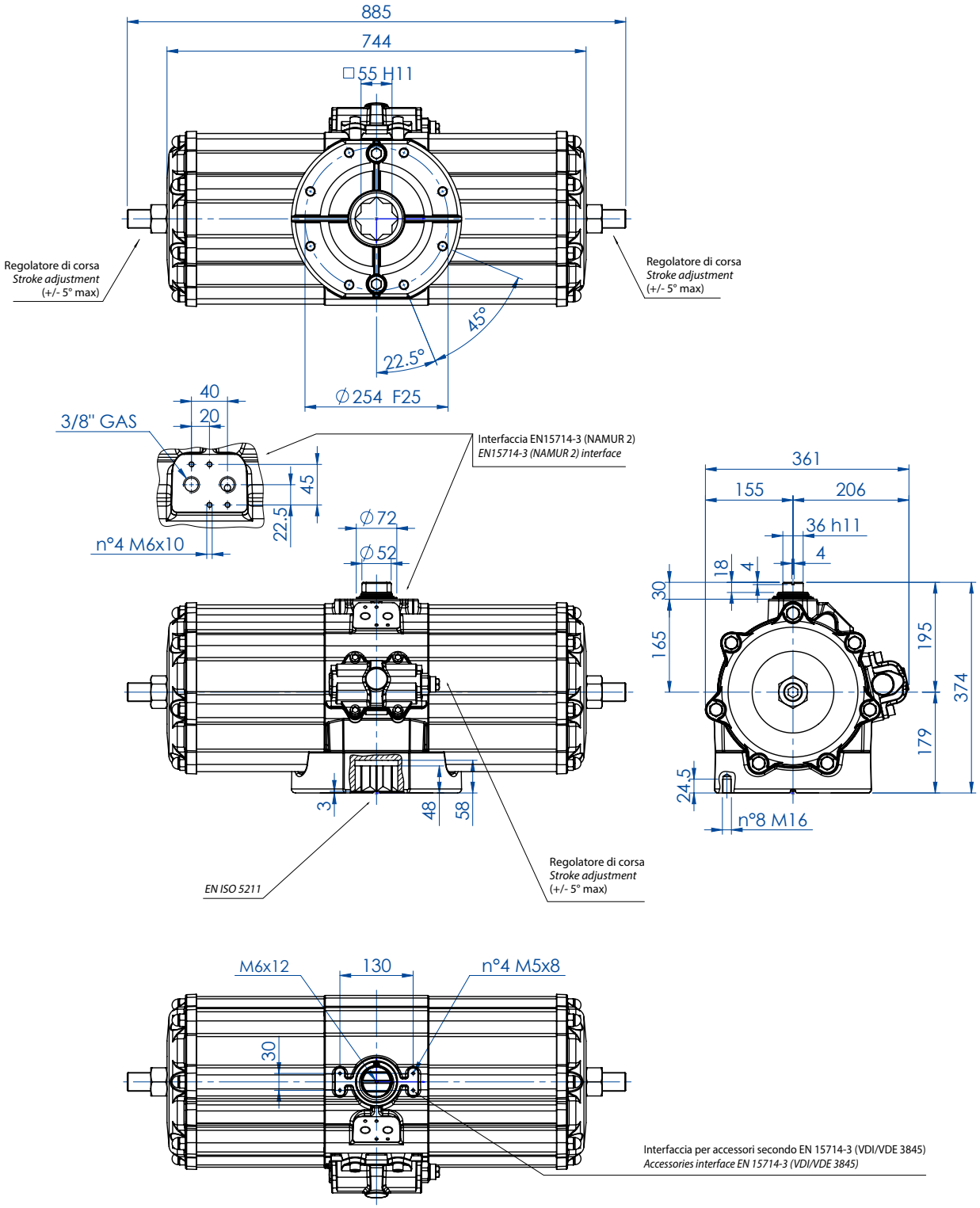



Disponibile versione con doppia regolazione della corsa (+/- 5°max) con codice DA3840E16D0A.
*Available version with double stroke adjustment (+/- 5°max) with code DA3840E16D0A.*

| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **DA3840E1600A** |
| Peso *Weight* Kg | 49,0 |
| Volume aria *Air volume* $dm^3$/cycle | 25,6 |
| Guarnizioni di ricambio *Spare seals* | KGDI0030 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

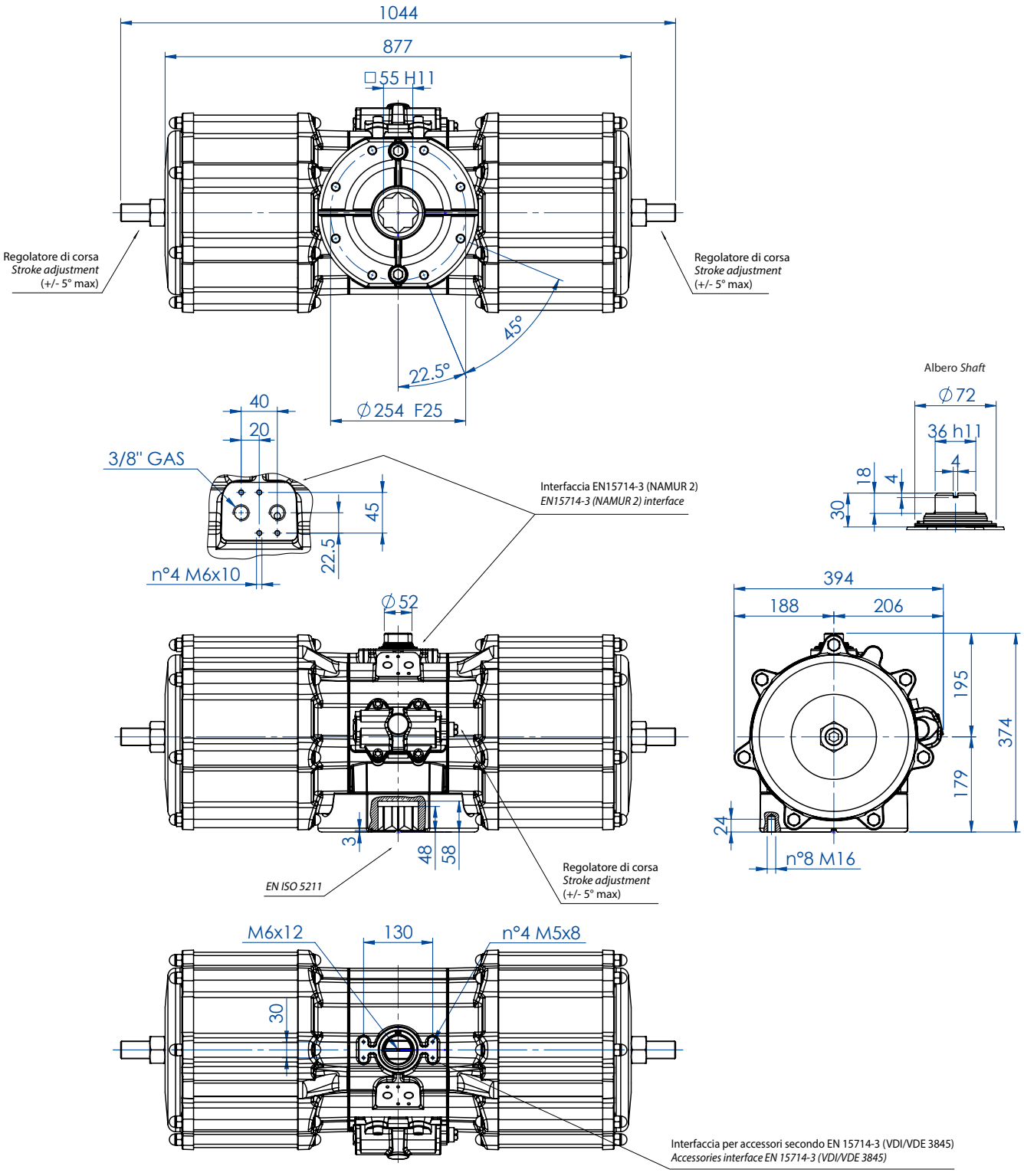
# Doppio effetto misura: DA 5760 (Nm)
## *Double acting size: DA 5760 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **DA5760E25D0A** |
| Peso *Weight* Kg | 85,5 |
| Volume aria *Air volume* $dm^3$/cycle | 38,0 |
| Guarnizioni di ricambio *Spare seals* | KGDI2035 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Doppio effetto misura: DA 8000 (Nm)
## *Double acting size: DA 8000 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | | |
|---|---|---|
| **Codice *Code*** | | **DA8000E25D0A** |
| Peso *Weight* | Kg | 105,5 |
| Volume aria *Air volume* | $dm^3$/cycle | 50,0 |
| Guarnizioni di ricambio *Spare seals* | | KGDI1040 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# ATTUATORE PNEUMATICO SEMPLICE EFFETTO “SR” IN ALLUMINIO

# *ALUMINIUM SPRING RETURN PNEUMATIC ACTUATOR “SR” TYPE*




## DATI TECNICI

- Coppia da 15 Nm a 4000 Nm.
- Flangia d’attacco: EN ISO 5211
  F03 - F04 - F05 - F07 - F10 - F12 - F14 - F16 - F25.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Il momento torcente di ritorno dipende solo dall’azione della molla ed è indipendente dalla pressione di alimentazione. Sono disponibili 4 differenti tarature per la molla; vedi tabella.
- La chiusura automatica per mezzo delle molle avviene in senso orario. In ciascun attuatore la cifra che segue la sigla SR corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

- *Torque from 15 Nm to 4000 Nm.*
- *Mounting flange according to EN ISO 5211*
  *F03 - F04 - F05 - F07 - F10 - F12 - F14 - F16 -F25.*
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°).*
- *Torque: the return torque depends on spring action only notwithstanding the air supply. The spring is provided in four different sizes (see table).*
- *The code numbers after the letters SR, always correspond to the breaka-way torque in Nm by 5,6 bar air supply.*
  *The actuator automatic closing takes place in clockwise direction by means of its springs.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C. (Versioni speciali: alta temperatura: -20°C +150°C; bassa temperatura: -50°C +60°C).
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata.
- In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITION*

- *Temperature: from -20°C to +80°C. (Special versions: high temperature: -20°C +150°C; low temperature: -50°C +60°).*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated.*
- *In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

## DIAGRAMMA DEL MOMENTO TORCENTE IN FUNZIONE DELL'ANGOLO DI ROTAZIONE
## *OUTPUT TORQUE DIAGRAM RELATED TO ROTATION ANGLE*

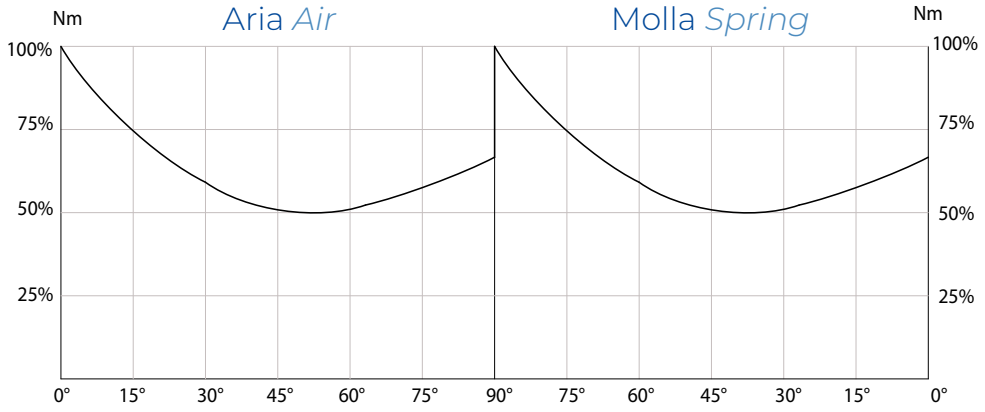
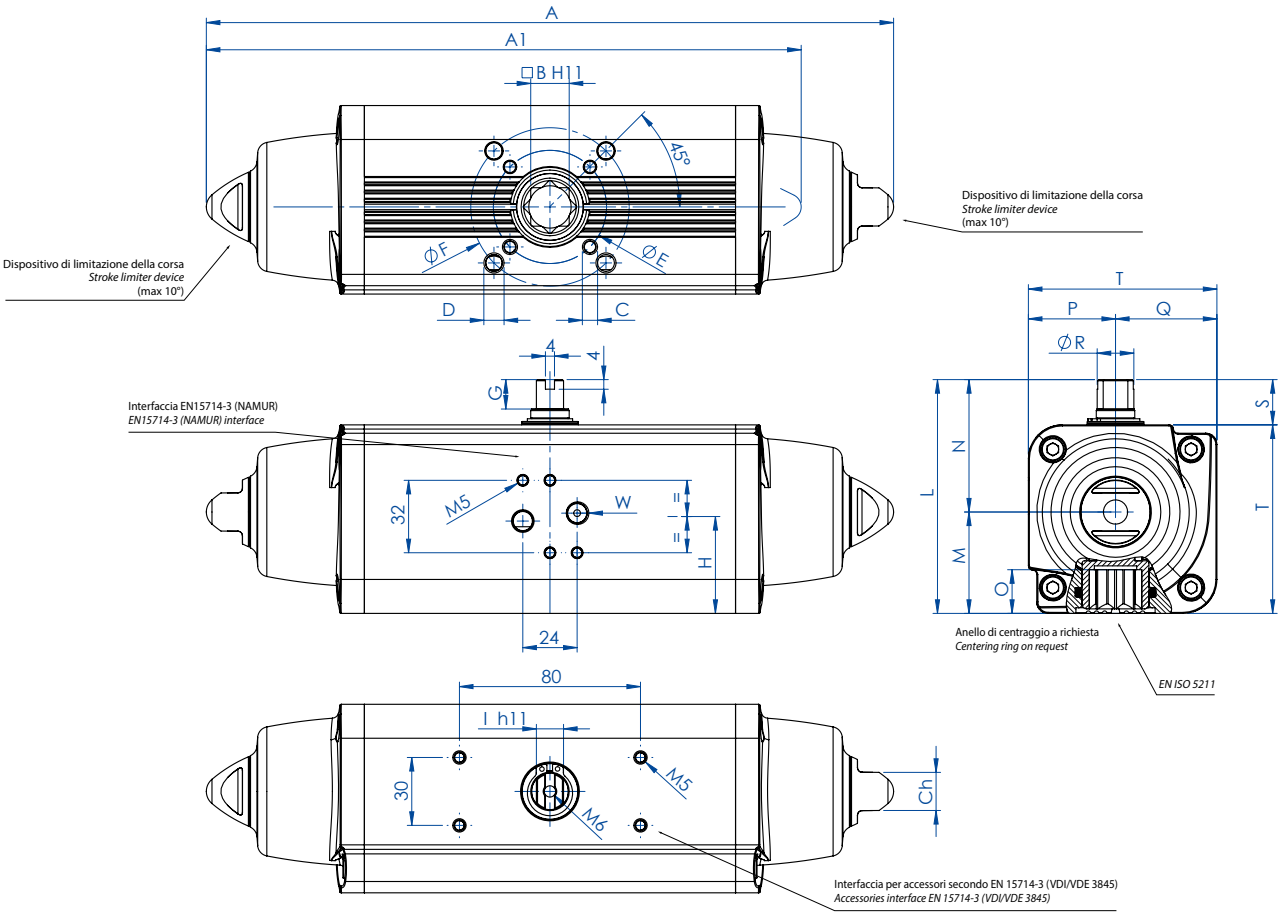



**TABELLA DEL MOMENTI TORCENTI (Nm)** ***OUTPUT TORQUE TABLE (Nm)*** α°= ANGOLO DI ROTAZIONE *α°= ROTATION ANGLE*

| MISURA *SIZE* | α° | 2,8 bar ÷ 40 PSI | | 3,5 bar ÷ 50 PSI | | 4,2 bar ÷ 60 PSI | | 5,6 bar ÷ 80 PSI | |
|---|---|---|---|---|---|---|---|---|---|
| | | aria *air* | molla *spring* | aria *air* | molla *spring* | aria *air* | molla *spring* | aria *air* | molla *spring* |
| **SRN 15** | 0° | 7,5 | 5 | 9,4 | 6,3 | 11,3 | 7,5 | 15 | 10 |
| | 50° | 3,7 | 3,7 | 4,7 | 4,7 | 5,6 | 5,6 | 7,5 | 7,5 |
| | 90° | 5 | 7,5 | 6,3 | 9,4 | 7,5 | 11,3 | 10 | 15 |
| **SRN 30** | 0° | 15 | 10 | 18,8 | 12,5 | 22,5 | 15 | 30 | 20 |
| | 50° | 7,5 | 7,5 | 9,4 | 9,4 | 11,3 | 11,3 | 15 | 15 |
| | 90° | 10 | 15 | 12,5 | 18,8 | 15 | 22,5 | 20 | 30 |
| **SRN 53** | 0° | 26,5 | 17,5 | 33 | 22 | 40 | 26 | 53 | 35 |
| | 50° | 13 | 13 | 16,5 | 16,5 | 19,5 | 19,5 | 26 | 26 |
| | 90° | 17,5 | 26,5 | 22 | 33 | 26 | 40 | 35 | 53 |
| **SRN 60** | 0° | 30 | 20 | 37,5 | 25 | 45 | 30 | 60 | 40 |
| | 50° | 15 | 15 | 18,8 | 18,8 | 22,5 | 22,5 | 30 | 30 |
| | 90° | 20 | 30 | 25 | 37,5 | 30 | 45 | 40 | 60 |
| **SRN 90** | 0° | 45 | 30 | 56,3 | 37,5 | 67,5 | 45 | 90 | 60 |
| | 50° | 22,5 | 22,5 | 28,1 | 28,1 | 33,9 | 33,9 | 45 | 45 |
| | 90° | 30 | 45 | 37,5 | 56,3 | 45 | 67,5 | 60 | 90 |
| **SRN 120** | 0° | 60 | 40 | 75 | 50 | 90 | 60 | 120 | 80 |
| | 50° | 30 | 30 | 37,5 | 37,5 | 45 | 45 | 60 | 60 |
| | 90° | 40 | 60 | 50 | 75 | 60 | 90 | 80 | 120 |
| **SRN 180** | 0° | 90 | 60 | 112,5 | 75 | 135 | 90 | 180 | 120 |
| | 50° | 45 | 45 | 56,3 | 56,3 | 67,5 | 67,5 | 90 | 90 |
| | 90° | 60 | 90 | 75 | 112,5 | 90 | 135 | 120 | 180 |
| **SRN 240** | 0° | 120 | 80 | 150 | 100 | 180 | 120 | 240 | 160 |
| | 50° | 60 | 60 | 75 | 75 | 90 | 90 | 120 | 120 |
| | 90° | 80 | 120 | 100 | 150 | 120 | 180 | 160 | 240 |
| **SRN 360** | 0° | 180 | 120 | 225 | 150 | 270 | 180 | 360 | 240 |
| | 50° | 90 | 90 | 112,5 | 112,5 | 135 | 135 | 180 | 180 |
| | 90° | 120 | 180 | 150 | 225 | 180 | 270 | 240 | 360 |
| **SRN 480** | 0° | 240 | 160 | 300 | 200 | 360 | 240 | 480 | 320 |
| | 50° | 120 | 120 | 150 | 150 | 180 | 180 | 240 | 240 |
| | 90° | 160 | 240 | 200 | 300 | 240 | 360 | 320 | 480 |
| **SRN 720** | 0° | 360 | 240 | 450 | 300 | 540 | 360 | 720 | 480 |
| | 50° | 180 | 180 | 225 | 225 | 270 | 270 | 360 | 360 |
| | 90° | 240 | 360 | 300 | 450 | 360 | 540 | 480 | 720 |
| **SRN 960** | 0° | 480 | 320 | 600 | 400 | 720 | 480 | 960 | 640 |
| | 50° | 240 | 240 | 300 | 300 | 360 | 360 | 480 | 480 |
| | 90° | 320 | 480 | 400 | 600 | 480 | 720 | 640 | 960 |
| **SR 1440** | 0° | --- | --- | 900 | 600 | --- | --- | 1440 | 960 |
| | 50° | --- | --- | 450 | 450 | --- | --- | 720 | 720 |
| | 90° | --- | --- | 600 | 900 | --- | --- | 960 | 1440 |
| **SR 1920** | 0° | 960 | 640 | 1200 | 800 | 1440 | 960 | 1920 | 1280 |
| | 50° | 480 | 480 | 600 | 600 | 720 | 720 | 960 | 960 |
| | 90° | 640 | 960 | 800 | 1200 | 960 | 1440 | 1280 | 1920 |
| **SR 2880** | 0° | 1440 | 960 | 1800 | 1200 | 2160 | 1440 | 2880 | 1920 |
| | 50° | 720 | 720 | 900 | 900 | 1080 | 1080 | 1440 | 1440 |
| | 90° | 960 | 1440 | 1200 | 1800 | 1440 | 2160 | 1920 | 2880 |
| **SR 4000** | 0° | 2000 | 1333 | 2500 | 1666,3 | 3000 | 1999,5 | 4000 | 2666 |
| | 50° | 1000 | 1000 | 1250 | 1250 | 1500 | 1500 | 2000 | 2000 |
| | 90° | 1333 | 2000 | 1666,3 | 2500 | 1999,5 | 3000 | 2666 | 4000 |

# Semplice effetto misure: SRN 15 (Nm) ÷ SRN 53 (Nm)

## *Spring return sizes: SRN 15 (Nm) ÷ SRN 53 (Nm)*

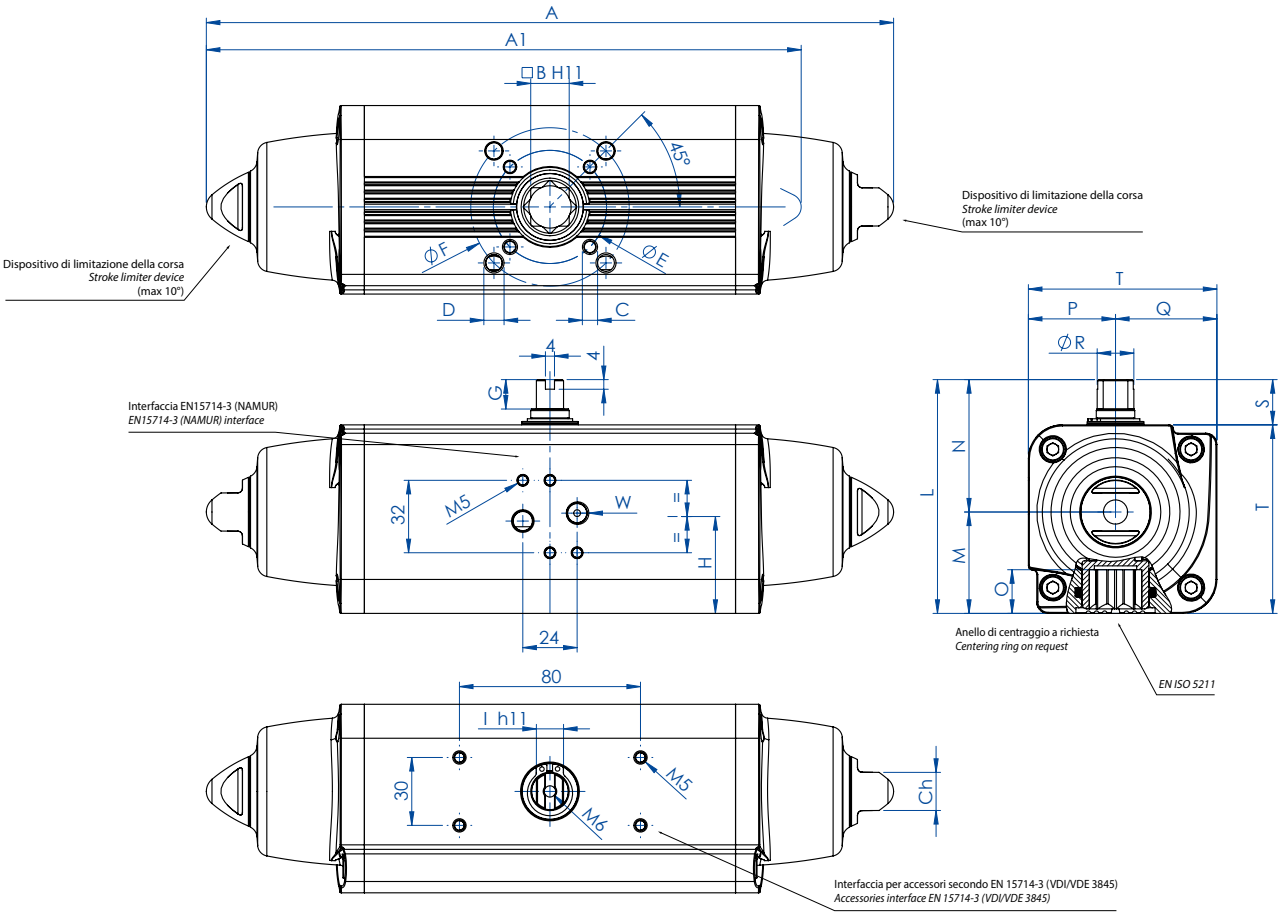



| SCHEDA TECNICA *DATA SHEET* | | | | | |
|---|---|---|---|---|---|
| **Codice *Code*** | **SRN0015401S** | **SRN0015402S** | **SRN0030401S** | **SRN0030402S** | **SRN0053401S** |
| *Spare seals* | KGGI0014 | | KGGI0016 | | KGGI0060 |
| **Misura *Size*** | **SRN 15** | | **SRN 30** | | **SRN 53** |
| ISO | F03/F05 | F04 | F04 | F05/F07 | F05/F07 |
| A | 233,3 | 233,3 | 259 | 259 | 304,3 |
| A1 (2,8 Bar) | 203,8 | 203,8 | 228,5 | 228,5 | 270,7 |
| B | 11 | 11 | 14 | 14 | 17 |
| C x depth | M5x8 | M5x8 | M5x8 | M6x9 | M6x9 |
| D x depth | M6x9 | - | - | M8x12 | M8x12 |
| E | 36 | 42 | 42 | 50 | 50 |
| F | 50 | - | - | 70 | 70 |
| G | 10 | 10 | 13 | 13 | 13 |
| H | 30,3 | 30,3 | 35,7 | 35,7 | 42,8 |
| I | 9 | 9 | 10 | 10 | 12 |
| L | 79,2 | 79,2 | 90,4 | 90,4 | 103,3 |
| M | 31,5 | 31,5 | 37,7 | 37,7 | 44,8 |
| N | 47,7 | 47,7 | 52,7 | 52,7 | 58,5 |
| O | 13,2 | 13,2 | 16,5 | 16,5 | 19,3 |
| P | 27,7 | 27,7 | 32,7 | 32,7 | 38,5 |
| Q | 31,5 | 31,5 | 37,7 | 37,7 | 44,8 |
| R | 10,9 | 10,9 | 14,5 | 14,5 | 16,2 |
| S | 20 | 20 | 20 | 20 | 20 |
| T | 59,2 | 59,2 | 70,4 | 70,4 | 83,3 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" |
| Ch | 13 | 13 | 13 | 13 | 17 |
| Weight (Kg) | 1,2 | 1,2 | 1,95 | 1,95 | 3 |
| Air (dm3/cycle) | 0,09 | 0,09 | 0,17 | 0,17 | 0,3 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Semplice effetto misure: SRN 60 (Nm) ÷ SRN 360 (Nm)
## *Spring return sizes: SRN 60 (Nm) ÷ SRN 360 (Nm)*

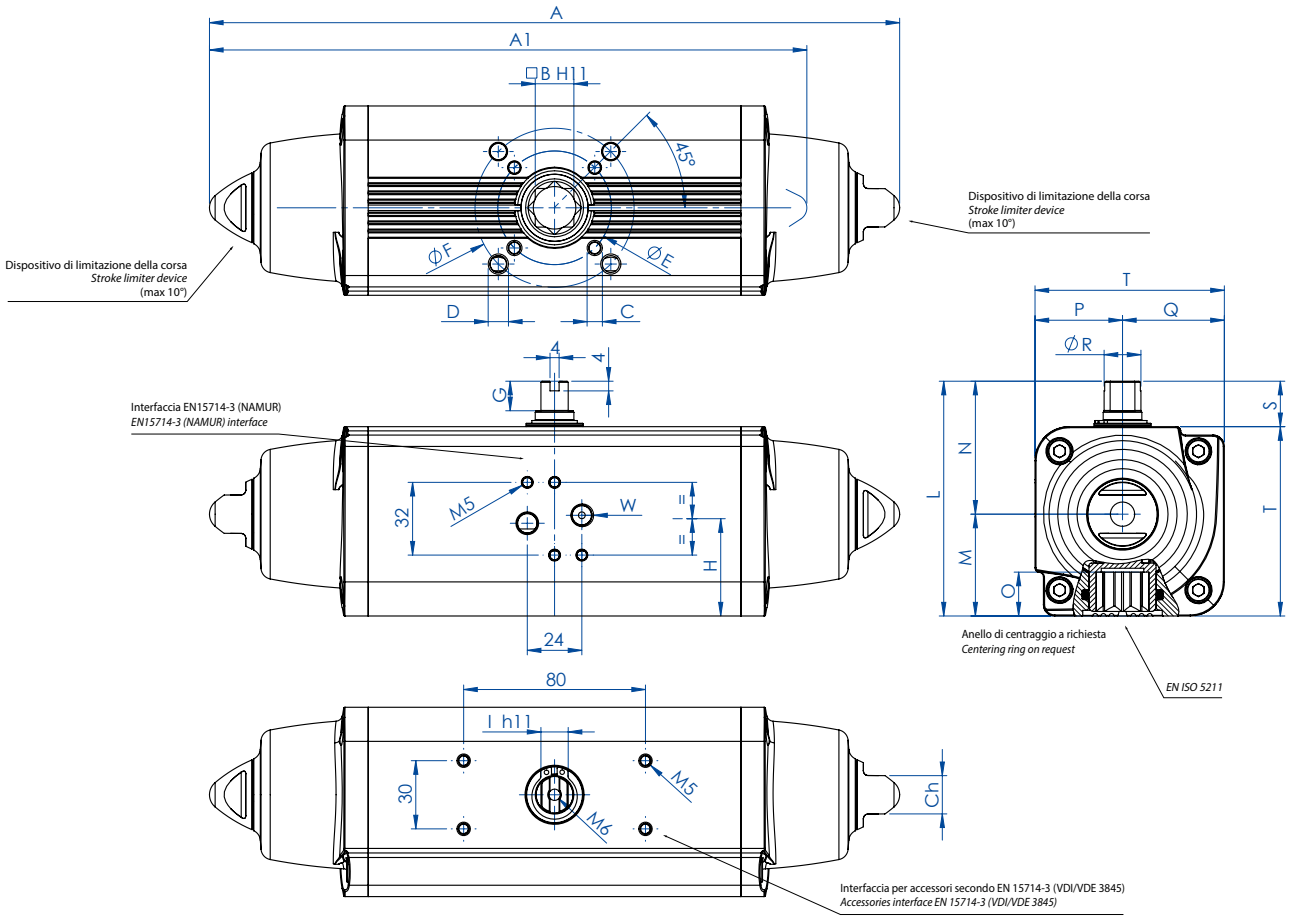



| SCHEDA TECNICA *DATA SHEET* | | | | | | |
|---|---|---|---|---|---|---|
| **Codice *Code*** | **SRN0060401S** | **SRN0090401S** | **SRN0120401S** | **SRN0180401S** | **SRN0240401S** | **SRN0360401S** |
| *Spare seals* | KGGI0018 | KGGI0019 | KGGI0020 | KGGI0021 | KGGI0022 | KGGI0023 |
| **Misura *Size*** | **SRN 60** | **SRN 90** | **SRN 120** | **SRN 180** | **SRN 240** | **SRN 360** |
| ISO | F05/F07 | F07/F10 | F07/F10 | F07/F10 | F10/F12 | F10/F12 |
| A | 338,5 | 393,7 | 409,6 | 474 | 520,5 | 613 |
| A1 (2,8 Bar) | 309,1 | 341,8 | 361,6 | 406,6 | 454,1 | 523 |
| B | 17 | 22 | 22 | 22 | 27 | 27 |
| C x depth | M6x9 | M8x12 | M8x12 | M8x12 | M10x15 | M10x15 |
| D x depth | M8x12 | M10x15 | M10x15 | M10x15 | M12x18 | M12x18 |
| E | 50 | 70 | 70 | 70 | 102 | 102 |
| F | 70 | 102 | 102 | 102 | 125 | 125 |
| G | 13 | 16 | 17 | 19 | 19 | 19,5 |
| H | 44,8 | 54,5 | 58,1 | 60 | 57,4 | 61,5 |
| I | 12 | 15 | 15 | 19 | 19 | 22 |
| L | 107 | 137,5 | 141,1 | 148 | 164,9 | 178 |
| M | 46,8 | 56,5 | 60,1 | 62 | 72,9 | 78,5 |
| N | 60,2 | 81 | 81 | 86 | 92 | 99,5 |
| O | 19,3 | 24,8 | 24,8 | 24,3 | 29,5 | 29,5 |
| P | 40,2 | 51 | 51 | 56 | 62 | 69,5 |
| Q | 46,8 | 56,5 | 60,1 | 62 | 72,9 | 78,5 |
| R | 18 | 20,2 | 22,5 | 25,5 | 29 | 31,8 |
| S | 20 | 30 | 30 | 30 | 30 | 30 |
| T | 87 | 107,5 | 111,1 | 118 | 134,9 | 148 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/4" | 1/4" |
| Ch | 17 | 22 | 22 | 22 | 27 | 27 |
| Weight (Kg) | 3,35 | 5,9 | 6,8 | 8,9 | 11,8 | 16,5 |
| Air (dm3/cycle) | 0,33 | 0,55 | 0,8 | 1 | 1,5 | 2 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Semplice effetto misure: SRN 480 (Nm) ÷ SRN 960 (Nm)
## *Spring return sizes: SRN 480 (Nm) ÷ SRN 960 (Nm)*

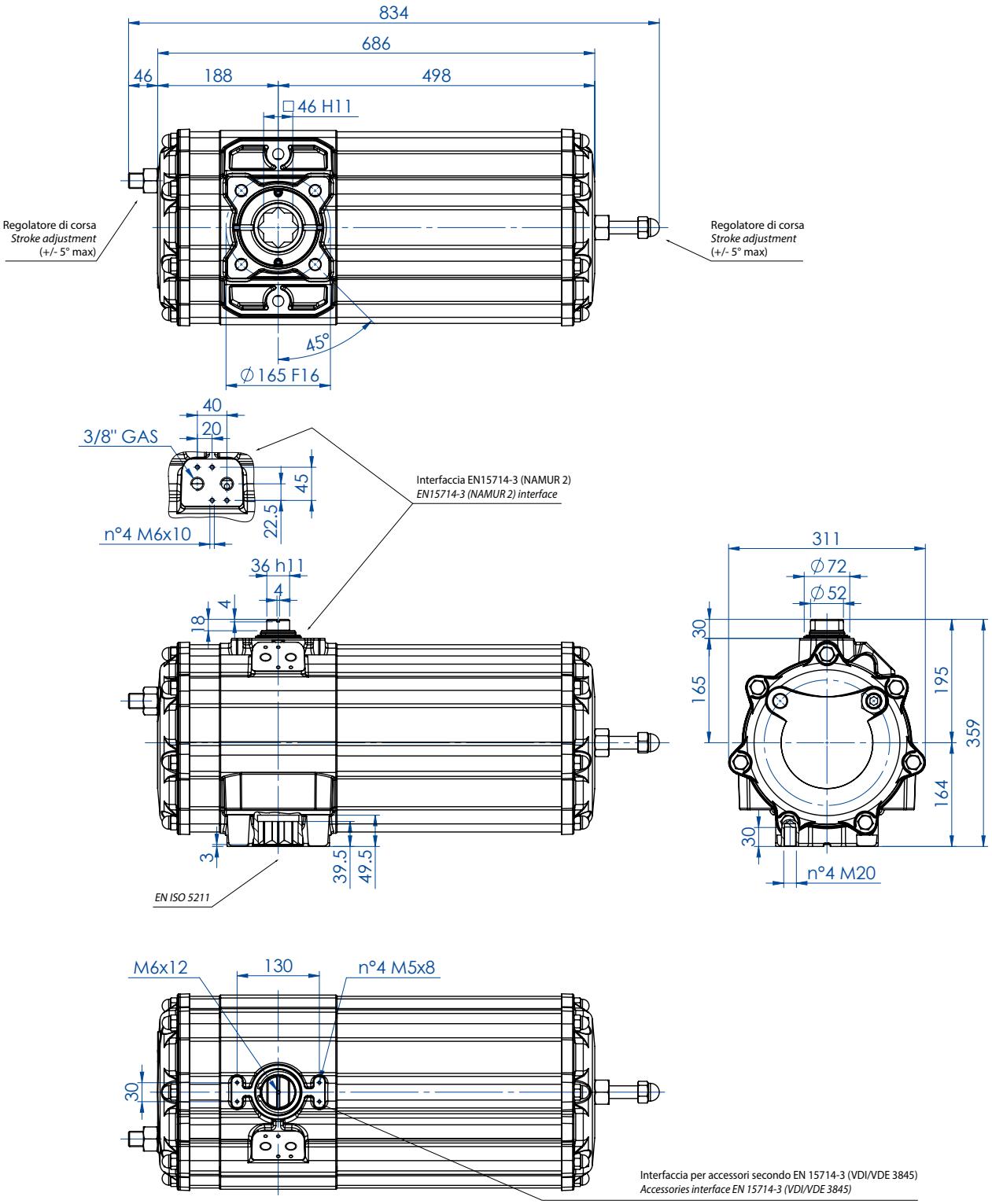



| SCHEDA TECNICA *DATA SHEET* | | | | | | |
|---|---|---|---|---|---|---|
| **Codice *Code*** | **SRN0480401S** | **SRN0480402S** | **SRN0720402S** | **SRN0720401S** | **SRN0960402S** | **SRN0960401S** |
| *Spare seals* | KGGI0024 | | KGGI0025 | | KGGI0026 | |
| **Misura *Size*** | **SRN 480** | | **SRN 720** | | **SRN 960** | |
| ISO | F10/F12 | F14 | F12 | F14 | F12/F16 | F14 |
| A | 648,2 | 648,2 | 798 | 798 | 828 | 828 |
| A1 (2,8 Bar) | 563,8 | 563,8 | 683 | 683 | 714,4 | 714,4 |
| B | 36 | 36 | 36 | 36 | 46 | 46 |
| C x depth | M10x15 | M16x24 | M12x18 | M16x24 | M12x18 | M16x24 |
| D x depth | M12x18 | - | - | - | M20x30 | - |
| E | 102 | 140 | 125 | 140 | 125 | 140 |
| F | 125 | - | - | - | 165 | - |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 | 18,5 |
| H | 78 | 78 | 86,5 | 86,5 | 99,2 | 99,2 |
| I | 24 | 24 | 27 | 27 | 32 | 32 |
| L | 198 | 198 | 216 | 216 | 237,7 | 237,7 |
| M | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| N | 104,5 | 104,5 | 114,5 | 114,5 | 123 | 123 |
| O | 38,5 | 38,5 | 38,5 | 38,5 | 48,5 | 48,5 |
| P | 74,5 | 74,5 | 84,5 | 84,5 | 93 | 93 |
| Q | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| R | 36,5 | 36,5 | 41 | 41 | 46 | 46 |
| S | 30 | 30 | 30 | 30 | 30 | 30 |
| T | 168 | 168 | 186 | 186 | 207,7 | 207,7 |
| W (Gas) | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| Ch | 27 | 27 | 36 | 36 | 36 | 36 |
| Weight (Kg) | 22,7 | 22,7 | 33 | 33 | 42 | 42 |
| Air (dm3/cycle) | 2,8 | 2,8 | 4,2 | 4,2 | 5,9 | 5,9 |

H = CENTRO DEI FISSAGGI BASETTA *H = CENTER OF PLATE'S FIXING*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

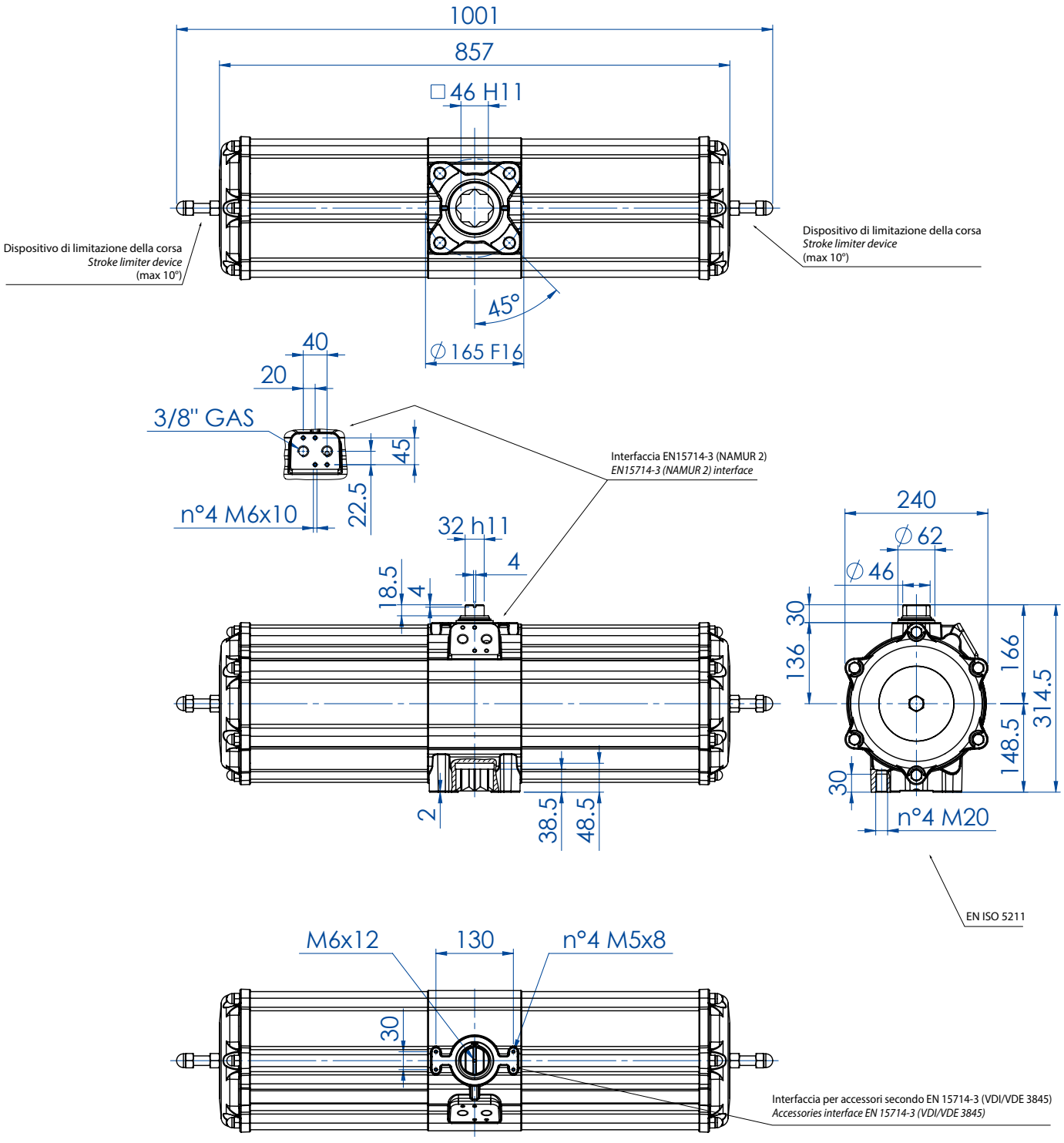
# Semplice effetto misura: SR 1440 (Nm)
## *Spring return size: SR 1440 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **SR1440E16D8A** |
| Peso *Weight* Kg | 74,0 |
| Volume aria *Air volume* $dm^3$/cycle | 11,0 |
| Guarnizioni di ricambio *Spare seals* | KGSI1035 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Semplice effetto misura: SR 1920 (Nm)
## *Spring return size: SR 1920 (Nm)*

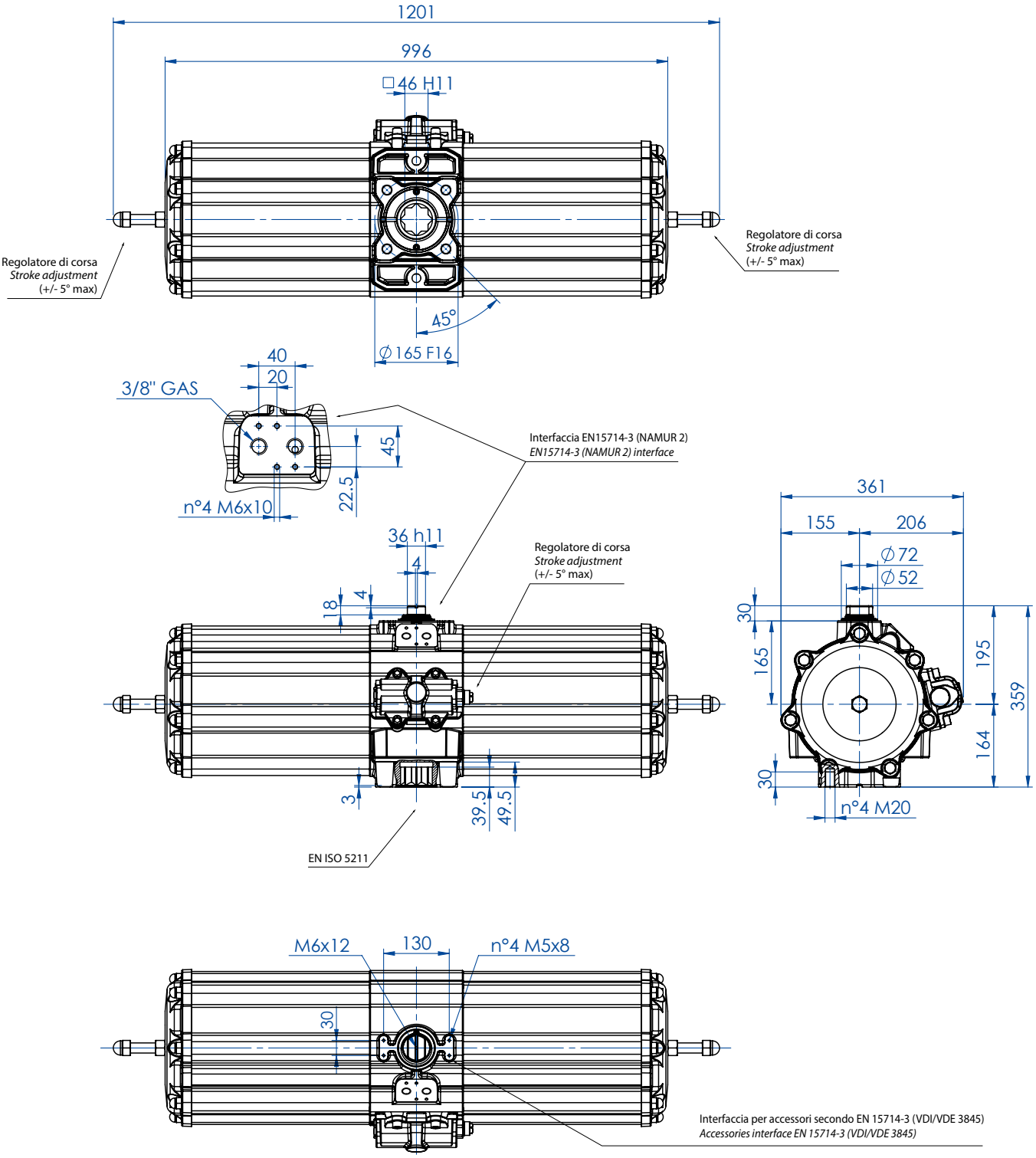



Disponibile versione con doppia regolazione della corsa (+/- 5°max) con codice SR1920E16D8A.
*Available version with double stroke adjustment (+/- 5°max) with code SR1920E16D8A.*

| SCHEDA TECNICA *DATA SHEET* | | |
|---|---|---|
| **Codice *Code*** | | **SR1920E1608A** |
| Peso *Weight* | Kg | 67,0 |
| Volume aria *Air volume* | $dm^3$/cycle | 12,0 |
| Guarnizioni di ricambio *Spare seals* | | KGDI0030 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

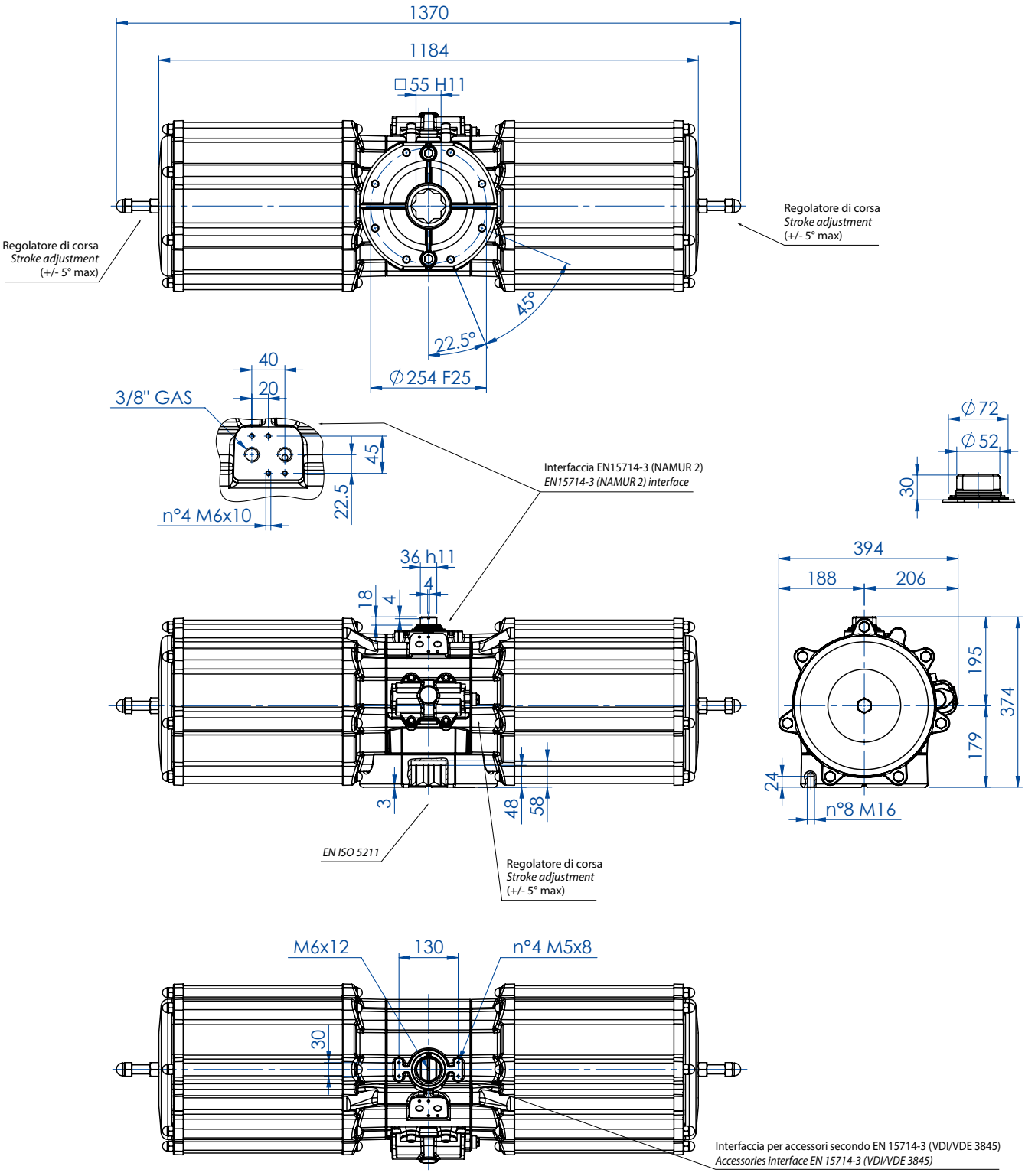
# Semplice effetto misura: SR 2880 (Nm)
## *Spring return size: SR 2880 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **SR2880E16D8A** |
| Peso *Weight* Kg | 116,8 |
| Volume aria *Air volume* $dm^3$/cycle | 21,0 |
| Guarnizioni di ricambio *Spare seals* | KGSI2035 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# Semplice effetto misura: SR 4000 (Nm)
## *Spring return size: SR 4000 (Nm)*




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **SR4000E25D8A** |
| Peso *Weight* Kg | 183,0 |
| Volume aria *Air volume* $dm^3$/cycle | 29,1 |
| Guarnizioni di ricambio *Spare seals* | KGSI1040 |

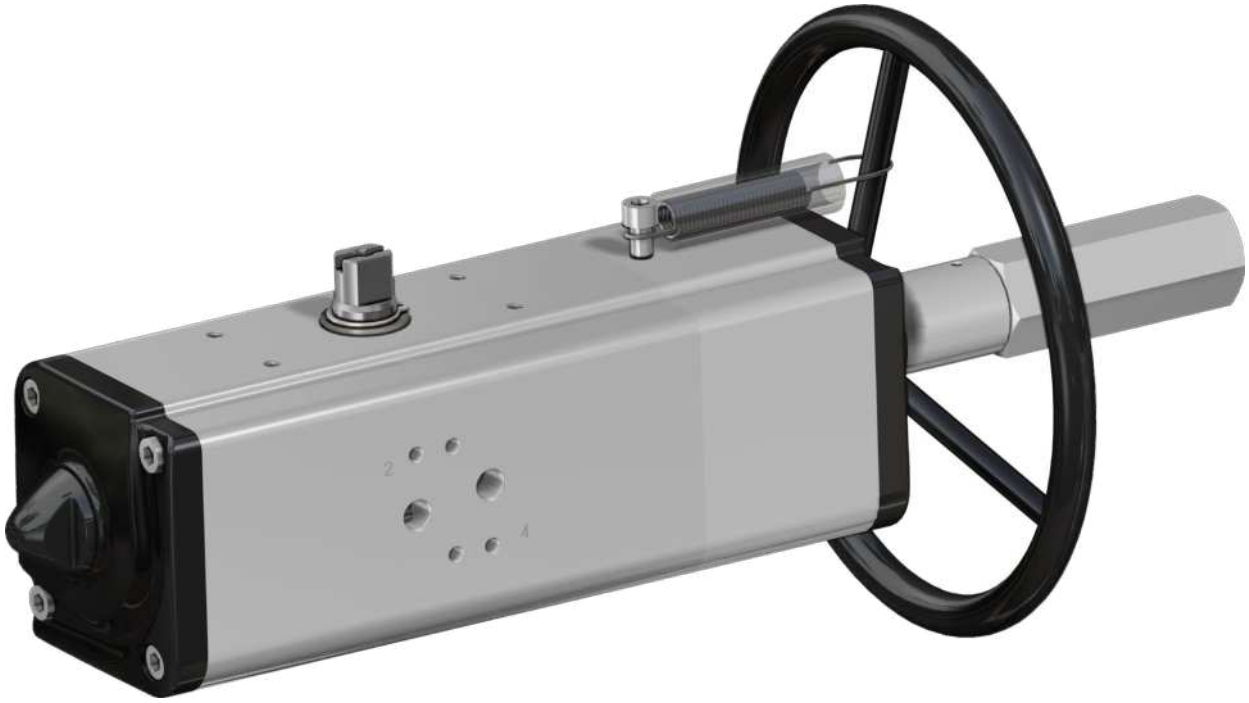
Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

ATTUATORE PNEUMATICO DOPPIO EFFETTO

# "DA" CON COMANDO MANUALE INTEGRATO

*PNEUMATIC ACTUATOR DOUBLE ACTING*

# *"DA" WITH INTEGRATED HANDWHEEL*



### DATI TECNICI

- Coppia da 60 Nm a 3840 Nm.
- Flangia d'attacco: EN ISO 5211 F05 - F07 - F10 - F12 - F14 - F16.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Direttamente proporzionale alla pressione di alimentazione; vedi tabella.
- In ciascun attuatore la cifra che segue la sigla DA corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

### *TECHNICAL FEATURES*

- *Torque from 60 Nm to 3840 Nm.*
- *Mounting flange according to* EN ISO 5211 *F05 - F07 - F10 - F12 - F14 - F16.*
- *In accordance with* EN 15714-3.
- *Rotation angle: 92° (-1°, +91°).*
- *Torque: directly proportional to the air supply (see table).*
- *The code numbers after the DA letters, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

### CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C. (Versioni speciali: alta temperatura: -20°C +150°C; bassa temperatura: -50°C +60°C).
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata.
- In caso di lubrificazione usare olio non detergente o compatibile con NBR.

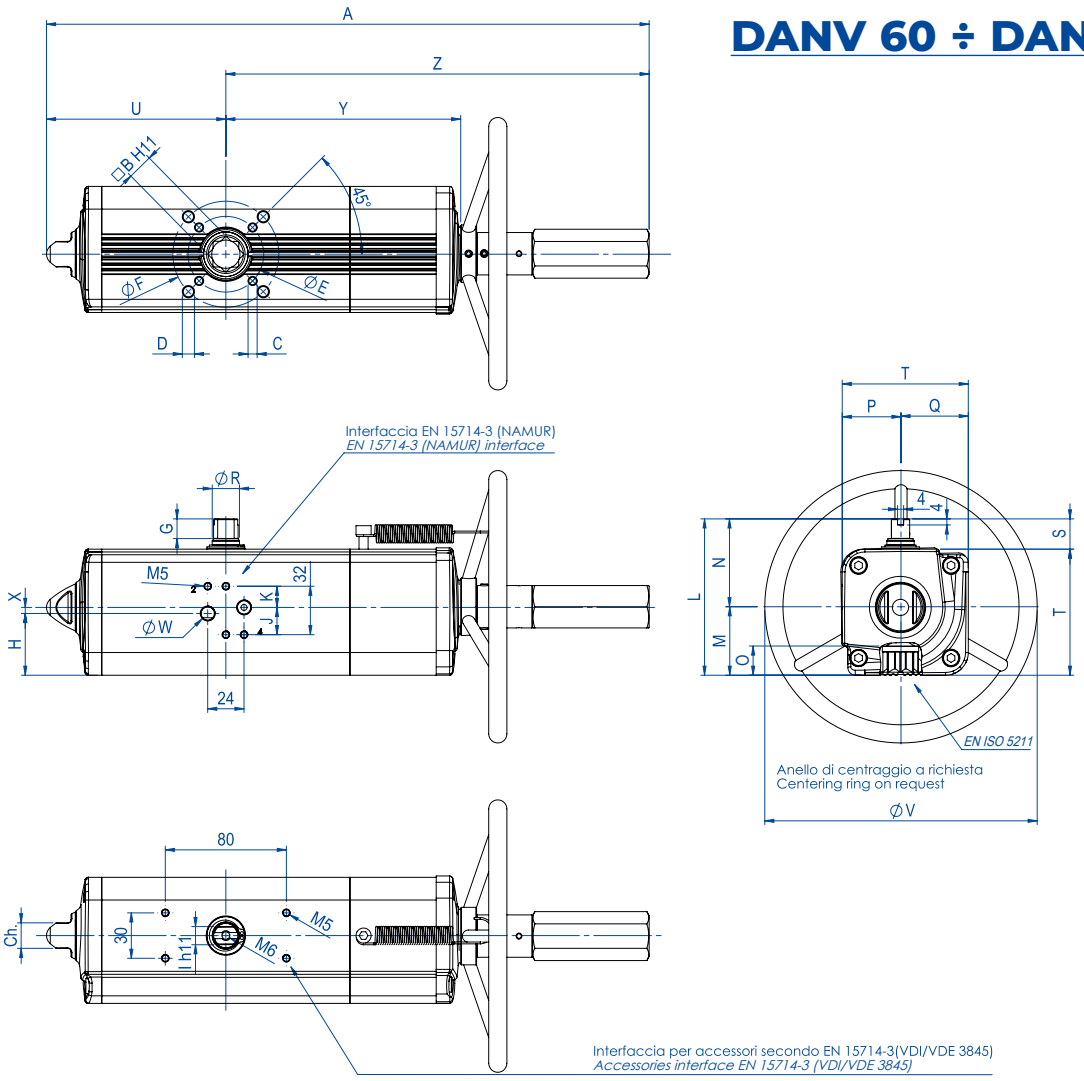
### *WORKING CONDITIONS*

- *Temperature: from -20°C to +80°C. (Special versions: high temperature: -20°C +150°C; low temperature: -50°C +60°).*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated.*
- *In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

Qualora richiesto l'attuatore pneumatico a quarto di giro di nostra produzione può essere dotato di un azionamento manuale.
Il dispositivo può essere integrato sia nella versione Doppio Effetto che in quella Semplice Effetto.
Per il buon funzionamento del sistema e per l'integrità meccanica del dispositivo è indispensabile accertarsi che l'attuatore pneumatico sia disconnesso dalle linee di alimentazione di aria compressa prima di compiere alcuna manovra impiegando il dispositivo di azionamento manuale.
Il dispositivo di azionamento manuale agisce sulla trasmissione meccanica primaria dell'attuatore pneumatico e a fronte di coppie applicate al volantino conformi alla norma EN 12570 produce coppie in uscita di pari valore della coppia nominale dell'attuatore stesso.

*Once required the quarter turn pneumatic actuator can be equipped with a manual handwheel.*
*The device can be integrated either in Double Acting and Spring Return versions.*
*For the proper functioning of the system and for the mechanical integrity of the device is essential to ensure that the pneumatic actuator is disconnected from the power lines of compressed air before performing any operation using the manual handwheel.*
*The manual handwheel acts on the transmission of the primary mechanical transmission of the pneumatic actuator and with torques applied to the handwheel according to EN 12570 it releases output torque of equal value of the nominal torque of the actuator.*

# DANV 60 ÷ DANV 480



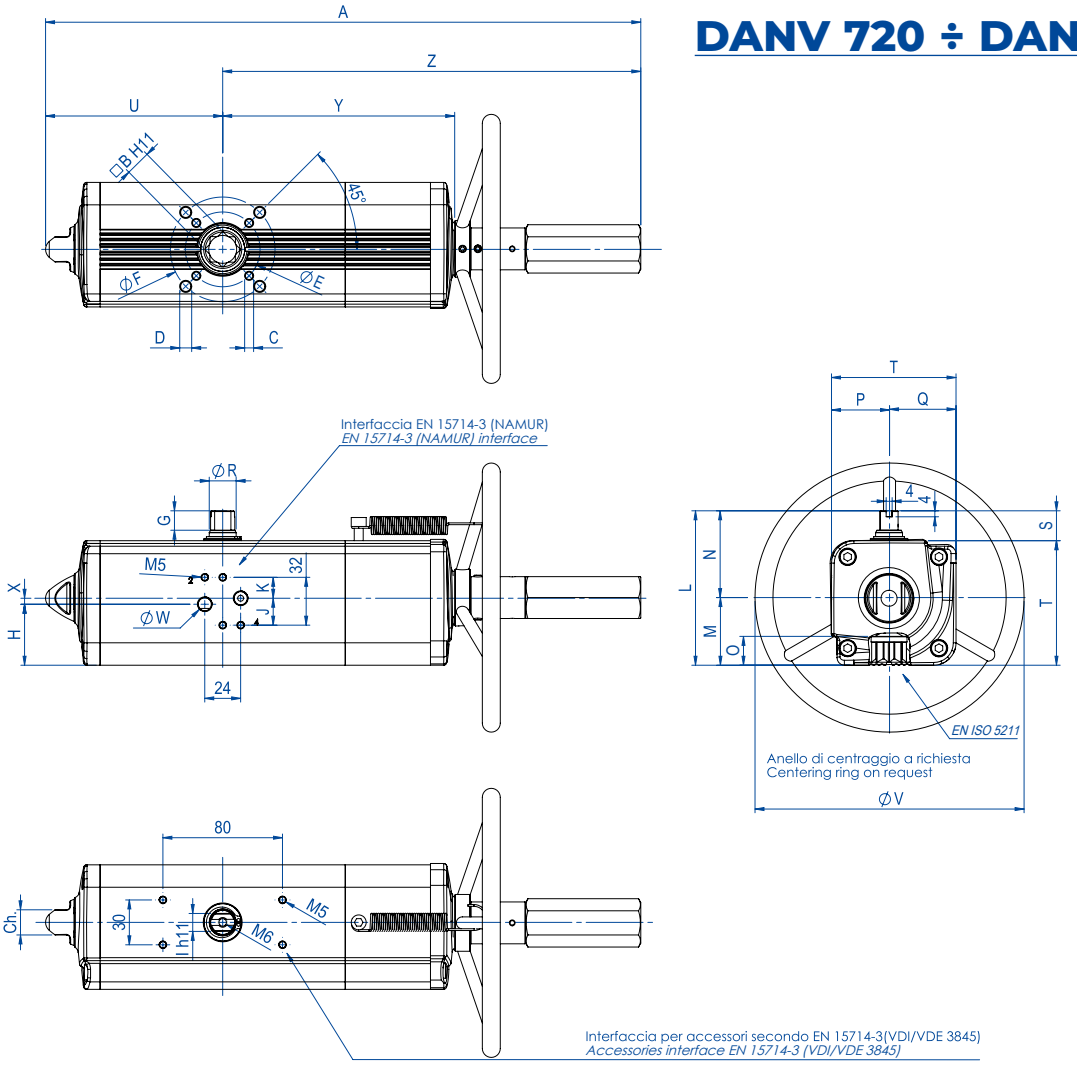

## SCHEDA TECNICA *DATA SHEET*

| **Codice** *Code* | **DANV00604115** | **DANV00604125** | **DANV01064115** | **DANV01204115** | **DANV01804115** | **DANV02404115** | **DANV03604115** | **DANV04804115** |
|---|---|---|---|---|---|---|---|---|
| Kit guarniz. *Spare Seals* | KGGI0016VX | KGGI0016VX | KGGI0060VX | KGGI0018VX | KGGI0019VX | KGGI0020VX | KGGI0021VX | KGGI0022VX |
| Misura *Size* | DANV 60 | DANV 60 | DANV 106 | DANV 120 | DANV 180 | DANV 240 | DANV 360 | DANV 480 |
| ISO | F04 | F05/F07 | F05/F07 | F05/F07 | F07/F10 | F07/F10 | F07/F10 | F10/F12 |
| A | 362,3 | 362,3 | 397,8 | 410,5 | 483 | 510,5 | 567,6 | 634,4 |
| B | 14 | 14 | 17 | 17 | 22 | 22 | 22 | 27 |
| C x depth | M5x8 | M6x9 | M6x9 | M6x9 | M8x12 | M8x12 | M8x12 | M10x15 |
| D x depth | - | M8x12 | M8x12 | M8x12 | M10x15 | M10x15 | M10x15 | M12x18 |
| E | 42 | 50 | 50 | 50 | 70 | 70 | 70 | 102 |
| F | - | 70 | 70 | 70 | 102 | 102 | 102 | 125 |
| G | 13 | 13 | 13 | 13 | 16 | 17 | 19 | 19 |
| H | 33,7 | 33,7 | 40,8 | 42,8 | 52,5 | 56,1 | 58 | 57,4 |
| J | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 16 |
| K | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 16 |
| I | 10 | 10 | 12 | 12 | 15 | 15 | 19 | 19 |
| L | 90,4 | 90,4 | 103,3 | 107 | 137,5 | 141,1 | 148 | 164,9 |
| M | 37,7 | 37,7 | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 |
| N | 52,7 | 52,7 | 58,5 | 60,2 | 81 | 81 | 86 | 92 |
| O | 16,5 | 16,5 | 19,3 | 19,3 | 24,8 | 24,8 | 24,3 | 29,5 |
| P | 32,7 | 32,7 | 38,5 | 40,2 | 51 | 51 | 56 | 62 |
| Q | 37,7 | 37,7 | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 |
| R | 14,5 | 14,5 | 16,2 | 18 | 20,2 | 22,5 | 25,5 | 29 |
| S | 20 | 20 | 20 | 20 | 30 | 30 | 30 | 30 |
| T | 70,4 | 70,4 | 83,3 | 87 | 107,5 | 111,1 | 118 | 134,9 |
| U | 99 | 99 | 118,5 | 122,1 | 144,9 | 156,8 | 169,6 | 193,8 |
| V | 180 | 180 | 180 | 180 | 220 | 220 | 300 | 300 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/4" |
| X | 4 | 4 | 4 | 4 | 4 | 4 | 4 | - |
| Y | 137,6 | 137,6 | 154,8 | 163,9 | 183,5 | 199,1 | 220,8 | 236,4 |
| Z | 263,3 | 263,3 | 279,3 | 288,4 | 338,1 | 353,7 | 398 | 440,6 |
| Ch | 13 | 13 | 17 | 17 | 22 | 22 | 22 | 27 |
| N° giri* *N°of turns** | 11 | 11 | 13 | 14 | 16 | 18 | 15 | 16 |
| Peso *Weight* (Kg) | 2,8 | 2,8 | 4 | 4,5 | 6 | 8 | 10,2 | 13,2 |
| Aria *Air* (dm3/cycle) | 0,3 | 0,3 | 0,7 | 0,59 | 1,2 | 1,65 | 2,3 | 3,2 |

* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# DANV 720 ÷ DANV 1920

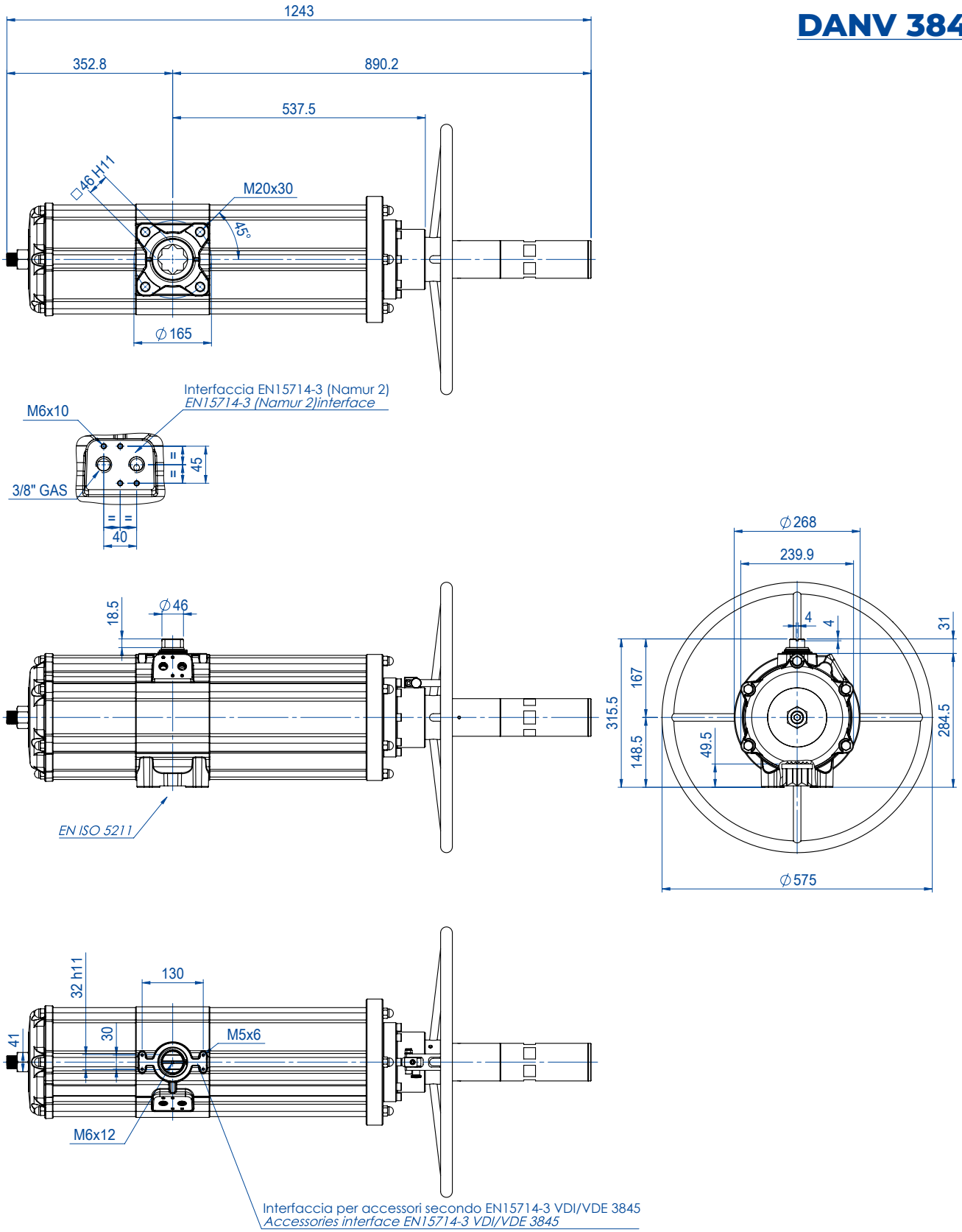



| SCHEDA TECNICA *DATA SHEET* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Codice *Code*** | **DANV0720411S** | **DANV0960411S** | **DANV0960412S** | **DANV1440411S** | **DANV1440412S** | **DANV1920411S** | **DANV1920412S** |
| Kit guarniz. *Spare Seals* | KGGI0023VX | KGGI0024VX | | KGGI0025VX | | KGGI0026VX | |
| Misura *Size* | DANV 720 | DANV 960 | | DANV 1440 | | DANV 1920 | |
| ISO | F10/F12 | F10/F12 | F14 | F14 | F12 | F14 | F12/F16 |
| A | 720,1 | 758 | 758 | 919,9 | 919,9 | 954,1 | 954,1 |
| B | 27 | 36 | 36 | 36 | 36 | 46 | 46 |
| C x depth | M10x15 | M10x15 | M16x24 | M16x24 | M12x18 | M16x24 | M12x18 |
| D x depth | M12x18 | M12x18 | - | - | - | - | M20x30 |
| E | 102 | 102 | 140 | 140 | 125 | 140 | 125 |
| F | 125 | 125 | - | - | - | - | 165 |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 | 18,5 |
| H | 61,5 | 78 | 78 | 86,5 | 86,5 | 99,2 | 99,2 |
| J | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| K | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| I | 22 | 24 | 24 | 27 | 27 | 32 | 32 |
| L | 178 | 198 | 198 | 216 | 216 | 237,7 | 237,7 |
| M | 78,5 | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| N | 99,5 | 104,5 | 104,5 | 114,5 | 114,5 | 123 | 123 |
| O | 29,5 | 38,5 | 38,5 | 38,5 | 38,5 | 48,5 | 48,5 |
| P | 69,5 | 74,5 | 74,5 | 84,5 | 84,5 | 93 | 93 |
| Q | 78,5 | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| R | 31,8 | 36,5 | 36,5 | 41 | 41 | 46 | 46 |
| S | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| T | 148 | 168 | 168 | 186 | 186 | 207,7 | 207,7 |
| U | 216,6 | 239,7 | 239,7 | 283,5 | 283,5 | 300,4 | 300,4 |
| V | 350 | 350 | 350 | 400 | 400 | 400 | 400 |
| W (Gas) | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| X | - | - | - | - | - | - | - |
| Y | 282,3 | 297,1 | 297,1 | 365,6 | 365,6 | 382,9 | 382,9 |
| Z | 503,5 | 518,3 | 518,3 | 636,4 | 636,4 | 653,7 | 653,7 |
| Ch | 27 | 27 | 27 | 36 | 36 | 36 | 36 |
| N° giri* *N°of turns** | 19 | 20 | | 25 | | 26 | |
| Peso *Weight* (Kg) | 17,8 | 23,8 | | 33,6 | | 43 | |
| Aria *Air* (dm3/cycle) | 4,6 | 6,05 | | 9,7 | | 12,9 | |

* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# DANV 3840




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **DANV3840E1600A** |
| Kit guarniz. *Spare Seals* | KGGI0130VX |
| Misura *Size* | DANV 3840 |
| ISO | F16 |
| N° giri* *N°of turns** | 30 |
| Peso *Weight* (Kg) | 75 |
| Aria *Air* (dm3/cycle) | 24,3 |

* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

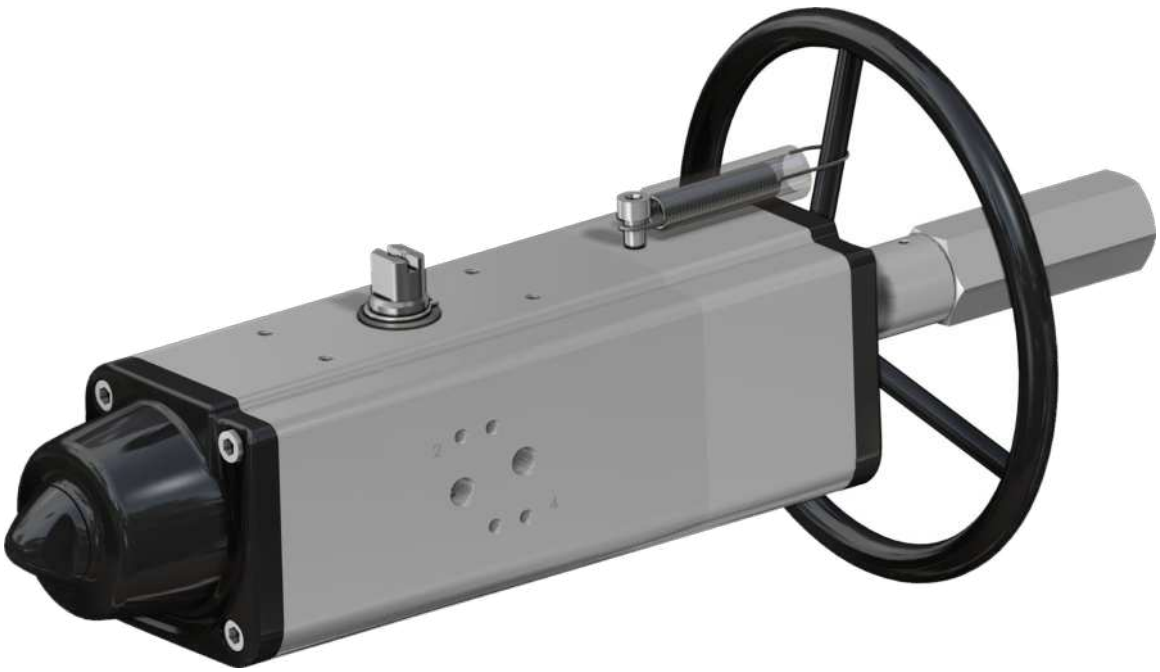
Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

ATTUATORE PNEUMATICO SEMPLICE EFFETTO

# "SR" CON COMANDO MANUALE INTEGRATO

*PNEUMATIC ACTUATOR SPRING RETURN*

# *"SR" WITH INTEGRATED HANDWHEEL*



## DATI TECNICI

- Coppia da 30 Nm a 1920 Nm.
- Flangia d'attacco: EN ISO 5211
  F05 - F07 - F10 - F12 - F14 - F16.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Il momento torcente di ritorno dipende solo dall'azione della molla ed è indipendente dalla pressione di alimentazione. Sono disponibili 4 differenti tarature per la molla; vedi tabella.
- La chiusura automatica per mezzo delle molle avviene in senso orario. In ciascun attuatore la cifra che segue la sigla SR corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

- *Torque from 30 Nm to 1920 Nm.*
- *Mounting flange according to EN ISO 5211*
  *F05 - F07 - F10 - F12 - F14 - F16.*
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°).*
- *Torque: the return torque depends on spring action only notwithstanding the air supply. The spring is provided in four different sizes (see table).*
- *The code numbers after the letters SR, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
  *The actuator automatic closing takes place in clockwise direction by means of its springs.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C. (Versioni speciali: alta temperatura: -20°C +150°C; bassa temperatura: -50°C +60°C).
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata.
- In caso di lubrificazione usare olio non detergente o compatibile con NBR.

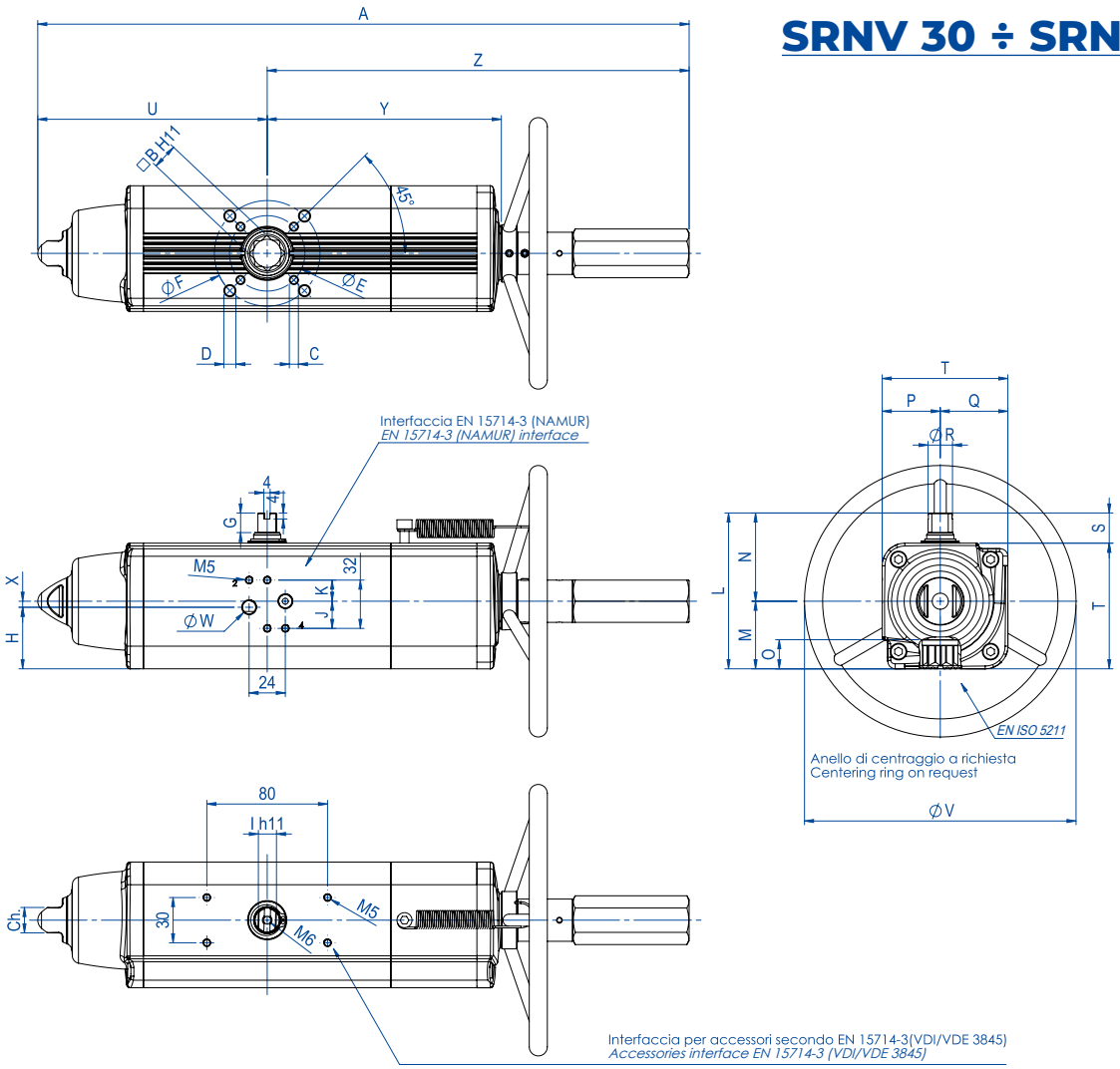
## *WORKING CONDITION*

- *Temperature: from -20°C to +80°C. (Special versions: high temperature: -20°C +150°C; low temperature: -50°C +60°).*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated.*
- *In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

Qualora richiesto l'attuatore pneumatico a quarto di giro di nostra produzione può essere dotato di un azionamento manuale.
Il dispositivo può essere integrato sia nella versione Doppio Effetto che in quella Semplice Effetto.
Per il buon funzionamento del sistema e per l'integrità meccanica del dispositivo è indispensabile accertarsi che l'attuatore pneumatico sia disconnesso dalle linee di alimentazione di aria compressa prima di compiere alcuna manovra impiegando il dispositivo di azionamento manuale.
Il dispositivo di azionamento manuale agisce sulla trasmissione meccanica primaria dell'attuatore pneumatico e a fronte di coppie applicate al volantino conformi alla norma EN 12570 produce coppie in uscita di pari valore della coppia nominale dell'attuatore stesso.

*Once required the quarter turn pneumatic actuator can be equipped with a manual handwheel.*
*The device can be integrated either in Double Acting and Spring Return versions.*
*For the proper functioning of the system and for the mechanical integrity of the device is essential to ensure that the pneumatic actuator is disconnected from the power lines of compressed air before performing any operation using the manual handwheel.*
*The manual handwheel acts on the transmission of the primary mechanical transmission of the pneumatic actuator and with torques applied to the handwheel according to EN 12570 it releases output torque of equal value of the nominal torque of the actuator.*

# SRNV 30 ÷ SRNV 240

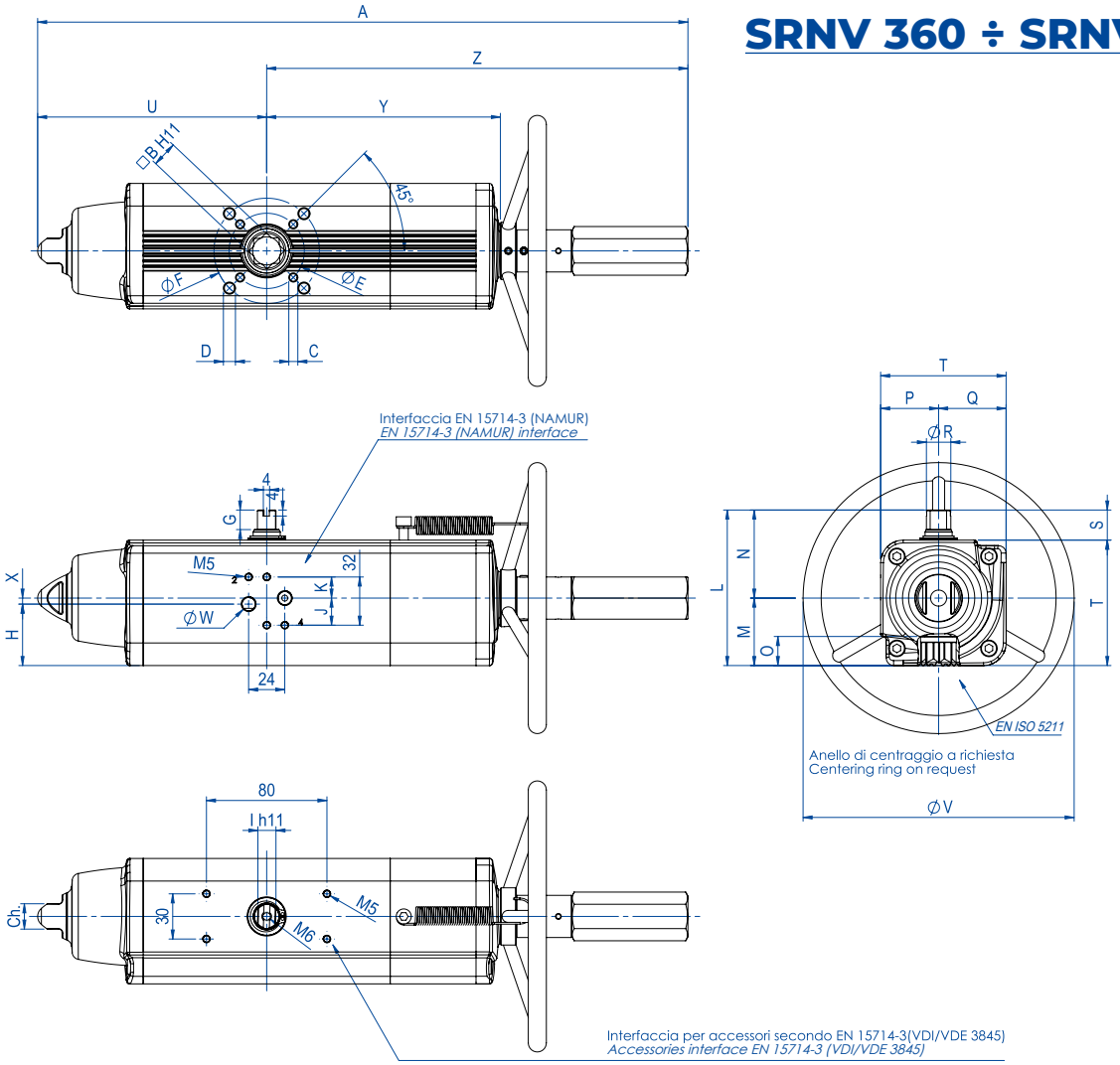



| SCHEDA TECNICA *DATA SHEET* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Codice *Code*** | **SRNV00304015** | **SRNV00304025** | **SRNV00534015** | **SRNV00604015** | **SRNV00904015** | **SRNV01204015** | **SRNV01804015** | **SRNV02404015** |
| Kit guarniz. *Spare Seals* | KGGI0016VX | KGGI0016VX | KGGI0060VX | KGGI0018VX | KGGI0019VX | KGGI0020VX | KGGI0021VX | KGGI0022VX |
| Misura *Size* | SRNV 30 | SRNV 30 | SRNV 53 | SRNV 60 | SRNV 90 | SRNV 120 | SRNV 180 | SRNV 240 |
| ISO | F04 | F05/F07 | F05/F07 | F05/F07 | F07/F10 | F07/F10 | F07/F10 | F10/F12 |
| A | 392,7 | 392,7 | 431,4 | 457,7 | 534,9 | 558,5 | 635 | 700,8 |
| B | 14 | 14 | 17 | 17 | 22 | 22 | 22 | 27 |
| C x depth | M5x8 | M6x9 | M6x9 | M6x9 | M8x12 | M8x12 | M8x12 | M10x15 |
| D x depth | - | M8x12 | M8x12 | M8x12 | M10x15 | M10x15 | M10x15 | M12x18 |
| E | 42 | 50 | 50 | 50 | 70 | 70 | 70 | 102 |
| F | - | 70 | 70 | 70 | 102 | 102 | 102 | 125 |
| G | 13 | 13 | 13 | 13 | 16 | 17 | 19 | 19 |
| H | 33,7 | 33,7 | 40,8 | 42,8 | 52,5 | 56,1 | 58 | 57,4 |
| J | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 16 |
| K | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 16 |
| I | 10 | 10 | 12 | 12 | 15 | 15 | 19 | 19 |
| L | 90,4 | 90,4 | 103,3 | 107 | 137,5 | 141,1 | 148 | 164,9 |
| M | 37,7 | 37,7 | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 |
| N | 52,7 | 52,7 | 58,5 | 60,2 | 81 | 81 | 86 | 92 |
| O | 16,5 | 16,5 | 19,3 | 19,3 | 24,8 | 24,8 | 24,3 | 29,5 |
| P | 32,7 | 32,7 | 38,5 | 40,2 | 51 | 51 | 56 | 62 |
| Q | 37,7 | 37,7 | 44,8 | 46,8 | 56,5 | 60,1 | 62 | 72,9 |
| R | 14,5 | 14,5 | 16,2 | 18 | 20,2 | 22,5 | 25,5 | 29 |
| S | 20 | 20 | 20 | 20 | 30 | 30 | 30 | 30 |
| T | 70,4 | 70,4 | 83,3 | 87 | 107,5 | 111,1 | 118 | 134,9 |
| U | 129,4 | 129,4 | 152,1 | 169,3 | 196,8 | 204,8 | 237 | 260,2 |
| V | 180 | 180 | 180 | 180 | 220 | 220 | 300 | 300 |
| W (Gas) | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/8" | 1/4" |
| X | 4 | 4 | 4 | 4 | 4 | 4 | 4 | - |
| Y | 137,6 | 137,6 | 154,8 | 163,9 | 183,5 | 199,1 | 220,8 | 236,4 |
| Z | 263,3 | 263,3 | 279,3 | 288,4 | 338,1 | 353,7 | 398 | 440,6 |
| Ch | 13 | 13 | 17 | 17 | 22 | 22 | 22 | 27 |
| N° giri* *N°of turns** | 11 | 11 | 13 | 14 | 16 | 18 | 15 | 16 |
| Peso *Weight* (Kg) | 3,2 | 3,2 | 4,5 | 5,3 | 6,8 | 9 | 11,7 | 15,2 |
| Aria *Air* (dm3/cycle) | 0,17 | 0,17 | 0,3 | 0,33 | 0,55 | 0,8 | 1 | 1,5 |

* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# SRNV 360 ÷ SRNV 960

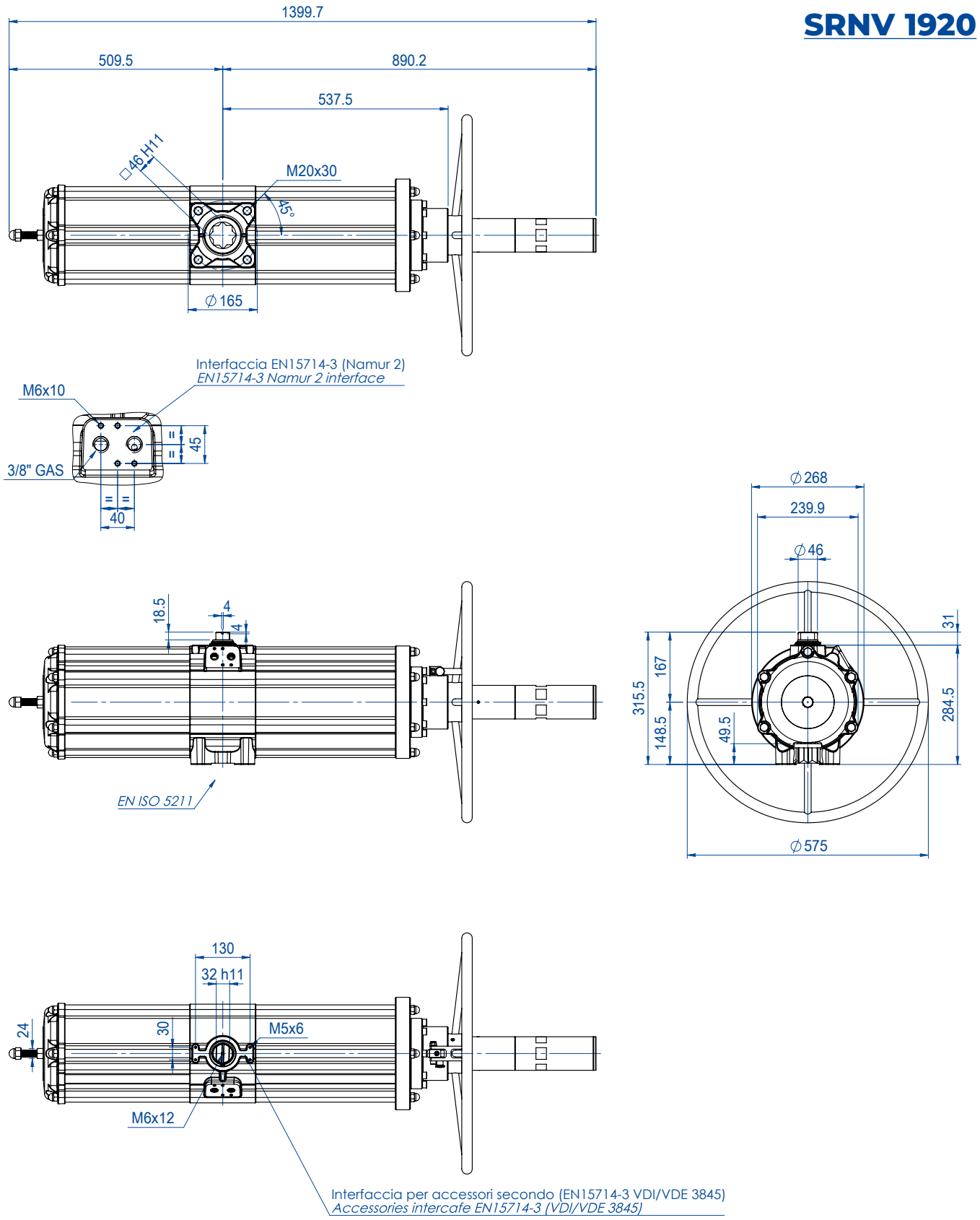



| SCHEDA TECNICA *DATA SHEET* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Codice *Code*** | **SRNV0360401S** | **SRNV0480401S** | **SRNV0480402S** | **SRNV0720401S** | **SRNV0720402S** | **SRNV0960401S** | **SRNV0960402S** |
| Kit guarniz. *Spare Seals* | KGGI0023VX | KGGI0024VX | | KGGI0025VX | | KGGI0026VX | |
| Misura *Size* | SRNV 360 | SRNV 480 | | SRNV 720 | | SRNV 960 | |
| ISO | F10/F12 | F10/F12 | F14 | F14 | F12 | F14 | F12/F16 |
| A | 810,1 | 842,4 | 842,4 | 1035,4 | 1035,4 | 1067,7 | 1067,7 |
| B | 27 | 36 | 36 | 36 | 36 | 46 | 46 |
| C x depth | M10x15 | M10x15 | M16x24 | M16x24 | M12x18 | M16x24 | M12x18 |
| D x depth | M12x18 | M12x18 | - | - | - | - | M20x30 |
| E | 102 | 102 | 140 | 140 | 125 | 140 | 125 |
| F | 125 | 125 | - | - | - | - | 165 |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 | 18,5 |
| H | 61,5 | 78 | 78 | 86,5 | 86,5 | 99,2 | 99,2 |
| J | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| K | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| I | 22 | 24 | 24 | 27 | 27 | 32 | 32 |
| L | 178 | 198 | 198 | 216 | 216 | 237,7 | 237,7 |
| M | 78,5 | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| N | 99,5 | 104,5 | 104,5 | 114,5 | 114,5 | 123 | 123 |
| O | 29,5 | 38,5 | 38,5 | 38,5 | 38,5 | 48,5 | 48,5 |
| P | 69,5 | 74,5 | 74,5 | 84,5 | 84,5 | 93 | 93 |
| Q | 78,5 | 93,5 | 93,5 | 101,5 | 101,5 | 114,7 | 114,7 |
| R | 31,8 | 36,5 | 36,5 | 41 | 41 | 46 | 46 |
| S | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| T | 148 | 168 | 168 | 186 | 186 | 207,7 | 207,7 |
| U | 306,6 | 324,1 | 324,1 | 399 | 399 | 414 | 414 |
| V | 350 | 350 | 350 | 400 | 400 | 400 | 400 |
| W (Gas) | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" | 1/4" |
| X | - | - | - | - | - | - | - |
| Y | 282,3 | 297,1 | 297,1 | 365,6 | 365,6 | 382,9 | 382,9 |
| Z | 503,5 | 518,3 | 518,3 | 636,4 | 636,4 | 653,7 | 653,7 |
| Ch | 27 | 27 | 27 | 36 | 36 | 36 | 36 |
| N° giri* *N°of turns** | 19 | 20 | | 25 | | 26 | |
| Peso *Weight* (Kg) | 19,5 | 28,1 | | 38,8 | | 50,6 | |
| Aria *Air* (dm3/cycle) | 2 | 2,8 | | 4,2 | | 5,9 | |

* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# SRNV 1920




| SCHEDA TECNICA *DATA SHEET* | |
|---|---|
| **Codice *Code*** | **SRNV1920E1608A** |
| Kit guarniz. *Spare Seals* | KGGI0230VX |
| Misura *Size* | SRNV 1920 |
| ISO | F16 |
| N° giri* *N°of turns** | 30 |
| Peso *Weight* (Kg) | 91 |
| Aria *Air* (dm3/cycle) | 12,5 |

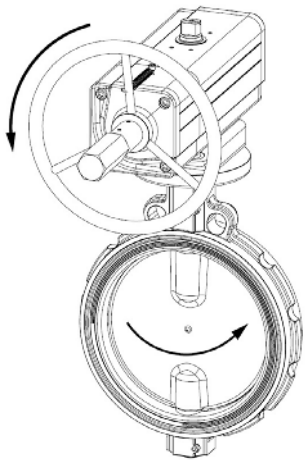
* N° giri teorico per chiu./apert. partendo dalla posizione naturale. **Theorical n° of turns to close/open starting from neutral position.*

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

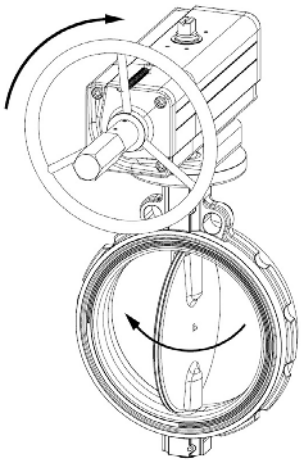
# SCHEMA FUNZIONAMENTO ATTUATORE CON COMANDO MANUALE INTEGRATO
## *WORKING PLANE PNEUMATIC ACTUATOR WITH INTEGRATED HANDWHEEL*

**Prima di azionare manualmente, assicurarsi che l'attuatore sia privo d'aria in pressione.**
***Prior to operate manually, ensure that the actuator is free from pressure.***

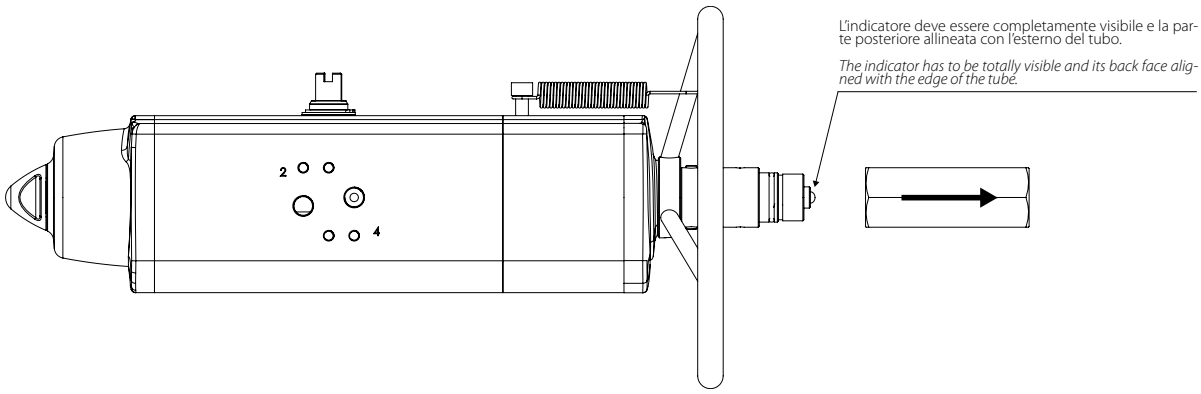
**APRIRE LA VALVOLA**
***TO OPEN THE VALVE***



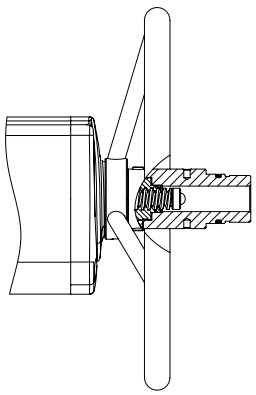
**CHIUDERE LA VALVOLA**
***TO CLOSE THE VALVE***



**Dopo che l'attuatore è stato azionato manualmente, ritornare alla posizione neutrale prima di riprendere l'azionamento pneumatico.**
***When the actuator has been manually operated, return to the neutral position prior to start normal operation.***

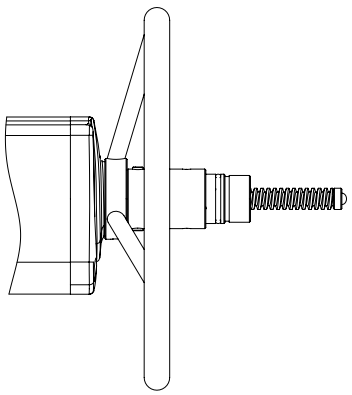



**POSIZIONE NEUTRALE** ***NEUTRAL POSITION***
Con la vite in posizione neutrale, il pistone può muoversi liberamente e l'attuaotre può essere comandato pneumaticamente.
*Whit the screw in neutral position the piston can move freely and the actuator can be driven pnaumatically.*



**AZIONAMENTO MANUALE**
**DANV**: Quando il volantino gira in senso antiorario, spinge la vite e i pistoni verso l'interno. La valvola si apre.
**SRNV**: Quando il volantino gira in senso orario, spinge la vite e i pistoni verso l'interno. La valvola si chiude.

***MANUAL OPERATION***
*DANV: When the handwheel turned counter clockwise, pushes the screw and piston inwards. The valve opens.*
*SRNV: When the handwheel turned clockwise pushes the screw and piston inwards. The valve closes.*



**AZIONAMENTO MANUALE**
**DANV**: Quando il volantino gira in senso orario, spinge la vite e i pistoni verso l'esterno. La valvola si chiude.
**SRNV**: Quando il volantino gira in senso antiorario, spinge la vite e i pistoni verso esterno. La valvola si apre.

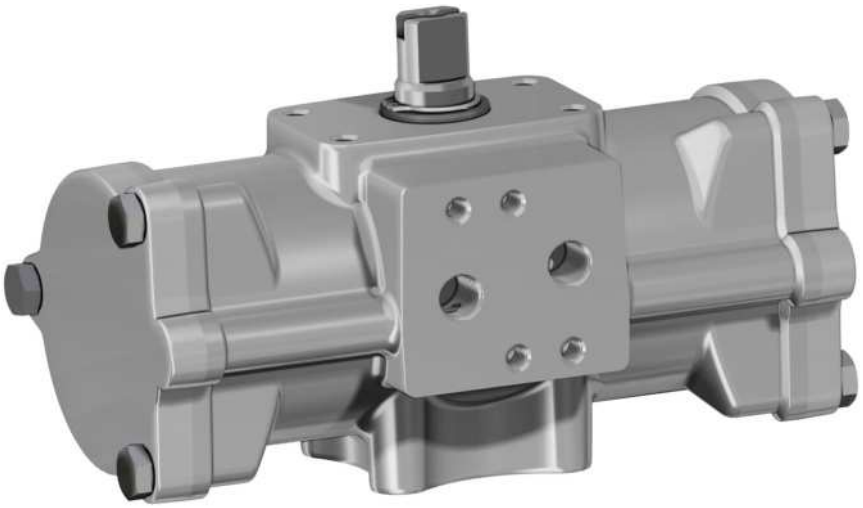
***MANUAL OPERATION***
*DANV: When the handwheel is turned clockwise, the screw and piston are drawn outwards. The valve closes.*
*SRNV: When the handwheel is turned counter clockwise, the screw and the piston are drawn outwards. The valve opens.*

ATTUATORE PNEUMATICO DOPPIO EFFETTO

# "DA" INOX CF8M MICROFUSO

*PNEUMATIC ACTUATOR DOUBLE ACTING*

# *"DA" TYPE INOX PRECISION CASTING CF8M*



## DATI TECNICI

- Coppia da 15 Nm. a 480 Nm.
- Flangia d'attacco: ISO 5211; F03 - F05 - F07 - F10.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Direttamente proporzionale alla pressione di alimentazione; vedi tabella attuatori pneumatici DA catalogo generale.
- In ciascun attuatore la cifra che segue la sigla DA corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- Dalla misura DA 60 è possibile il montaggio diretto di elettrovalvole NAMUR sull'attuatore. Le misure DA15-DA30 necessitano dell'interfaccia NAMUR.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

- *Torque from 15 Nm to 480 Nm.*
- *Mounting flange according to ISO 5211; F03 - F05 - F07 - F10.*
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°).*
- *Torque: directly proportional to the air supply (see table - general catalogue pneumatic actuator DA).*
- *The code numbers after the DA letters, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- *Sizes from DA 60 direct connection with NAMUR solenoid valve. Sizes DA15 - DA30 can be provided with NAMUR plate on request.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITION*

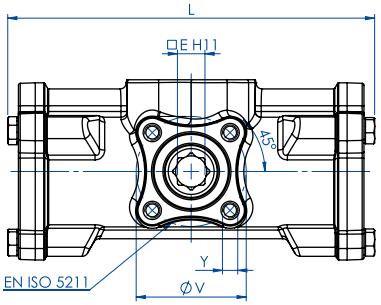
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

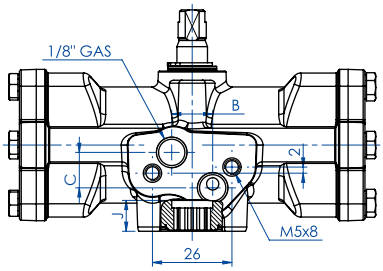
## SCHEDA TECNICA *DATA SHEET*

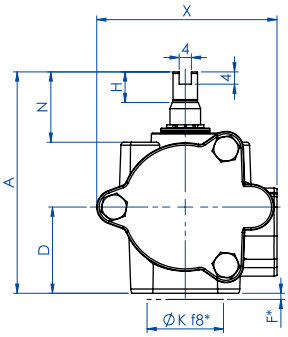
| **Codice** *Code* | | **DA015516S** | **DA030516S** | **DA060516S** | **DA120516S** | **DA240516S** | **DA480516S** |
|---|---|---|---|---|---|---|---|
| Guarnizioni ricambio *Spare seals* | | KGXI0112 | KGXI0114 | KGXI0116 | KGXI0118 | KGXI0120 | KGXI0122 |
| **Misura** *Size* | | **DA 15 F03** | **DA 30 F03** | **DA 60 F03-F05** | **DA 120 F05-F07** | **DA 240 F05-F07** | **DA 480 F07-F10** |
| L | mm. | 120 | 134,6 | 158,4 | 192,9 | 246,8 | 298,4 |
| A | mm. | 72,4 | 80,4 | 92,5 | 116,5 | 136,4 | 160 |
| B | mm. | 13,4 | 11,6 | - | - | - | - |
| C | mm. | 12 | 13 | - | - | - | - |
| D | mm. | 28,2 | 32,7 | 37,7 | 46,2 | 56,2 | 68 |
| □E | mm. | 9 | 9 | 11 | 14 | 17 | 22 |
| F | mm. | 2 | 2 | 2 | 3 | 3 | 3 |
| Ch. G | mm. | 8 | 9 | 10 | 12 | 15 | 19 |
| H | mm. | 10 | 10 | 13 | 13 | 17 | 19 |
| N | mm. | 23 | 23 | 20 | 30 | 30 | 30 |
| X | mm. | 59 | 68 | 80,3 | 94,4 | 117 | 139,7 |
| J | mm. | 10,2 | 10,2 | 12,2 | 16,3 | 19,3 | 24,3 |
| ØK | mm. | 25 | 25 | 25 | 35 | 35 | 55 |
| Q | mm. | 50 | 50 | 50 | 80 | 80 | 80 |
| P | mm. | 25 | 25 | 25 | 30 | 30 | 30 |
| ØU | mm. | - | - | 50 | 70 | 70 | 102 |
| ØV | mm. | 36 | 36 | 36 | 50 | 50 | 70 |
| Y x prof. *depth* | mm. | M5x9 | M5x9 | M5x9 | M6x11 | M6x11 | M8x13 |
| W x prof. *depth* | mm. | - | - | M6x11 | M8x15 | M8x13 | M10x22 |
| aria *air* | $dm^3$/cycle | 0,079 | 0,148 | 0,28 | 0,59 | 1,18 | 2,38 |
| peso *weight* | Kg. | 0,8 | 1,2 | 1,8 | 3,3 | 5,6 | 9,5 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# DA 15 ÷ DA 30

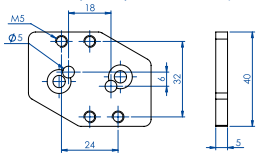


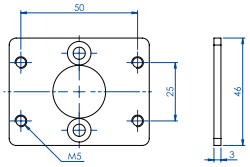

*Anello di centraggio
*Centering ring

Interfaccia EN 15714-3 (Namur) a richiesta
*EN 15714-3 (Namur) interface on request*

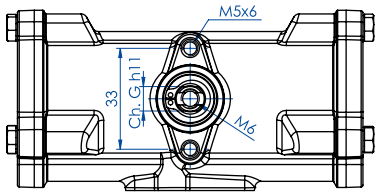



Optional Code KBNI4015

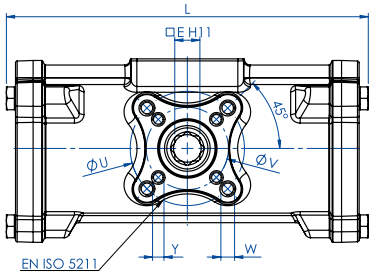
Interfaccia EN 15714-3 (Namur) a richiesta
*EN 15714-3 (Namur) interface on request*

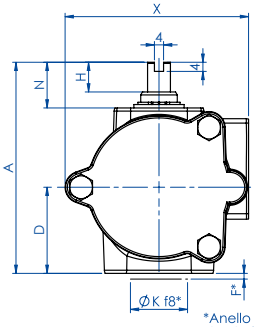



Optional Code KBVI4015

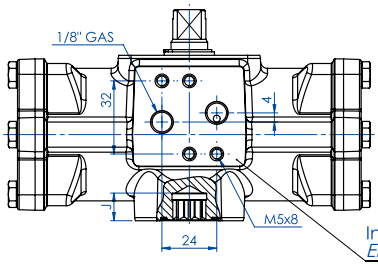



# DA 60 ÷ DA 480

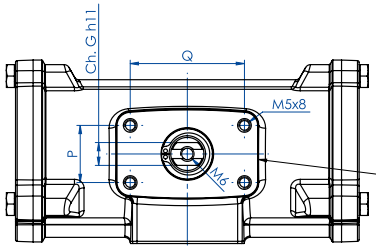



*Anello di centraggio
*Centering ring




Interfaccia EN 15714-3 (Namur)
*EN 15714-3 (Namur) interface*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

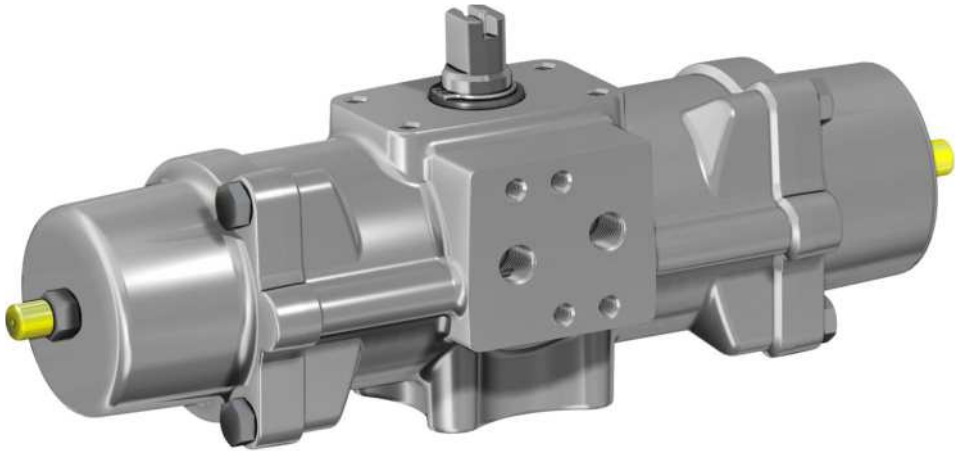
*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

ATTUATORE PNEUMATICO SEMPLICE EFFETTO

# "SR" INOX CF8M MICROFUSO

*PNEUMATIC ACTUATOR SPRING RETURN*

# *"SR" TYPE INOX PRECISION CASTING CF8M*



## DATI TECNICI

- Coppia da 15 Nm a 240 Nm.
- Flangia d'attacco: ISO 5211; F03 - F05 - F07 - F10.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Il momento torcente di ritorno dipende solo dall'azione della molla ed è indipendente dalla pressione di alimentazione. Sono disponibili 4 differenti tarature per la molla; vedi tabella attuatori pneumatici SR.
- La chiusura automatica per mezzo delle molle avviene in senso orario. In ciascun attuatore la cifra che segue la sigla SR corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- Dalla misura SR 30 è possibile il montaggio diretto di elettrovalvole NAMUR sull'attuatore. La misura SR 15 necessita dell'interfaccia NAMUR.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

- *Torque from 15 Nm to 240 Nm.*
- *Mounting flange according to ISO 5211; F03 - F05 - F07 - F10.*
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°)*
- *Torque: the return torque depends on spring action only notwithstanding the air supply. The spring is provided in four different sizes (see table - general catalogue pneumatic actuator SR). The code numbers after the letters SR, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- *The actuator automatic closing takes place in clockwise direction by means of its springs.*
- *Sizes from SR 30 direct connection with NAMUR solenoid valve. Size SR15 can be provided with NAMUR plate on request*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITION*

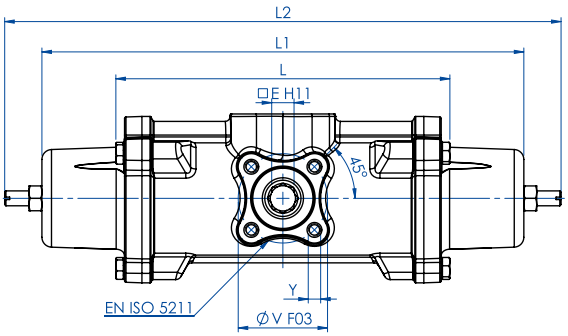
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

**SCHEDA TECNICA *DATA SHEET***

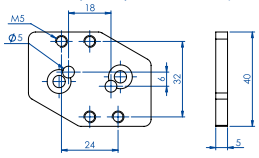
| **Codice *Code*** | | **SR015516S** | **SR030516S** | **SR060516S** | **SR120516S** | **SR240516S** |
|---|---|---|---|---|---|---|
| Guarnizioni ricambio *Spare seals* | | KGXI0114 | KGXI0116 | KGXI0118 | KGXI0120 | KGXI0122 |
| **Misura *Size*** | | **SR 15 F03** | **SR 30 F03-F05** | **SR 60 F05-F07** | **SR 120 F05-F07** | **SR 240 F07-F10** |
| L | mm. | 134,6 | 158,4 | 192,9 | 246,8 | 298,4 |
| L1 | mm. | 194,2 | 217,9 | 287,5 | 341,2 | 421 |
| L2 | mm. | 224 | 246,2 | 316,5 | 376,2 | 463,9 |
| A | mm. | 80,4 | 92,5 | 116,5 | 136,4 | 160 |
| D | mm. | 32,7 | 37,7 | 46,2 | 56,2 | 68 |
| □E | mm. | 9 | 11 | 14 | 17 | 22 |
| F | mm. | 2 | 2 | 3 | 3 | 3 |
| Ch. G | mm. | 9 | 10 | 12 | 15 | 19 |
| H | mm. | 10 | 13 | 13 | 17 | 19 |
| N | mm. | 23 | 20 | 30 | 30 | 30 |
| X | mm. | 68 | 80,3 | 94,4 | 117 | 139,7 |
| J | mm. | 10,2 | 12,2 | 16,3 | 19,3 | 24,3 |
| ØK | mm. | 25 | 25 | 35 | 35 | 55 |
| Q | mm. | 50 | 50 | 80 | 80 | 80 |
| P | mm. | 25 | 25 | 30 | 30 | 30 |
| ØU | mm. | - | 50 | 70 | 70 | 102 |
| ØV | mm. | 36 | 36 | 50 | 50 | 70 |
| Y x prof. *depth* | mm. | M5x9 | M5x9 | M6x11 | M6x11 | M8x13 |
| W x prof. *depth* | mm. | - | M6x11 | M8x15 | M8x13 | M10x22 |
| aria *air* $dm^3$/*cycle* | | 0,086 | 0,16 | 0,33 | 0,7 | 1,38 |
| peso *weight* | Kg. | 1,6 | 2,4 | 4,5 | 7,6 | 12,9 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

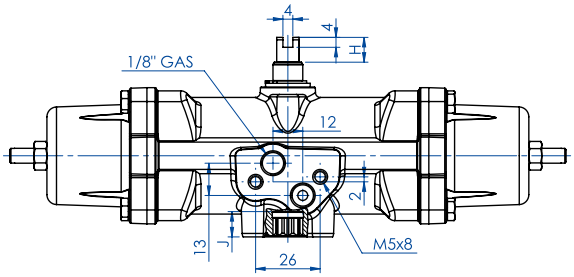
# SR 15

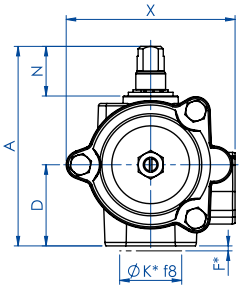



Interfaccia EN 15714-3 (Namur) a richiesta
*EN 15714-3 (Namur) interface on request*



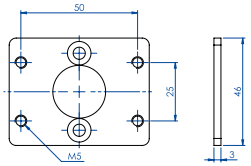

Optional Code KBNI4015



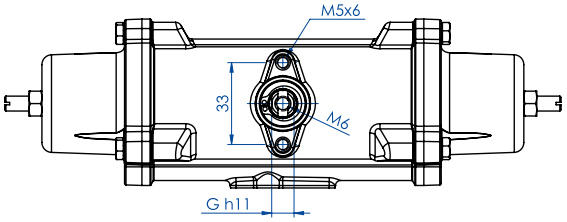




*Anello di centraggio
**Centering ring*

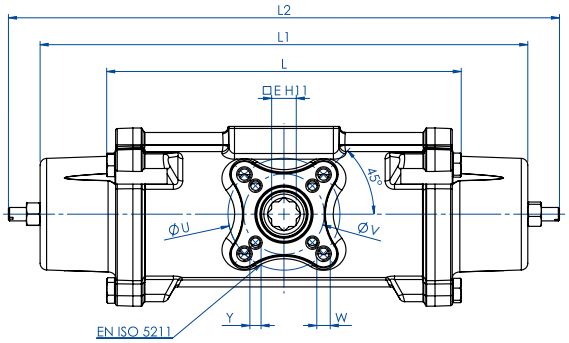
Interfaccia EN 15714-3 (Namur) a richiesta
*EN 15714-3 (Namur) interface on request*

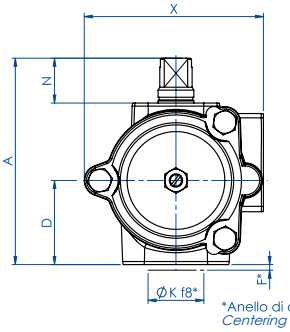



Optional Code KBVI4015

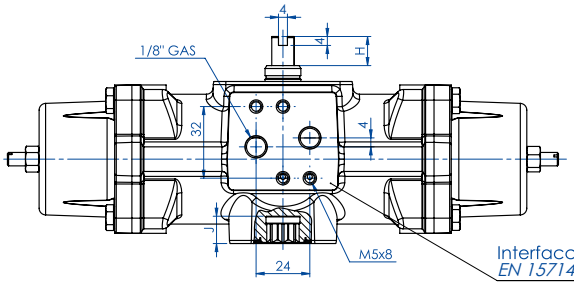



# SR 30 ÷ SR 240

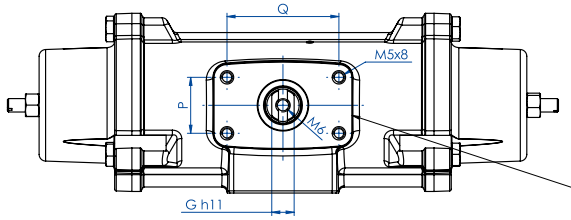



*Anello di centraggio
**Centering ring*




Interfaccia EN 15714-3 (Namur)
*EN 15714-3 (Namur) interface*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

ATTUATORE PNEUMATICO DOPPIO EFFETTO

# "DA" INOX 316 DA BARRA

*PNEUMATIC ACTUATOR DOUBLE ACTING*

# *"DA" TYPE INOX 316 FROM SOLID BAR*



**DATI TECNICI**

- Coppia da 720 Nm. a 1920 Nm.
- Flangia d'attacco: EN ISO 5211
  F10 - F12 - F14 - F16.
- Conforme alle EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Direttamente proporzionale alla pressione di alimentazione; vedi tabella attuatori pneumatici DA catalogo generale.
- In ciascun attuatore la cifra che segue la sigla DA corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

***TECHNICAL FEATURES***

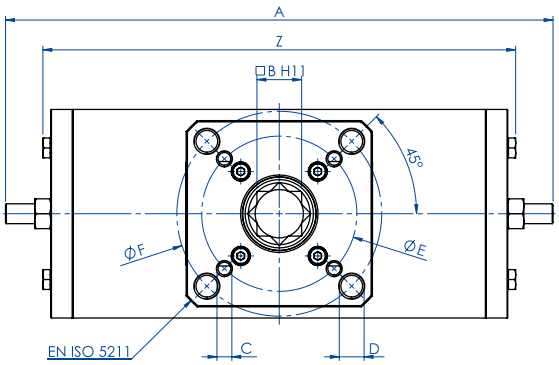
- *Torque from 720 Nm to 1920 Nm.*
- *Mounting flange according to EN ISO 5211*
  F10 - F12 - F14 - F16.
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°) .*
- *Torque: directly proportional to the air supply (see table - general catalogue pneumatic actuator DA).*
- *The code numbers after the DA letters, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

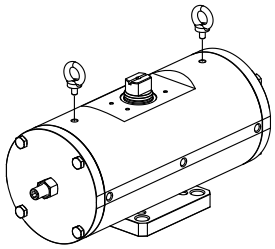
**CONDIZIONI DI ESERCIZIO**

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

***WORKING CONDITION***

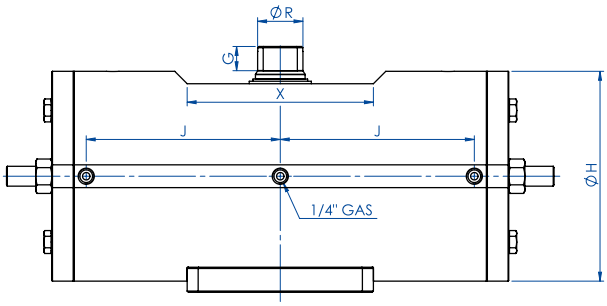
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

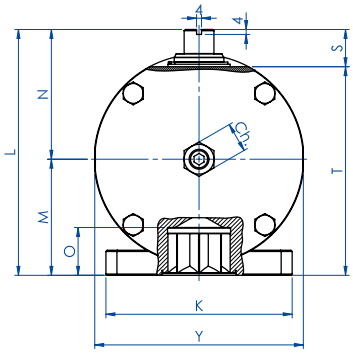


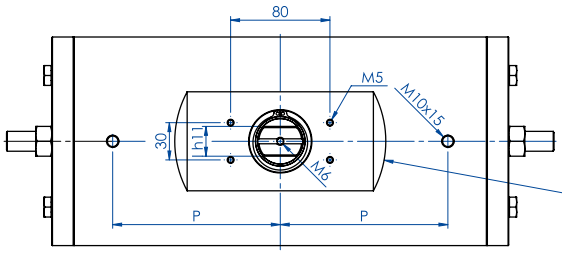



*I punti di sollevamento sono progettati per il solo attuatore*
*Per il sollevamento utilizzare due golfari M10*

*For the lifting use n° 2 eyebolts M10*
*Lifting point are designed for actuator only*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

| SCHEDA TECNICA *DATA SHEET* | | | | | |
|---|---|---|---|---|---|
| **Codice *Code*** | **DA0720416S** | **DA0960416S** | **DA1440424S** | **DA1440416S** | **DA1920416S** |
| Guarnizioni ricambio *Spare seals* | KGXI0023 | KGXI0024 | KGXI0025 | KGXI0025 | KGXI0026 |
| **Misura *Size*** | **DA0720 F10/F12** | **DA0960 F12/F16** | **DA1440 F12** | **DA1440 F14** | **DA1920 F12/F16** |
| **A** | 401,5 | 441 | 524,8 | 524,8 | 562 |
| **□B** | 27 | 36 | 36 | 36 | 46 |
| **C x depth** | M10x11,5 | M12x20 | M12x18 | M16x18 | M12x23 |
| **D x depth** | M12x11,5 | M20x20 | - | - | M20x23 |
| **ØE** | 102 | 125 | 125 | 140 | 125 |
| **ØF** | 125 | 165 | - | - | 165 |
| **G** | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 |
| **ØH** | 156 | 169 | 188 | 188 | 211 |
| **I** | 22 | 24 | 27 | 27 | 32 |
| **J** | 138,5 | 156,3 | 179,5 | 179,5 | 192 |
| **K** | 115 | 150 | 130 | 130 | 150 |
| **L** | 178 | 198 | 216 | 216 | 237,7 |
| **M** | 78,5 | 93,5 | 101,5 | 101,5 | 114,7 |
| **N** | 99,5 | 104,5 | 114,5 | 114,5 | 123 |
| **O** | 29,5 | 38,5 | 38,5 | 38,5 | 48,5 |
| **P** | 116 | 135 | 160 | 160 | 160 |
| **ØR** | 31,8 | 36,5 | 41 | 41 | 46 |
| **S** | 30 | 30 | 30 | 30 | 30 |
| **T** | 148 | 168 | 186 | 186 | 207,7 |
| **X** | 150 | 150 | 150 | 150 | 150 |
| **Y** | 155 | 168 | 187 | 187 | 209 |
| **Z** | 345,8 | 381 | 433,8 | 433,8 | 469 |
| **Ch** | 24 | 24 | 30 | 30 | 30 |
| **Weight (Kg)** | 30 | 40 | 50,5 | 50,5 | 73 |
| **Air (dm3/cycle) (l/cycle)** | 3,50 | 4,9 | 7,60 | 7,60 | 10,2 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

ATTUATORE PNEUMATICO SEMPLICE EFFETTO

# "SR" INOX 316 DA BARRA

*PNEUMATIC ACTUATOR SPRING RETURN*

# *"SR" TYPE INOX 316 FROM SOLID BAR*



## DATI TECNICI

- Coppia da 360 Nm. a 960 Nm.
- Flangia d'attacco: EN ISO 5211; F10 - F12 - F14 - F16.
- Conforme alla EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Il momento torcente di ritorno dipende solo dall'azione della molla ed è indipendente dalla pressione di alimentazione. Sono disponibili 4 differenti tarature per la molla; vedi tabella attuatori pneumatici SR catalogo generale.
- La chiusura automatica per mezzo delle molle avviene in senso orario. In ciascun attuatore la cifra che segue la sigla SR corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

## *TECHNICAL FEATURES*

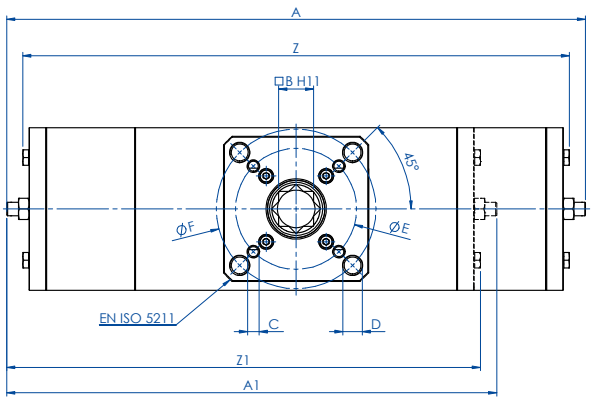
- *Torque from 360 Nm to 960 Nm.*
- *Mounting flange according to EN ISO 5211;* F10 - F12 - F14 - F16.
- *In compliance with EN 15714-3.*
- *Rotation angle: 92° (-1°, +91°).*
- *Torque: the return torque depends on spring action only notwithstanding the air supply. The spring is provided in four different sizes (see table - general catalogue pneumatic actuator SR).*
- *The code numbers after the letters SR, always correspond to the breakaway torque in Nm by 5,6 bar air supply. The actuator automatic closing takes place in clockwise direction by means of its springs.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

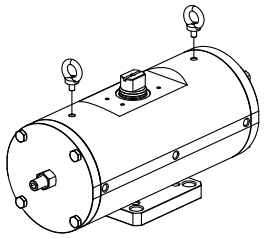
## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITION*

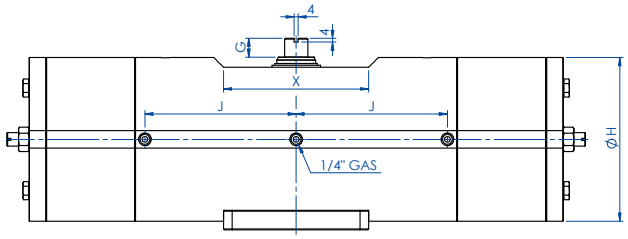
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

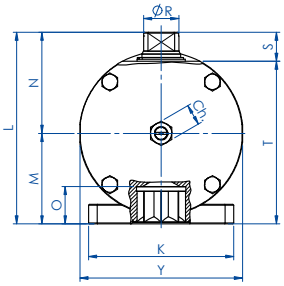


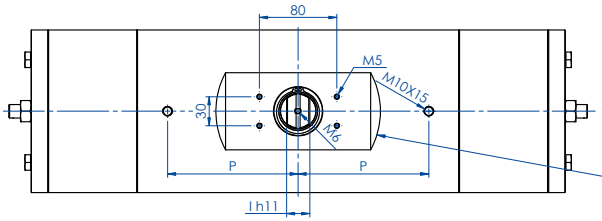



*I punti di sollevamento sono progettati per il solo attuatore*
*Per il sollevamento utilizzare due golfari M10*

*For the lifting use n° 2 eyebolts M10*
*Lifting point are designed for actuator only*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

## SCHEDA TECNICA *DATA SHEET*

| **Codice *Code*** | **SR0360416S** | **SR0480416S** | **SR0720424S** | **SR0720416S** | **SR0960416S** |
|---|---|---|---|---|---|
| Guarnizioni ricambio *Spare seals* | KGXI0023 | KGXI0024 | KGXI0025 | KGXI0025 | KGXI0026 |
| **Misura *Size*** | **SR0360 F10/F12** | **SR0480 F12/F16** | **SR0720 F12** | **SR0720 F14** | **SR0960 F12/F16** |
| A | 565,5 | 598 | 736,8 | 736,8 | 769,6 |
| A1 (2,8 Bar) | 483,5 | 506 | 630,8 | 630,8 | 645 |
| □B | 27 | 36 | 36 | 36 | 46 |
| C x depth | M10x11,5 | M12x20 | M12x18 | M16x18 | M12x23 |
| D x depth | M12x11,5 | M20x20 | - | - | M20x23 |
| ØE | 102 | 125 | 125 | 140 | 125 |
| ØF | 125 | 165 | - | - | 165 |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 |
| ØH | 156 | 169 | 188 | 188 | 211 |
| I | 22 | 24 | 27 | 27 | 32 |
| J | 138,5 | 156,3 | 179,5 | 179,5 | 192 |
| K | 115 | 150 | 130 | 130 | 150 |
| L | 178 | 198 | 216 | 216 | 237,7 |
| M | 78,5 | 93,5 | 101,5 | 101,5 | 114,7 |
| N | 99,5 | 104,5 | 114,5 | 114,5 | 123 |
| O | 29,5 | 38,5 | 38,5 | 38,5 | 48,5 |
| P | 116 | 135 | 160 | 160 | 160 |
| Q | - | - | - | - | - |
| Q2 | - | - | - | - | - |
| ØR | 31,8 | 36,5 | 41 | 41 | 46 |
| S | 30 | 30 | 30 | 30 | 30 |
| S2 | - | - | - | - | - |
| T | 148 | 168 | 186 | 186 | 207,7 |
| T2 | - | - | - | - | - |
| X | 150 | 150 | 150 | 150 | 150 |
| Y | 155 | 168 | 187 | 187 | 209 |
| Z | 525,8 | 565 | 685 | 685 | 718,4 |
| Z1 (2,8 Bar) | 435,8 | 473 | 559,4 | 559,4 | 593,8 |
| Ch | 22 | 22 | 24 | 24 | 24 |
| Ch1 (2,8 Bar) | 24 | 24 | 30 | 30 | 30 |
| Weight (Kg) | 45,5 | 60 | 82,5 | 82,5 | 112 |
| Weight (2,8 Bar) (Kg) | 37,5 | 51 | 77 | 77 | 96 |
| Air (dm3/cycle) (l/cycle) | 2,00 | 2,8 | 4,20 | 4,20 | 5,9 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

ATTUATORE PNEUMATICO DOPPIO EFFETTO

# "DA" ACCIAIO AL CARBONIO A105

*PNEUMATIC ACTUATOR DOUBLE ACTING*

# *"DA" TYPE CARBON STEEL A105*



**DATI TECNICI**

- Coppia da 720 Nm. a 1920 Nm.
- Flangia d'attacco: EN ISO 5211
  F10 - F12 - F14 - F16.
- Conforme alle EN 15714-3.
- Angolo di rotazione: 92° (-1° +91°).
- Momento torcente: Direttamente proporzionale alla pressione di alimentazione; vedi tabella attuatori pneumatici DA.
- In ciascun attuatore la cifra che segue la sigla DA corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- Attuatori con verniciatura epossidica.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

***TECHNICAL FEATURES***

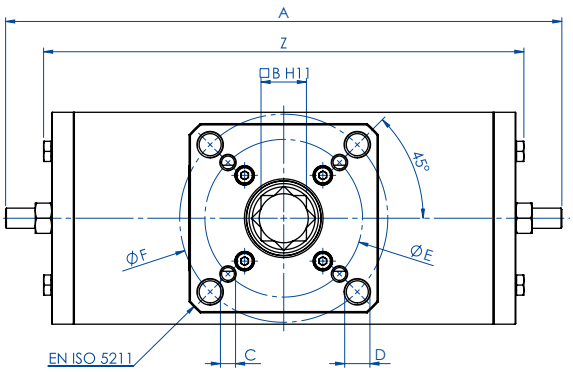
- *Torque from 720 Nm to 1920 Nm.*
- *Mounting flange according to EN ISO 5211*
  F03 - F05 - F07 - F10 - F12 - F16.
- *In compliance with EN 15714-3.*
- *Rotation angle 92° (-1° +91°).*
- *Torque: directly proportional to the air supply (see table pneumatic actuator DA).*
- *The code numbers after the DA letters, always correspond to the breakaway torque in Nm by 5,6 bar air supply.*
- *Actuator with epoxy painting.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

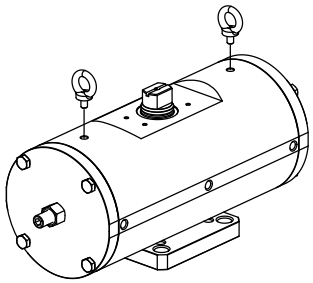
**CONDIZIONI DI ESERCIZIO**

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

***WORKING CONDITION***

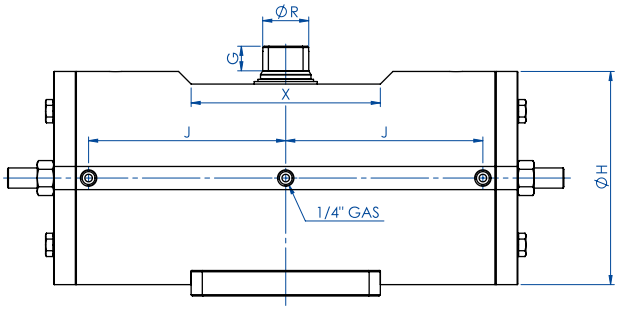
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

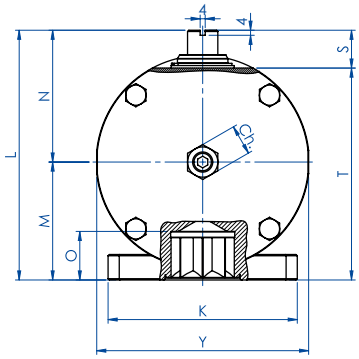


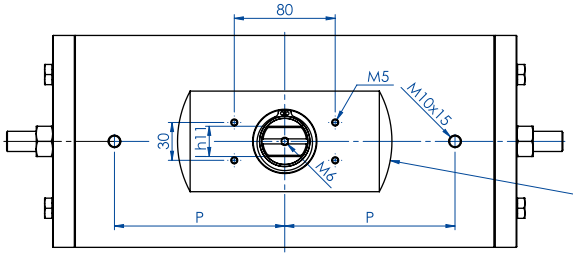



*I punti di sollevamento sono progettati per il solo attuatore*
*Per il sollevamento utilizzare due golfari M10*

*For the lifting use n° 2 eyebolts M10*
*Lifting point are designed for actuator only*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

| SCHEDA TECNICA *DATA SHEET* | | | | | |
|---|---|---|---|---|---|
| **Codice *Code*** | **DAC0720416S** | **DAC0960416S** | **DAC1440424S** | **DAC1440416S** | **DAC1920416S** |
| Guarnizioni ricambio *Spare seals* | KGXI0023 | KGXI0024 | KGXI0025 | KGXI0025 | KGXI0026 |
| **Misura *Size*** | **DAC0720 F10/F12** | **DAC0960 F12/F16** | **DAC1440 F12** | **DAC1440 F14** | **DAC1920 F12/F16** |
| A | 401,5 | 441 | 524,8 | 524,8 | 562 |
| □B | 27 | 36 | 36 | 36 | 46 |
| C x depth | M10x11,5 | M12x20 | M12x18 | M16x18 | M12x23 |
| D x depth | M12x11,5 | M20x20 | - | - | M20x23 |
| ØE | 102 | 125 | 125 | 140 | 125 |
| ØF | 125 | 165 | - | - | 165 |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 |
| ØH | 156 | 169 | 188 | 188 | 211 |
| I | 22 | 24 | 27 | 27 | 32 |
| J | 138,5 | 156,3 | 179,5 | 179,5 | 192 |
| K | 115 | 150 | 130 | 130 | 150 |
| L | 178 | 198 | 216 | 216 | 237,7 |
| M | 78,5 | 93,5 | 101,5 | 101,5 | 114,7 |
| N | 99,5 | 104,5 | 114,5 | 114,5 | 123 |
| O | 29,5 | 38,5 | 38,5 | 38,5 | 48,5 |
| P | 116 | 135 | 160 | 160 | 160 |
| ØR | 31,8 | 36,5 | 41 | 41 | 46 |
| S | 30 | 30 | 30 | 30 | 30 |
| T | 148 | 168 | 186 | 186 | 207,7 |
| X | 150 | 150 | 150 | 150 | 150 |
| Y | 155 | 168 | 187 | 187 | 209 |
| Z | 345,8 | 381 | 433,8 | 433,8 | 469 |
| Ch | 24 | 24 | 30 | 30 | 30 |
| Weight (Kg) | 30 | 40 | 50,5 | 50,5 | 73 |
| Air (dm3/cycle) (l/cycle) | 3,50 | 4,9 | 7,60 | 7,60 | 10,2 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

ATTUATORE PNEUMATICO SEMPLICE EFFETTO

# "SR" ACCIAIO AL CARBONIO A105

*PNEUMATIC ACTUATOR SPRING RETURN*

# *"SR" TYPE CARBON STEEL A105*



### DATI TECNICI

- Coppia da 360 Nm. a 960 Nm.
- Flangia d'attacco: EN ISO 5211; F10 - F12 - F14 - F16.
- Conforme alle EN 15714-3.
- Angolo di rotazione: 92° (-1°, +91°).
- Momento torcente: Il momento torcente di ritorno dipende solo dall'azione della molla ed è indipendente dalla pressione di alimentazione. Sono disponibili 4 differenti tarature per la molla; vedi tabella attuatori pneumatici SR catalogo generale.
- La chiusura automatica per mezzo delle molle avviene in senso orario. In ciascun attuatore la cifra che segue la sigla SR corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.
- Attuatori con verniciatura epossidica.
- **A richiesta: Versione ATEX in conformità alla direttiva 2014/34/UE.**

### *TECHNICAL FEATURES*

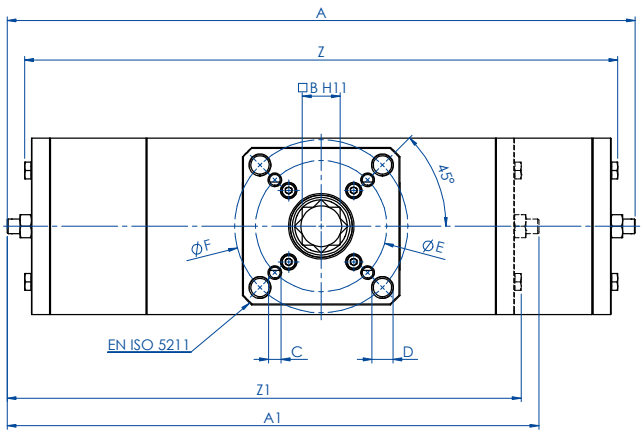
- *Torque from 360 Nm to 960 Nm.*
- *Mounting flange according to EN ISO 5211;* F10 - F12 - F14 - F16.
- *In compliance with EN 15714-3.*
- *Rotation angle* 92° (-1°, +91°).
- *Torque: the return torque depends on spring action only notwithstanding the air supply. The spring is provided in four different sizes (see table - general catalogue pneumatic actuator SR).*
- *The code numbers after the letters SR, always correspond to the breakaway torque in Nm by 5,6 bar air supply. The actuator automatic closing takes place in clockwise direction by means of its springs.*
- *Actuator with epoxy painting.*
- ***On request: ATEX version in conformity with directive 2014/34/EU.***

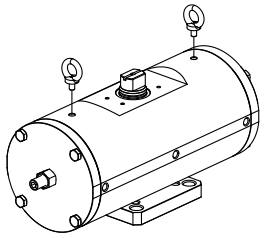
### CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

### *WORKING CONDITION*

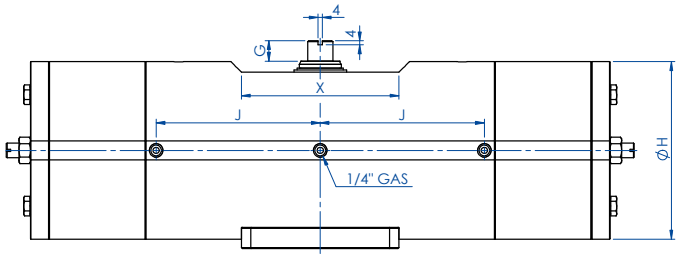
- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

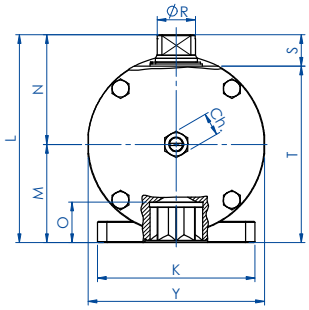


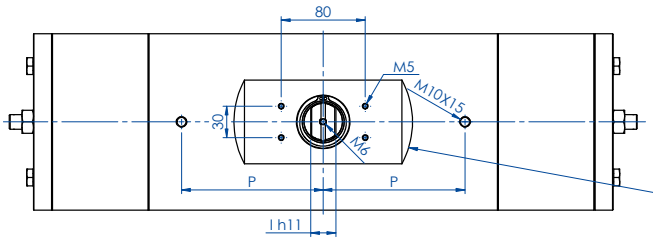



*I punti di sollevamento sono progettati per il solo attuatore*
*Per il sollevamento utilizzare due golfari M10*

*For the lifting use n° 2 eyebolts M10*
*Lifting point are designed for actuator only*




Interfaccia per accessori
EN 15714-3 (VDI/VDE 3845)

*Accessories interface*
*EN 15714-3 (VDI/VDE 3845)*

## SCHEDA TECNICA *DATA SHEET*

| **Codice *Code*** | **SRC0360416S** | **SRC0480416S** | **SRC0720424S** | **SRC0720416S** | **SRC0960416S** |
|---|---|---|---|---|---|
| Guarnizioni ricambio *Spare seals* | KGXI0023 | KGXI0024 | KGXI0025 | KGXI0025 | KGXI0026 |
| **Misura *Size*** | **SRC0360 F10/F12** | **SRC0480 F12/F16** | **SRC0720 F12** | **SRC0720 F14** | **SRC0960 F12/F16** |
| A | 565,5 | 598 | 736,8 | 736,8 | 769,6 |
| A1 (2,8 Bar) | 483,5 | 506 | 630,8 | 630,8 | 645 |
| □B | 27 | 36 | 36 | 36 | 46 |
| C x depth | M10x11,5 | M12x20 | M12x18 | M16x18 | M12x23 |
| D x depth | M12x11,5 | M20x20 | - | - | M20x23 |
| ØE | 102 | 125 | 125 | 140 | 125 |
| ØF | 125 | 165 | - | - | 165 |
| G | 19,5 | 19,5 | 19,5 | 19,5 | 18,5 |
| ØH | 156 | 169 | 188 | 188 | 211 |
| I | 22 | 24 | 27 | 27 | 32 |
| J | 138,5 | 156,3 | 179,5 | 179,5 | 192 |
| K | 115 | 150 | 130 | 130 | 150 |
| L | 178 | 198 | 216 | 216 | 237,7 |
| M | 78,5 | 93,5 | 101,5 | 101,5 | 114,7 |
| N | 99,5 | 104,5 | 114,5 | 114,5 | 123 |
| O | 29,5 | 38,5 | 38,5 | 38,5 | 48,5 |
| P | 116 | 135 | 160 | 160 | 160 |
| ØR | 31,8 | 36,5 | 41 | 41 | 46 |
| S | 30 | 30 | 30 | 30 | 30 |
| T | 148 | 168 | 186 | 186 | 207,7 |
| X | 150 | 150 | 150 | 150 | 150 |
| Y | 155 | 168 | 187 | 187 | 209 |
| Z | 525,8 | 565 | 685 | 685 | 718,4 |
| Z1 (2,8 Bar) | 435,8 | 473 | 559,4 | 559,4 | 593,8 |
| Ch | 22 | 22 | 24 | 24 | 24 |
| Ch1 (2,8 Bar) | 24 | 24 | 30 | 30 | 30 |
| Weight (Kg) | 45,5 | 60 | 82,5 | 82,5 | 112 |
| Weight (2,8 Bar) (Kg) | 37,5 | 51 | 77 | 77 | 96 |
| Air (dm3/cycle) (l/cycle) | 2,00 | 2,8 | 4,20 | 4,20 | 5,9 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

# ATTUATORE PNEUMATICO DOSATORE IN ALLUMINIO
# *ALUMINIUM TWO STAGE PNEUMATIC ACTUATOR*



## DATI TECNICI

- Angolo di rotazione dosaggio: max 45° .
- Angolo di rotazione attuatore: 92° (-1°, +91°).
- Momento torcente: vedi tabella degli attuatori relativi.
- In ciascun dosatore la cifra che segue la sigla DDN corrisponde al valore della coppia di spunto in Nm. alla pressione di 5,6 bar.

## *TECHNICAL FEATURES*

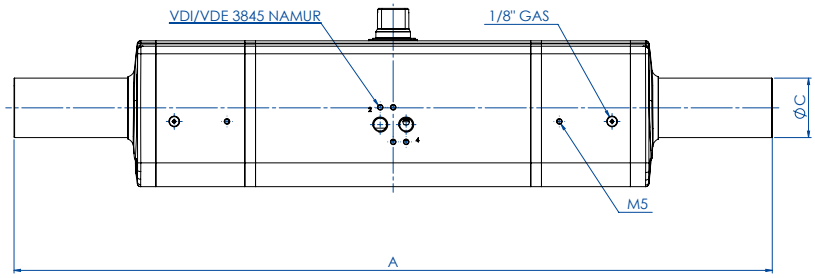
- *Metering rotation angle: 45° max.*
- *Max. rotation angle: 92° (-1°, +91°).*
- *Torque (see the corresponding actuator tables).*
- *The code numbers after the letters DDN, always correspond to the breakaway torque in Nm at 5,6 bar air supply.*

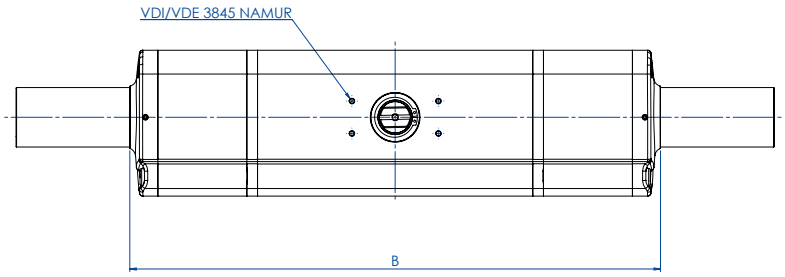
## CONDIZIONI DI ESERCIZIO

- Temperatura: da -20°C a +80°C.
- Pressione nominale: 5,6 bar; massima di esercizio 8,4 bar.
- Fluido di alimentazione: aria compressa filtrata secca non necessariamente lubrificata. In caso di lubrificazione usare olio non detergente o compatibile con NBR.

## *WORKING CONDITION*

- *Temperature: from -20°C to +80°C.*
- *Air supply: 5,6 bar; maximum 8,4 bar.*
- *Actuating media: filtered dry compressed air, not necessarily lubricated. In case of lubricated air, either non detergent oil or NBR compatible oil, must be used.*

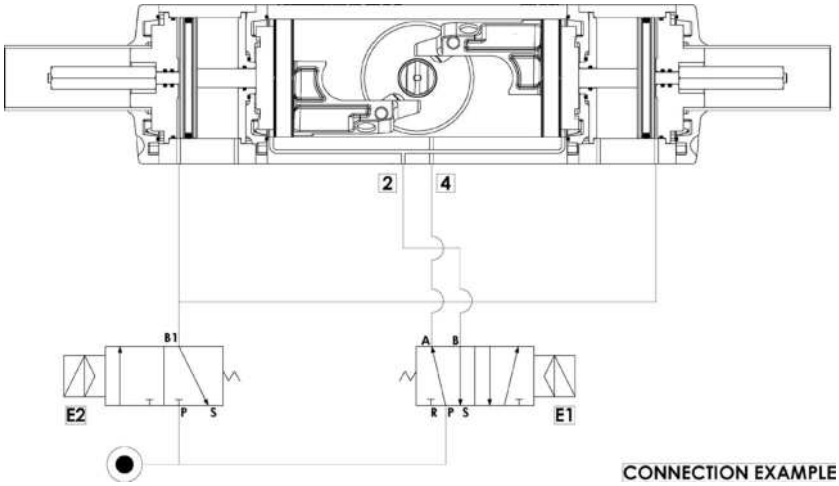



| SCHEDA TECNICA *DATA SHEET* | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Codice** *Code* | **DDN030401S** | **DDN030402S** | **DDN060401S** | **DDN060402S** | **DDN106401S** | **DDN240401S** | **DDN480401S** |
| **Misura** *Size* | **DDN 30 F03-F05** | **DDN 30 F04** | **DDN 60 F04** | **DDN 60 F05-F07** | **DDN 106 F05-F07** | **DDN 240 F07-F10** | **DDN 480 F10-F12** |
| A [mm] | 355 | 355 | 423 | 423 | 502 | 589 | 702 |
| B [mm] | 245 | 245 | 278 | 278 | 345 | 416 | 491 |
| C [mm] | 29 | 29 | 29 | 29 | 29 | 40 | 55 |
| peso *weight* Kg. | 1,8 | 1,8 | 2,8 | 2,8 | 4,7 | 8 | 14,3 |

Per la tabella dei componenti vedi "**Indice tabelle componenti attuatori pneumatici**" a pag. 540. ***"Pneumatic Actuator Components' Table"*** *to be found in the Index on page 541.*

## SCHEMA DI FUNZIONAMENTO *WORKING PLANE*




### Condizioni generali di utilizzo e principio funzionamento

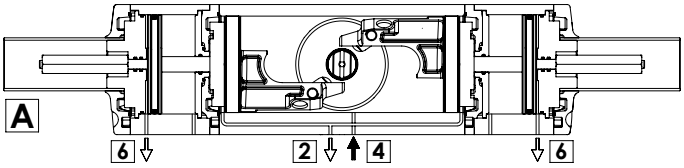
**UTILIZZO**: Riempitura-Dosaggio di materie liquide o semisolide tramite il dispositivo di ponderazione.
Attuatore a doppia azione per dosaggi grossolani o fini.
**ESECUZIONE**: Con attuatore a doppio effetto a norma EN ISO5211.
**METODO DI LAVORO:** Il modello base é l'attuatore OMAL. Ad esso sono stati aggiunti due cilindri al cui interno i pistoni, solidali ad un asta, la spingono longitudinalmente facendo da fermo ai pistoni dell'attuatore impedendo così la completa rotazione del meccanismo ed incidendo sulla portata totale della valvola. Il dispositivo funziona tramite le due elettrovalvole E1 = 5/2; E2 =3/2. Dove E1 comanda l'attuatore mentre E2 i due cilindri esterni. Con riferimento alle elettrovalvole nel disegno vediamo alcuni esempi:
-con VALVOLA TUTTA CHIUSA (0°) avremo:
E1: A in pressione B allo scarico; E2: B1 allo scarico.
-Con VALVOLA TUTTA APERTA (90°) regolazione grossolana avremo:
E1: A allo scarico e B in pressione; E2: B1 allo scarico.
Al raggiungimento del valore previsto es. 90% del riempimento totale del contenitore, il segnale di grossolano (valvola tutta aperta) viene escluso e l'aria, passando per E2 e successivamente cambiando la posizione di E1, raggiunge i pistoni esterni i quali, muovendosi, eseguono l'angolo di chiusura desiderato, es. 30° (regolazione fine), provocando così la riduzione voluta della portata.
Con VALVOLA APERTA es. 30° regolazione fine avremo:
E1: A in pressione B allo scarico; E2: B1 in pressione.
Questa posizione intermedia e la relativa portata della valvola verrà riprodotta con assoluta fedeltà e precisione ad ogni ripetizione del procedimento.
N.B. la regolazione voluta può variare da 0° a 45° tramite il controdado D.
Quando il valore teorico combacerà con quello effettivo, verrà escluso il segnale di regolazione fine che si trova su E2 (B1 allo scarico); l'attuatore comincerà a muoversi ottenendo così la chiusura totale della valvola. Con ciò è da ritenersi concluso il procedimento di Riempitura-Dosaggio.
**IN CONCLUSIONE:** Il dispositivo OMAL può essere installato ovunque sia richiesto di fornire esattamente le stesse quantità per lunghi cicli di lavoro.

### *General use and working condition*

**USE:** *Filling and metering of fluids or solids-mix materials by means of a special metering device. Double acting actuator for fine or rough metering.*
**EXECUTION:** *With EN ISO 5211.*
**WORKING SYSTEM:** *The basic model consists of an Omal double acting actuator, equipped with two additional cylinders whose inner-pistons, by means of a stroke adjustment device, stop the rotating angle of the actuator to a pre-set position, preventing it from a complete rotation and influencing the total valve flow pressure.*
*This device is driven by two solenoid valves.*
*E1 = 5/2; E2 =3/2. E1 drives the actuator, while E2 drives the two external cylinders.*
*Some examples referring to the valves in the drawing above:*
*- with a completely CLOSED VALVE (0°) You will have:*
*E1: air supply in A, exhausts in B*
*E2: exhausts in B1.*
*- with a completely OPEN VALVE (90°) rough metering You will have:*
*E1: exhausts in A, air supply in B*
*E2: exhausts in B1.*
*When You reach the desired level, e.g. 90% of the total filling, the rough signal (completely open valve) will turn off and the air, flowing through E2 and then changing the position of E1, will get to the external pistons which will move to the desired rotating angle, e.g. 30° (fine metering), consequently reducing the total valve flow..*
*With an OPEN VALVE, e.g. 30° fine metering, You will have:*
*E1: air supply in A, exhaust in B;*
*E2: air supply in B1*
*This intermediate position and the corresponding valve flow pressure will be reproduced, whenever you repeat the process.*
*NOTE: Thanks to control "D", the desired metering can range from 0° to 45°.When the desired level is the same as the actual one, the fine-metering signal on E2 (exhaust in B1) will turn off; the actuator will start moving and make the valve close, completely. Now the filling and metering process is over.*
**CONCLUSION:** *"OMAL" device can be assembled wherever you need to furnish exactly the same quantities in long working cycles.*

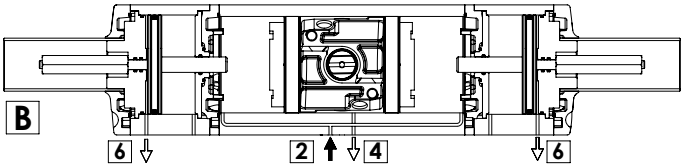
### A. POSIZIONE TOTALMENTE CHIUSO *FULLY CLOSED POSITION*

In questa posizione l'attuatore è alimentato nella porta 4, con le porte 2 e 6 in scarico.
*In this position the air is supplied to port 4 with exhaust air at port 2 and 6.*



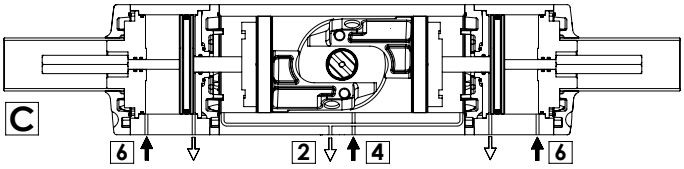

### B. POSIZIONE TOTALMENTE APERTO (approssimativamente 90°) *FULLY OPEN POSITION (90° rough metering)*

In questa posizione l'attuatore è alimentato nella porta 2, con le porte 4 e 6 in scarico.
*In this position the air is supplied to port 2 with exhaust air at port 4 and 6.*

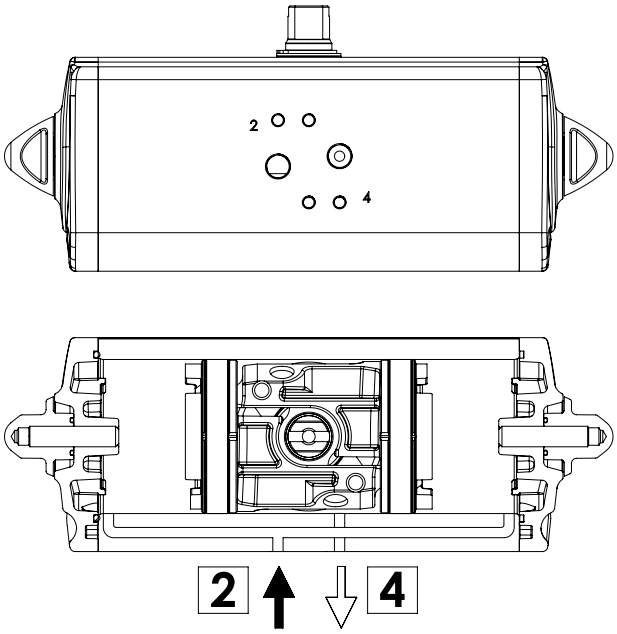



### C. POSIZIONE INTERMEDIA (misura precisa) *INTERMEDIATE POSITION (fine metering)*

In questa posizione l'attuatore è alimentato simultaneamente nella porta 6 e 4, con la porta 2 in scarico. In questo caso i pistoni esterni si muoveranno raggiungendo l'angolo desiderato; di conseguenza verrà ridotto il flusso totale della valvola.
*In this position the air is supplied to port 6 than to port 4, with exhaust air at port 2. In this case the external pistons will move to the desired rotating angle, consequently reducing the total valve flow.*

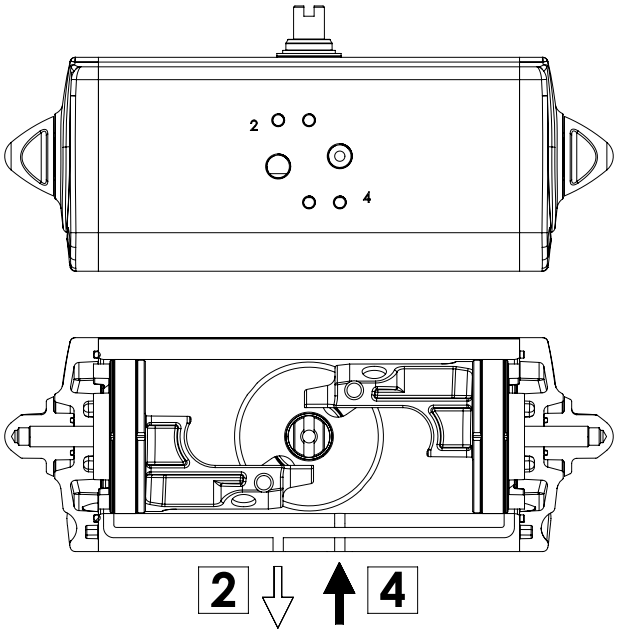


# SCHEMA FUNZIONAMENTO ATTUATORE PNEUMATICO "DA"
# *WORKING PLANE PNEUMATIC ACTUATOR "DA" TYPE*




**SCHEMA DI FUNZIONAMENTO**
Immettendo aria nel foro 2 di alimentazione, i pistoni si muovono verso il centro e si ha una rotazione antioraria, la posizione finale è quella rappresentata nel disegno.

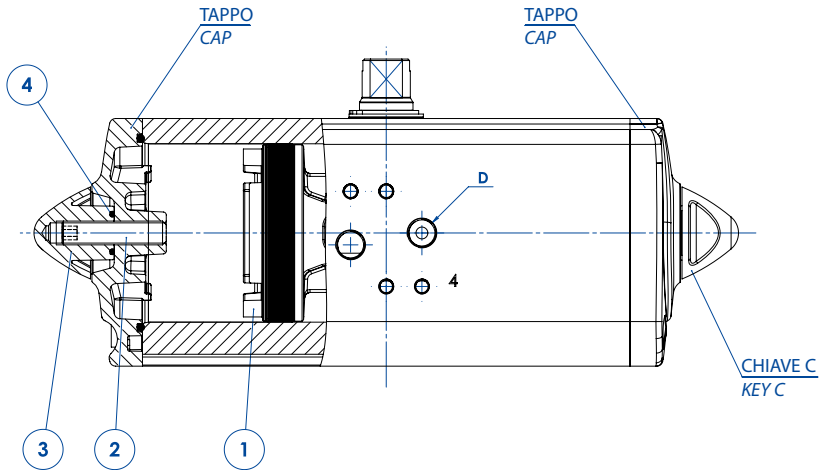
***WORKING PLANE***
*Supplying air through the air connection 2, the pistons move towards the center in an anticlockwise direction. The above drawing shows the final position.*




**SCHEMA DI FUNZIONAMENTO**
Immettendo aria nel foro 4 di alimentazione, i pistoni si muovono verso l'esterno e si ha una rotazione oraria, la posizione finale è quella rappresentata nel disegno.

***WORKING PLANE***
*Supplying air through the air connection 4, the pistons move outwards in a clockwise direction. The above drawing shows the final position.*

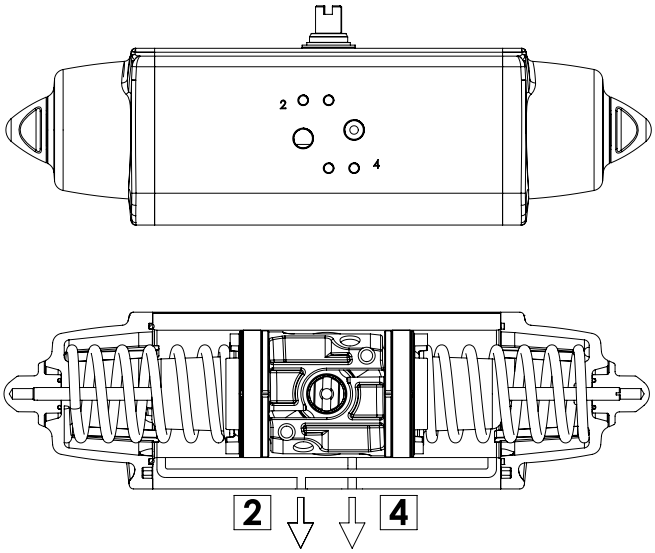
## ATTUATORE REGOLABILE-ISTRUZIONI PER L' UTILIZZO *ACTUATOR WITH STROKE ADJUSTMENT-INSTRUCTIONS*




**A)** Immettere aria nel foro "D" in modo che i pistoni (part. n°1) si vengano a trovare in posizione di finecorsa verso i tappi.
**B)** Togliere il controdado (part. n°3) agendo sulla chiave C.
**C)** Togliere l'aria di alimentazione.
**D**) Con una chiave a brugola agire sulle viti (part. n°2) ed effettuare la limitazione di corsa desiderata.
**N.B.** La corsa può essere limitata per un massimo di 10° da 80° a 90°. Altre regolazioni disponibili a richiesta.
**E)** Mettere aria nel foro "D", verificare che entrambe le viti (part. n°2) siano a battuta contro i pistoni.
**F)** Mettere il controdado (part. n°3) munito di O-ring (part. n°4) per la tenuta tra dado e tappo.

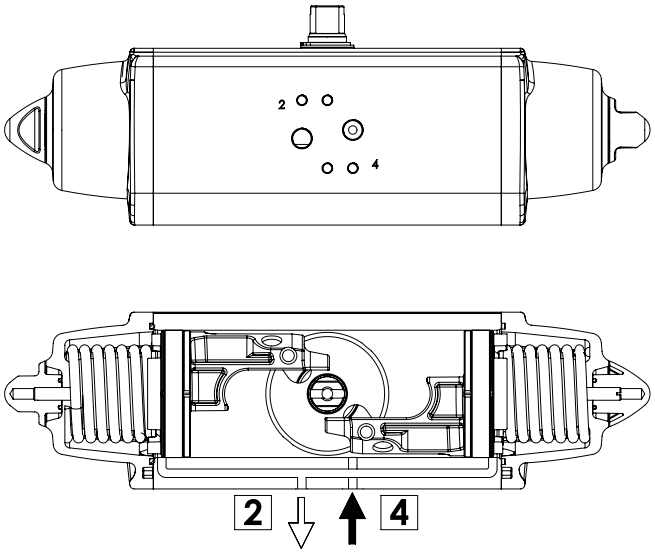
***A)*** *Supply air through the air connection D so that the pistons (Part. 1) move to the end-stroke position, towards the caps.*
***B)*** *Remove the counter nut (part. 3) acting on the C key.*
***C)*** *Shut off the air supply.*
***D)*** *Adjust the end stroke as desired, acting on the screws (part 2) with an hexagonal key.*
***Note:*** *maximum adjusting stroke 10°, ranging from 80° to 90°. Other regulations on request.*
***E)*** *Supply air through the air connection D and check that both screws stop the pistons.*
***F)*** *Screw the counter-nut (part 3) and its o-ring (part 4) to keep nut and cap tight.*

# SCHEMA FUNZIONAMENTO ATTUATORE PNEUMATICO "SR"
## *WORKING PLANE PNEUMATIC ACTUATOR "SR" TYPE*




**SCHEMA DI FUNZIONAMENTO**
Senza pressione di alimentazione, nella versione semplice effetto, l'attuatore torna automaticamente in posizione di riposo compiendo una rotazione oraria e la posizione finale è quella rappresentata nel disegno. Sul foro 2 è consigliato montare un filtrino onde evitare che polvere o particelle solide possano entrare nella camera del cilindro senza tuttavia impedire il passaggio dell'aria.

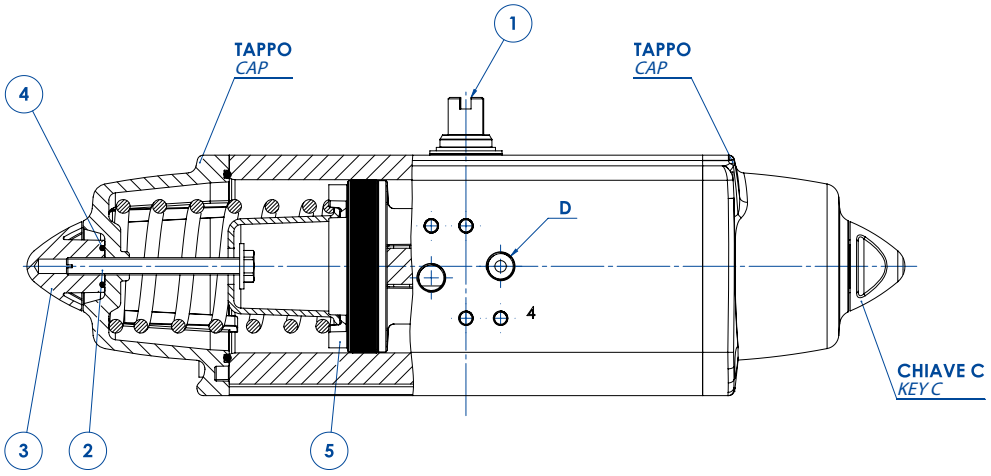
***WORKING PLANE***
*Without air supply, the spring return actuator returns to its resting position, rotating in a clockwise direction. The drawing shows its final position.*
*We assembling a small filter on the air connection 2 to prevent dust and particles into the cylinder chamber without, however, preventing the passage of air.*




**SCHEMA DI FUNZIONAMENTO**
Immettendo aria nel foro 4 di alimentazione, i pistoni si muovono verso l'esterno comprimendo le molle, si ha una rotazione antioraria e la posizione finale è quella rappresentata nel disegno.

***WORKING PLANE***
*Supplying air through the air connection 4, the pistons move outwards pressing the spring. An anticlockwise rotation takes place and the final position is shown above.*

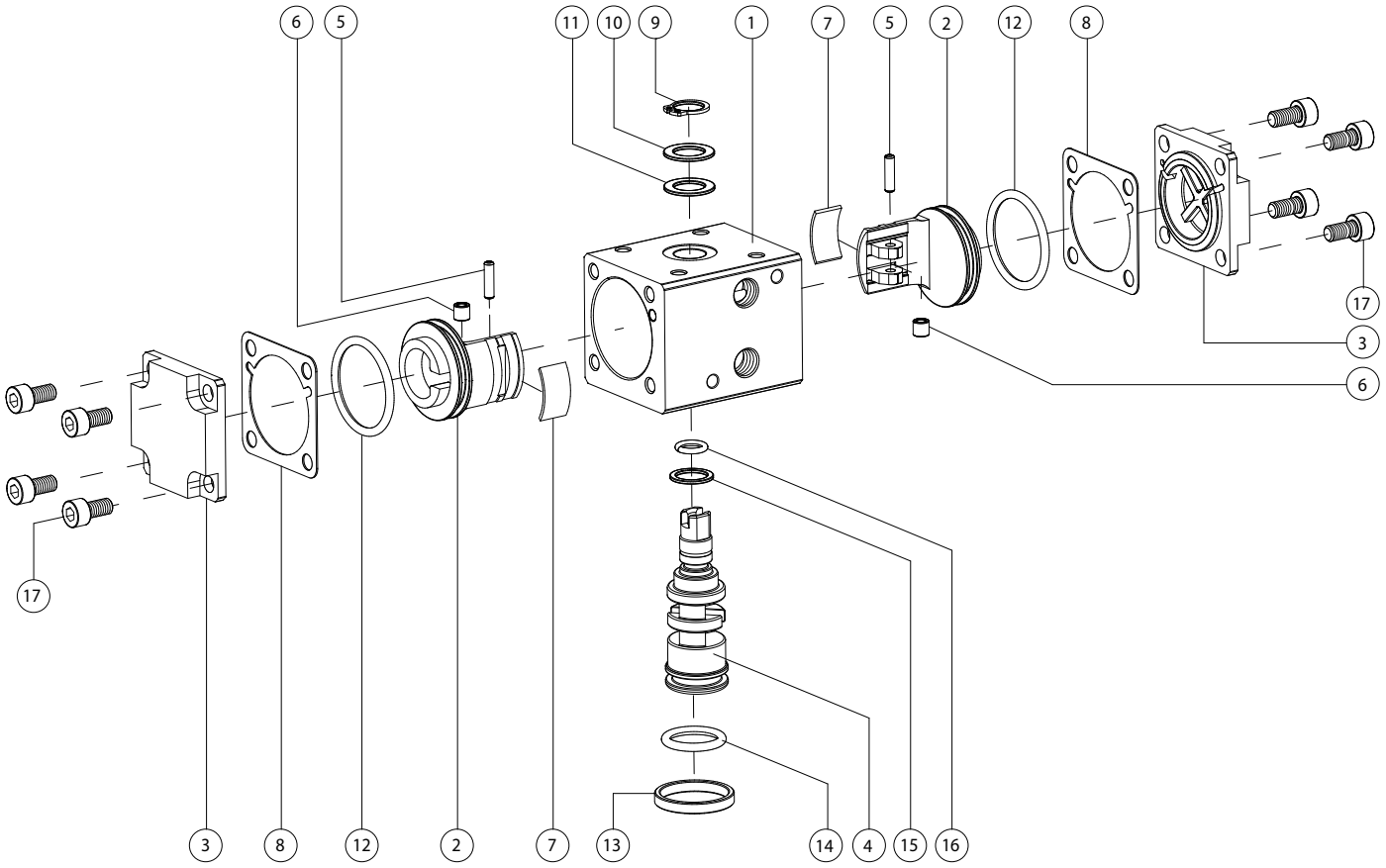
## ATTUATORE REGOLABILE-ISTRUZIONI PER L' UTILIZZO *ACTUATOR WITH STROKE ADJUSTMENT-INSTRUCTIONS*




**A)** Verificare che le molle siano in posizione di riposo osservando la chiave dell'albero (part. n°1) come da disegno e controllando che nel foro "D" non ci sia pressione.
**B)** Togliere i controdadi (part. n°3) agendo sulla chiave C.
**C)** Con un cacciavite avvitare le viti (part. n°2) in senso orario ed effettuare la limitazione di corsa desiderata.
**N.B.** La corsa può essere limitata per un massimo di 10° da 80° a 90°
**D)** Immettere aria nel foro "D" e verificare che entrambe le viti (part. n°2) siano a battuta contro i pistoni (part. n°5).
**E)** Bloccare i controdadi (part. n°3) muniti di O-ring (part. n°4) per la tenuta tra controdado, tappo e vite.

***A)*** *The springs must be at rest position, the shaft (part. 1) must be as shown in the drawing. Air connection D must not be supplied with air.*
***B)*** *Remove the counter-nuts (part. 3), acting on C key.*
***C)*** *By means of a screwdriver turn screws (part. 2) in a clockwise direction until you obtain the requested end-stroke regulation.*
***Note:*** *maximum adjusting stroke 10°, ranging from 80° to 90°.*
***D)*** *Supply connection D with air pressure and check that both adjusting screws (part. 2) stop the pistons (part. 5).*
***E)*** *Screw the counter-nuts (part. 3) and their O-ring (part. 4) to keep nut and cap tight.*

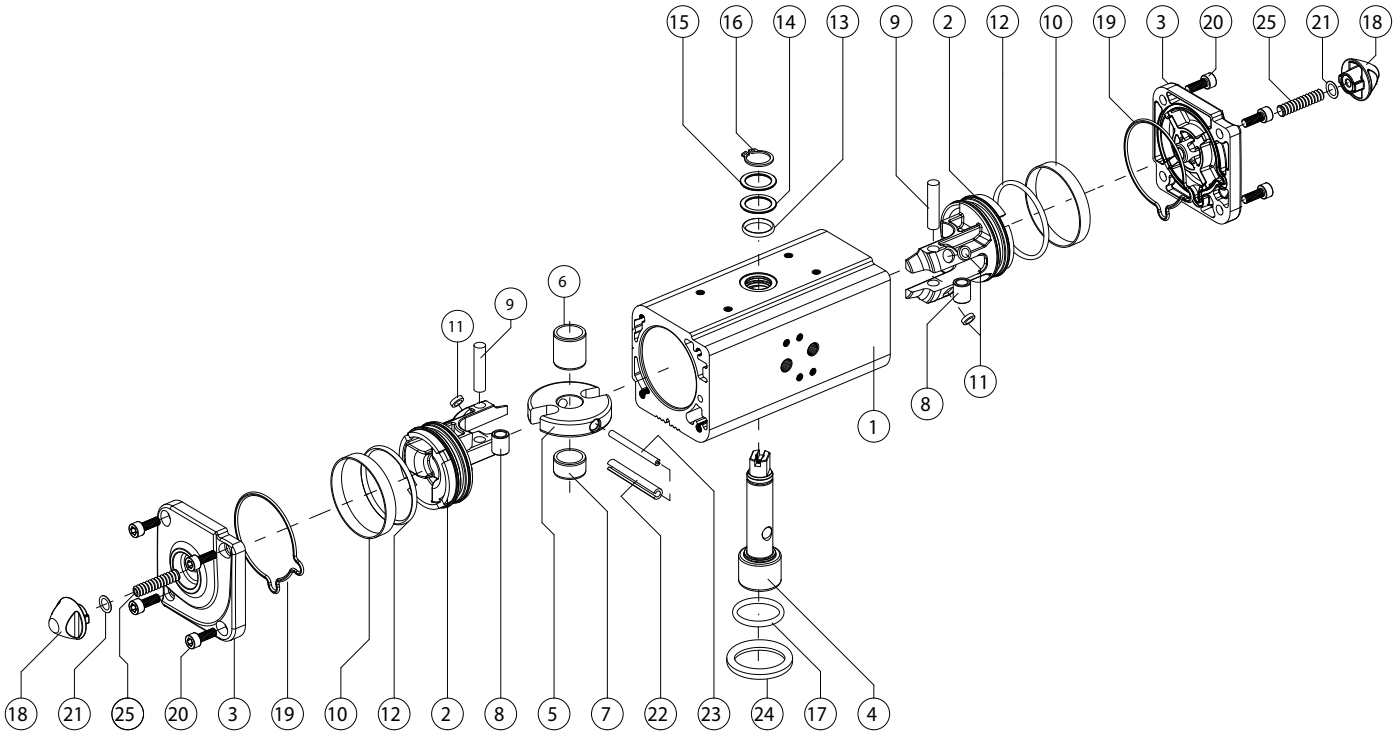
# COMPONENTI DOPPIO EFFETTO MISURA: DA 08
## *DOUBLE ACTING COMPONENTS SIZE: DA 08*




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo DA *Cap DA* | 2 | Lega di alluminio *Aluminium alloy* |
| 4 | Albero *Shaft* | 1 | Lega di acciaio *Steel alloy* |
| 5 | Perno *Sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 6 | Bussola acciaio *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 7* | Fascia di supporto *Support band* | 2 | Resina acetalica *Acetalic resins* |
| 8* | Guarnizione di tenuta *O-ring* | 2 | Gomma Nitrilica *NBR* |
| 9 | *Seeger* | 1 | Acciaio Inox *Stainless steel* |
| 10 | Rondella spessoramento *Washer* | 1 | Acciaio Inox *Stainless steel* |
| 11* | Anello supporto est. *Ext. support ring* | 1 | Resina acetalica *Acetalic resins* |
| 12* | O-ring pistone *O-ring* | 2 | Gomma nitrilica *NBR* |
| 13 | Anello centraggio F03 *Center ring F03* | 1 | Lega di alluminio *Aluminium alloy* |
| 14* | O-ring albero inferiore *O-ring* | 1 | FKM |
| 15* | Anello supporto int. *Int.support ring* | 1 | Resina acetalica *Acetalic resins* |
| 16* | Oring Albero superiore *O-ring* | 1 | FKM |
| 17 | Viti *Screw* | 8 | Acciaio inox |

* Particolari del kit di ricambio *Components of spare part kit*

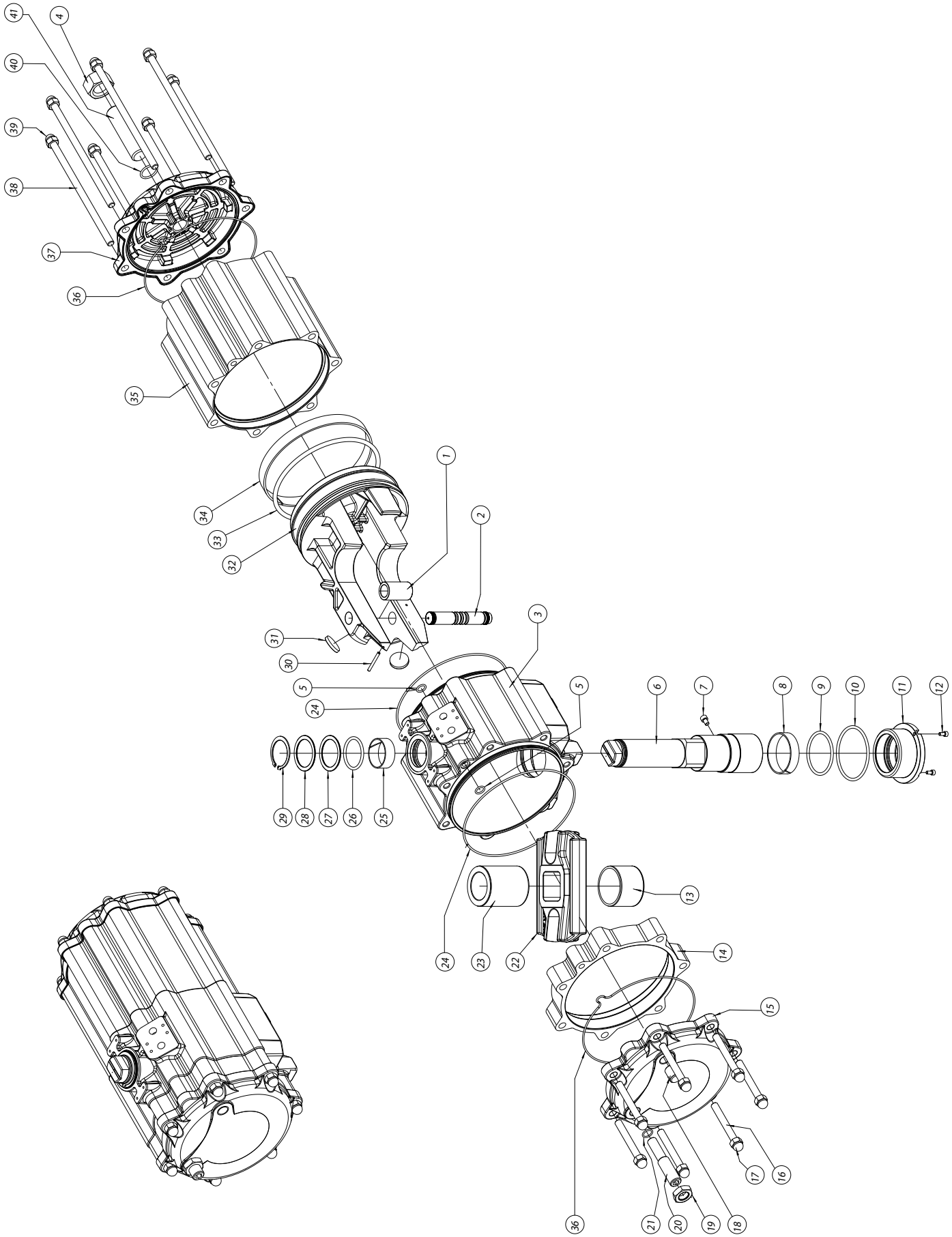
# COMPONENTI DOPPIO EFFETTO MISURE: DAN 15 ÷ DAN 1920
## *DOUBLE ACTING COMPONENTS SIZES: DAN 15 ÷ DAN 1920*




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 4 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola di scorrimento *Support bush* | 1 | Resina acetalica *Acetalic resin* |
| 7 | Supporto albero *Shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 8 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 9 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 10* | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Polyurethan* |
| 11* | Dischetto di supporto *Piston's suport* | 4 | *PTFE caric carbo-grafite* |
| 12* | O-ring pistone *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 13 | O-ring albero superiore *O-ring (upper sealing shaft)* | 1 | FKM |
| 14 | Anello di supporto esterno *External support ring* | 1 | Resina acetalica *Acetalic resins* |
| 15 | Rondella di spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 16 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 17 | O-ring albero inferiore *O-ring (lower sealing shaft)* | 1 | FKM |
| 18 | Dado *Nut* | 2 | Lega di alluminio *Aluminium alloy* |
| 19* | O-ring del tappo *End-cap O-ring* | 2 | Gomma nitrilica Nitrilic rubber |
| 20 | Viti *Screws* | 8 | Acciaio inox *Stainless steel* |
| 21* | *O-ring* | 2 | Gomma nitrilica Nitrilic rubber |
| 22 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio Steel alloy |
| 23 | Spina elastica interna *Internal elastic pin of the yoke* | 1 | Lega di acciaio Steel alloy |
| 24 | Anello di centraggio *Centering ring* | 1 | Lega di alluminio *Aluminium alloy* |
| 25 | Vite di regolazione corsa *Stroke adjustment screw* | 2 | Acciaio inox *Stainless steel* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO EFFETTO MISURA: DA 2880
## *DOUBLE ACTING COMPONENTS SIZE: DA 2880*



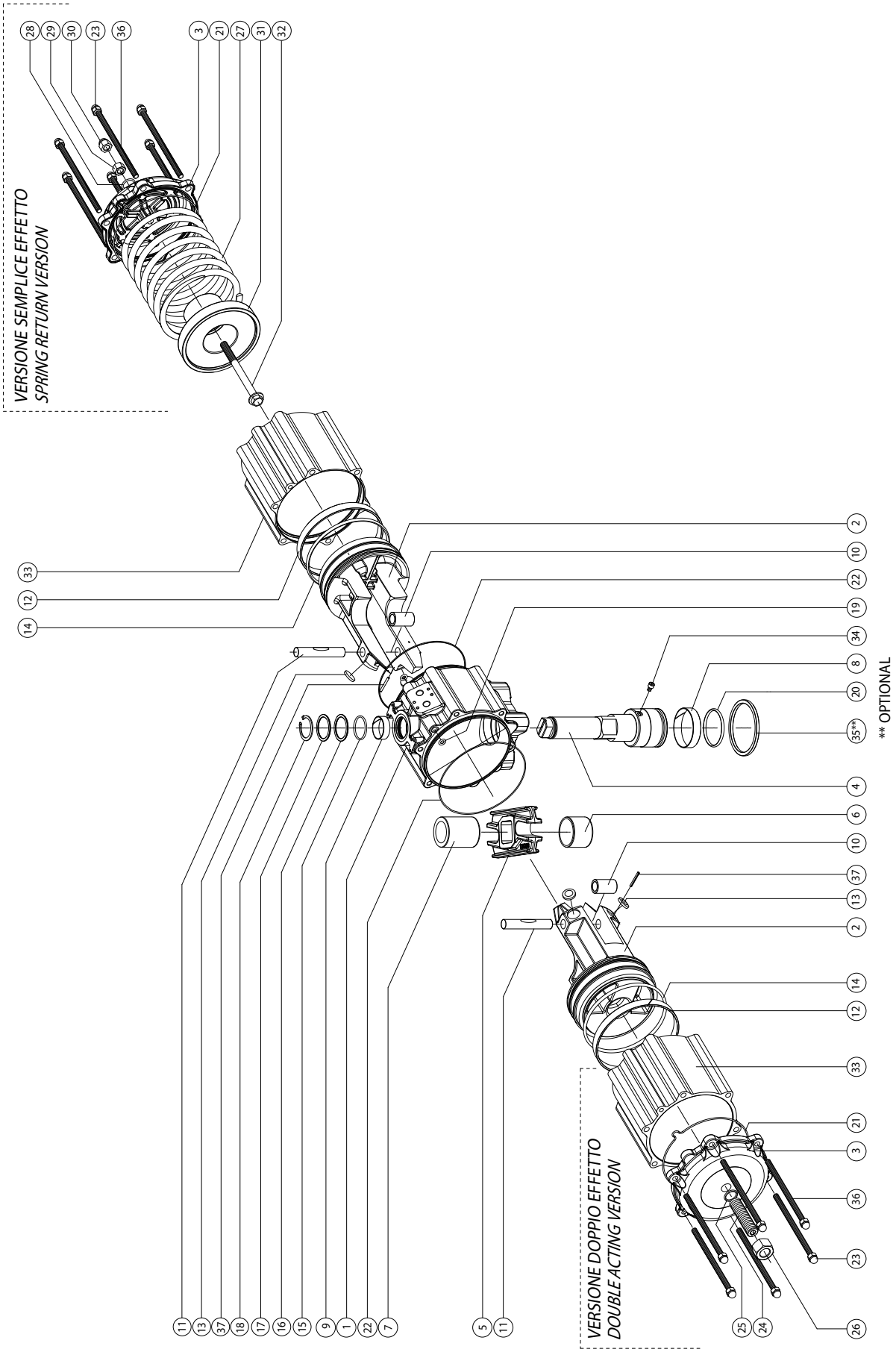
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 1 | Acciaio *Steel alloy* |
| 2 | Spina acciaio *Steel pin* | 1 | Acciaio *Steel alloy* |
| 3 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 4 | Dado *Nut* | 1 | Acciaio *Steel alloy* |
| 5* | O-ring *O-ring* | 2 | NBR |
| 6 | Albero *Shaft* | 1 | Acciaio *Steel alloy* |
| 7 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel alloy* |
| 8* | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resin* |
| 9* | *O-ring* | 1 | FKM |
| 10* | *O-ring* | 1 | FKM |
| 11 | Bussola di supporto inferiore *Low bearing bush* | 1 | Alluminio *Aluminium* |
| 12 | Vite per bussola *Screw* | 2 | Acciaio *Steel alloy* |
| 13 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 14 | Distanziale *Spacer* | 1 | Alluminio *Aluminium* |
| 15 | Tappo *Cap* | 1 | Alluminio *Aluminium* |
| 16 | Vite di assemblaggio *Cap screw* | 7 | Acciaio *Steel alloy* |
| 17 | Dado a calotta *Cap nut* | 7 | Acciaio *Steel alloy* |
| 18 | Grano (Tappo) *Grub screw* | 1 | Acciaio *Steel alloy* |
| 19 | Dado *Nut* | 1 | Acciaio *Steel alloy* |
| 20 | Grano di regolazione *Grub screw* | 1 | Acciaio *Steel alloy* |
| 21* | *O-ring* | 1 | NBR |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 22 | Forcella *Scotch yoke* | 1 | Acciaio *Steel alloy* |
| 23 | Bussola di scorr/supp *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 24* | *O-ring* | 2 | NBR |
| 25* | Supporto superiore *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resin* |
| 26* | *O-ring* | 1 | FKM |
| 27* | Anello di supporto esterno *Thrust bearing* | 1 | Resina acetalica *Acetalic resin* |
| 28 | Rondella di spessoramento *Washer* | 1 | Acciaio *Steel alloy* |
| 29 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 30 | Spina antiespulsione *Spring pin* | 1 | Acciaio *Steel alloy* |
| 31* | Dischetti Bearing *(piston back)* | 2 | Resina acetalica *Acetalic resin* |
| 32 | Pistone *Piston* | 1 | Alluminio *Aluminium* |
| 33* | *O-ring* | 1 | NBR |
| 34* | Anello di guida *Bearing (piston head)* | 1 | *P.T.F.E. Carbo-Graphite filled* |
| 35 | Cilindro laterale *Lateral cylinder* | 1 | Alluminio *Aluminium* |
| 36* | *O-ring* | 2 | NBR |
| 37 | Tappo *Cap* | 1 | Alluminio *Aluminium* |
| 38 | Vite di assemblaggio *Cap screw* | 7 | Acciaio *Steel alloy* |
| 39 | Dado a calotta *Cap nut* | 7 | Acciaio *Steel alloy* |
| 40* | *O-ring* | 1 | NBR |
| 41 | Grano di regolazione *Grub screw* | 1 | Acciaio *Steel alloy* |
| | | | |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO EFFETTO MISURA: DA 3840
## *DOUBLE ACTING COMPONENTS SIZE: DA 3840*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 4 | Albero *Shaft* | 1 | Acciaio Inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 7 | Bussola scorrim/supporto *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 8* | Fascetta supp.infer. *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resins* |
| 9* | Fascetta supp.super. *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resins* |
| 10 | Bussola acciaio *Steel bush* | 2 | Lega di acciaio *Steel alloy* |
| 11 | Spina acciaio *Steel pin* | 2 | Lega di acciaio *Steel alloy* |
| 12* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 13* | Dischetto supporto *Bearing (piston back)* | 4 | Resina acetalica *Acetalic resins* |
| 14* | O-ring del pistone *O-ring* | 2 | NBR |
| 15* | O-ring albero sup. *O-ring* | 1 | FKM |
| 16* | Anello supporto est. *Thrust bearing* | 1 | Resina acetalica *Acetalic resins* |
| 17 | Rondella spessoramento *Washer* | 1 | *Acciaio inox Stainless steel* |
| 18 | *Seeger* | 1 | Acciaio Inox *Stainless steel* |
| 19* | O-ring cond.aria *O-ring* | 2 | NBR |

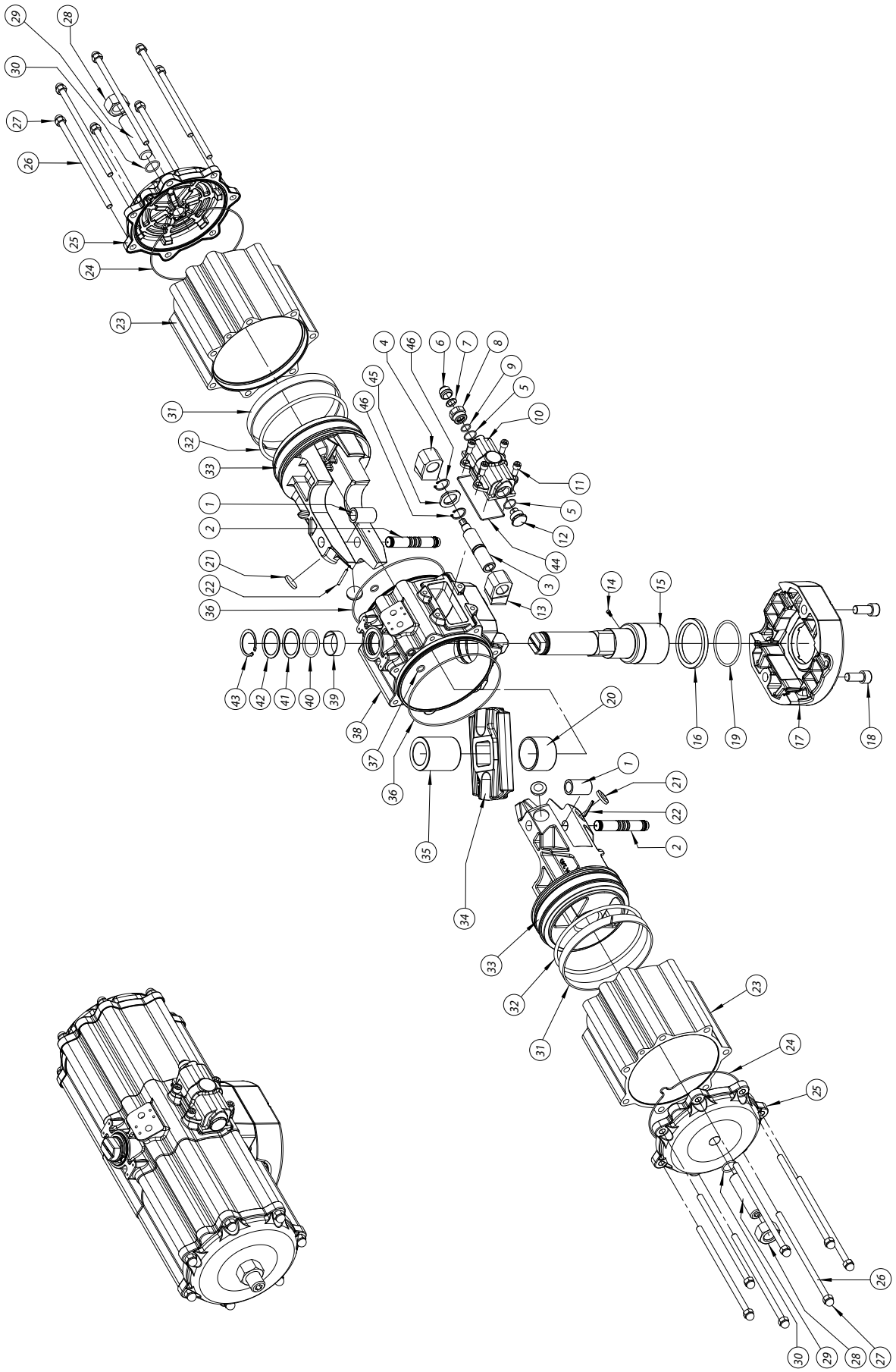
* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 20* | O-ring albero inferiore *O-ring* | 1 | FKM |
| 21* | O-ring tappo *O-ring* | 2 | NBR |
| 22* | O-ring corpo-cilindro *O-ring* | 2 | NBR |
| 23 | Dado a calotta *Cap nut* | 12 | Acciaio inox *Stainless steel* |
| 24 | Grano di regolaz. *Grub screws* | 2 | Acciaio inox *Stainless steel* |
| 25* | O-ring grano *O-ring* | 2 | NBR |
| 26 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 27 | Molla *Spring* | 4 | Lega di acciaio *Steel alloy* |
| 28* | O-ring regolazione *O-ring* | 2 | NBR |
| 29 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 30 | Dado a calotta *Cap nut* | 2 | Acciaio inox *Stainless steel* |
| 31 | Contenitore a molla *Spring cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 32 | Vite di prec.molla *Screw* | 2 | Acciaio inox *Stainless steel* |
| 33 | Cilindro laterale *Cylinder* | 2 | Lega di alluminio *Aluminium alloy* |
| 34 | Vite antiespulsione *Screw* | 1 | Acciaio inox *Stainless steel* |
| 35** | Anello di centraggio *Center ring* | 1 | Lega di alluminio *Aluminium alloy* |
| 36 | Vite di assemblaggio *Cap screw* | 12 | Acciaio *Steel alloy* |
| 37 | Spina antiespulsione *Spring pin* | 2 | Lega di acciaio *Steel alloy* |
| | | | |

* Particolari del kit di ricambio *Components of spare part kit*

** Optional

# COMPONENTI DOPPIO EFFETTO MISURA: DA 5760
## *DOUBLE ACTING COMPONENTS SIZE: DA 5760*



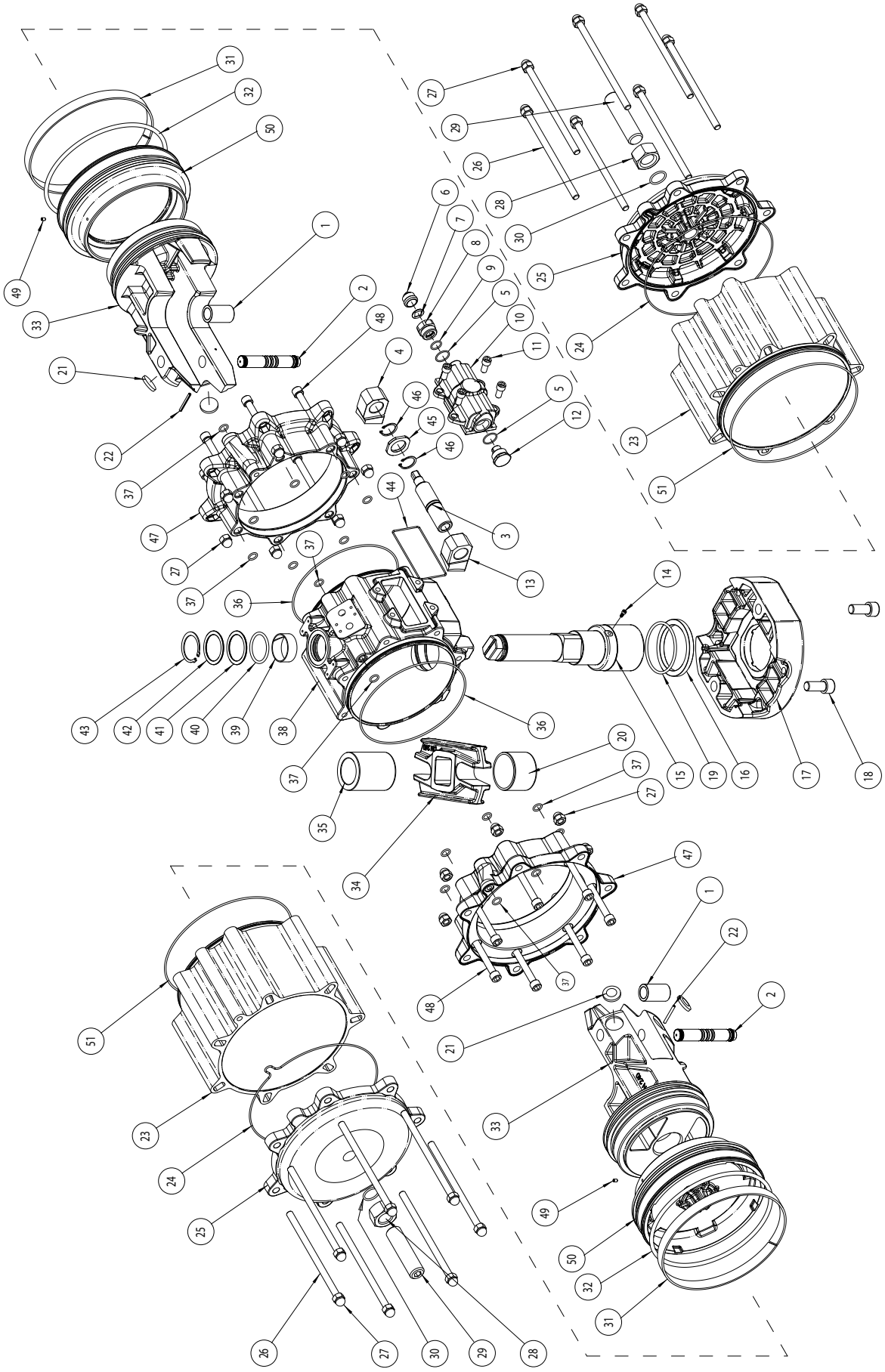
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 2 | Acciaio *Steel alloy* |
| 2 | Spina acciaio *Steel pin* | 2 | Acciaio *Steel alloy* |
| 3 | Vite di regolazione *Regolation screw* | 1 | Acciaio *Steel alloy* |
| 4 | Fermo sinistro *Left stop* | 1 | Acciaio *Steel alloy* |
| 5* | *O-ring* | 2 | NBR |
| 6 | Tappo di protezione *Protection cap* | 1 | Alluminio *Aluminium* |
| 7 | Rondella antirotazione *Antirotation washer* | 1 | Acciaio *Steel alloy* |
| 8 | Ghiera passante *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 9* | *O-ring* | 1 | NBR |
| 10 | Carter di regolaz. *Carter* | 1 | Alluminio *Aluminium* |
| 11 | *Vite per carter Screw* | 4 | Acciaio *Steel alloy* |
| 12 | Ghiera cieca *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 13 | Fermo destro *Right stop* | 1 | Acciaio *Steel alloy* |
| 14 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel alloy* |
| 15 | Albero *Shaft* | 1 | Acciaio *Steel alloy* |
| 16 | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resins* |
| 17 | Interfaccia F25 *Interface F25* | 1 | Alluminio *Aluminium* |
| 18 | Vite per interfaccia *Screw* | 2 | Acciaio *Steel alloy* |
| 19* | *O-ring* | 1 | FKM |
| 20 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 21* | Dischetti *Bearing (piston back)* | 4 | Resina acetalica *Acetalic resins* |
| 22 | Spina antiespulsione *Spring pin* | 2 | Acciaio *Steel alloy* |
| 23 | Cilindro laterale *Lateral cylinder* | 2 | Alluminio *Aluminium* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 24* | O-ring tappo *O-ring* | 2 | NBR |
| 25 | Tappo *Cap* | 2 | Alluminio *Aluminium* |
| 26 | Vite di assemblaggio *Cap screws* | 14 | Acciaio *Steel alloy* |
| 27 | Dado a calotta *Cap nut* | 14 | Acciaio *Steel alloy* |
| 28 | Dado *Nut* | 2 | Acciaio *Steel alloy* |
| 29 | Grano di regolazione *Grub screws* | 2 | Acciaio *Steel alloy* |
| 30* | *O-ring* | 2 | NBR |
| 31* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 32* | O-ring pistone *O-ring* | 2 | NBR |
| 33 | Pistone *Piston* | 2 | Alluminio *Aluminium* |
| 34 | Forcella *Scotch yoke* | 1 | Acciaio *Steel alloy* |
| 35 | Bussola di scorr./supp *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 36* | *O-ring* | 2 | NBR |
| 37* | *O-ring* | 2 | NBR |
| 38 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 39* | Supporto superiore *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resin* |
| 40* | *O-ring* | 1 | FKM |
| 41* | Anello di supp. esterno *Thrust bearing* | 1 | *Resina acetalica Acetalic resin* |
| 42 | Rondella di spessoram. *Washer* | 1 | Acciaio *Steel alloy* |
| 43 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 44* | Guarnizione carter *Gasket* | 1 | NBR |
| 45 | Rondella di supporto *Washer* | 1 | Acciaio *Steel alloy* |
| 46 | *Seeger* | 2 | Acciaio *Steel alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO EFFETTO MISURA: DA 8000
## *DOUBLE ACTING COMPONENTS SIZE: DA 8000*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 2 | Acciaio *Steel alloy* |
| 2 | Spina acciaio *Steel pin* | 2 | Acciaio *Steel alloy* |
| 3 | Vite di regolazione *Regulation screw* | 1 | Acciaio *Steel alloy* |
| 4 | Fermo sinistro *Left stop* | 1 | Acciaio *Steel alloy* |
| 5* | *O-ring* | 2 | NBR |
| 6 | Tappo di protezione *Protection cap* | 1 | Alluminio *Aluminium* |
| 7 | Rondella antirotazione *Antirotation washer* | 1 | Acciaio *Steel alloy* |
| 8 | Ghiera passante *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 9* | *O-ring* | 1 | NBR |
| 10 | Carter di regolaz. *Carter* | 1 | Alluminio *Aluminium* |
| 11 | Vite per carter *Screw* | 4 | Acciaio *Steel alloy* |
| 12 | Ghiera cieca *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 13 | Fermo destro *Right stop* | 1 | Acciaio *Steel alloy* |
| 14 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel alloy* |
| 15 | Albero *Shaft* | 1 | Acciaio *Steel alloy* |
| 16 | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resins* |
| 17 | Interfaccia F25 *Interface F25* | 1 | Alluminio *Aluminium* |
| 18 | Vite per interfaccia *Screw* | 2 | Acciaio *Steel alloy* |
| 19* | *O-ring* | 1 | FKM |
| 20 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 21 | Dischetti *Bearing (piston back)* | 4 | Resina acetalica *Acetalic resins* |
| 22 | Spina antiespulsione *Spring pin* | 2 | Acciaio *Steel alloy* |
| 23 | Cilindro laterale *Lateral cylinder* | 2 | Alluminio *Aluminium* |
| 24* | O-ring tappo *O-ring* | 2 | NBR |
| 25 | Tappo *Cap* | 2 | Alluminio *Aluminium* |
| 26 | Vite di assemblaggio *Cap screws* | 14 | Acciaio *Steel alloy* |

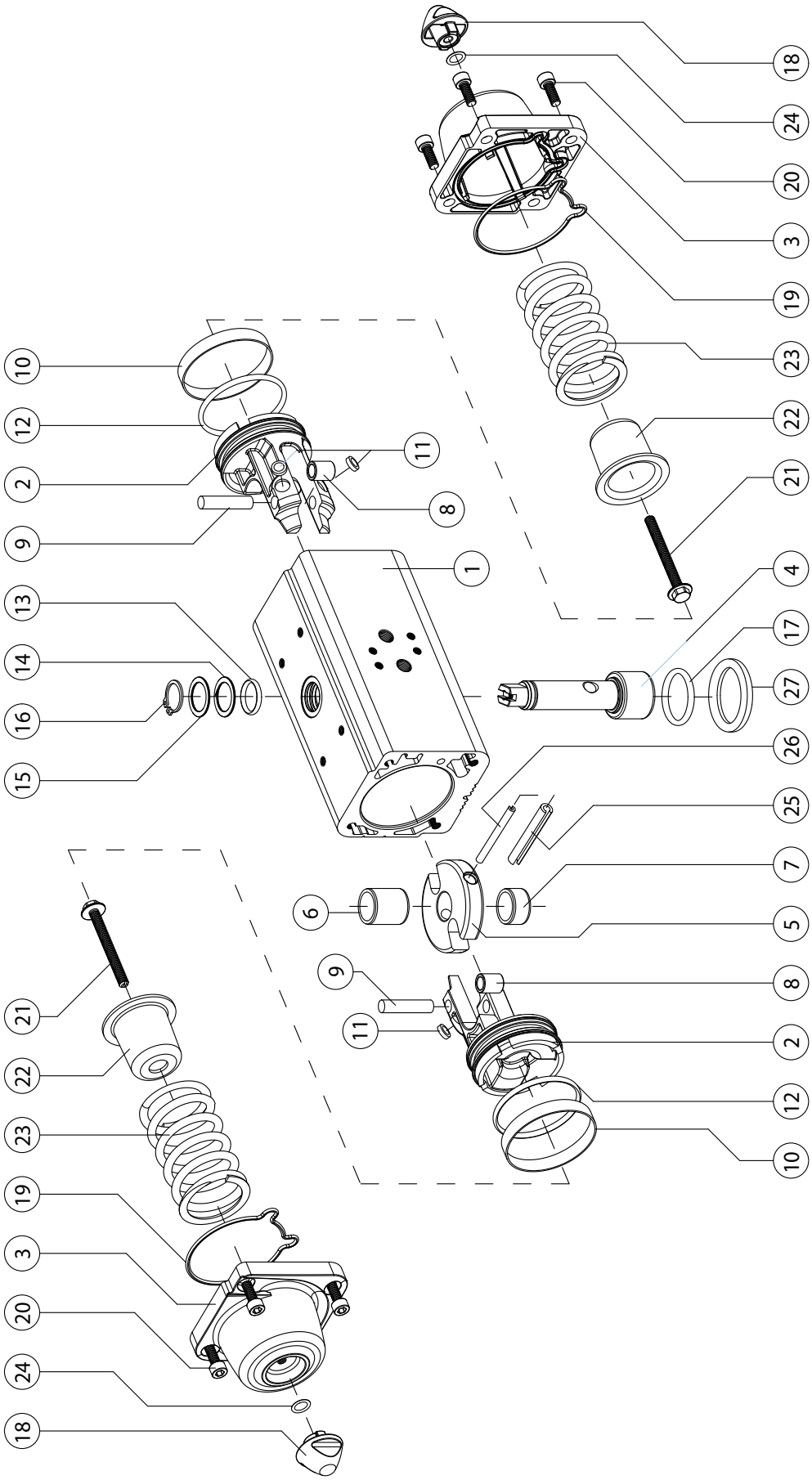
* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 27 | Dado a calotta *Cap nut* | 28 | Acciaio *Steel alloy* |
| 28 | Dado *Nut* | 2 | Acciaio *Steel alloy* |
| 29 | Grano di regolazione *Grub screws* | 2 | Acciaio *Steel alloy* |
| 30* | *O-ring* | 2 | NBR |
| 31* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 32* | O-ring pistone *O-ring* | 2 | NBR |
| 33 | Pistone *Piston* | 2 | Alluminio *Aluminium* |
| 34 | Forcella *Scotch yoke* | 1 | Acciaio *Steel alloy* |
| 35 | Bussola di scorr/supp *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 36* | *O-ring* | 2 | NBR |
| 37* | *O-ring* | 18 | NBR |
| 38 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 39* | Supporto superiore *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resins* |
| 40* | *O-ring* | 1 | *FKM* |
| 41* | Anello di supp.esterno *Thrust bearing* | 1 | Resina acetalica *Acetalic resins* |
| 42 | Rondella di spessoram. *Washer* | 1 | Acciaio *Steel alloy* |
| 43 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 44* | Guarnizione carter *Gasket* | 1 | NBR |
| 45 | Rondella supporto *Washer* | 1 | Acciaio *Steel alloy* |
| 46 | *Seeger* | 2 | Acciaio *Steel alloy* |
| 47 | Flangia rid.cilindro *Flange* | 2 | Alluminio *Aluminium* |
| 48 | Viti flangia *Screws* | 14 | Acciaio *Steel alloy* |
| 49 | Grano *Grub screw* | 2 | Acciaio *Steel alloy* |
| 50 | Flangia rid.pistone *Flange* | 2 | Alluminio *Aluminium* |
| 51* | *O-ring* | 2 | NBR |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO MISURE: SRN 15 ÷ SRN 960

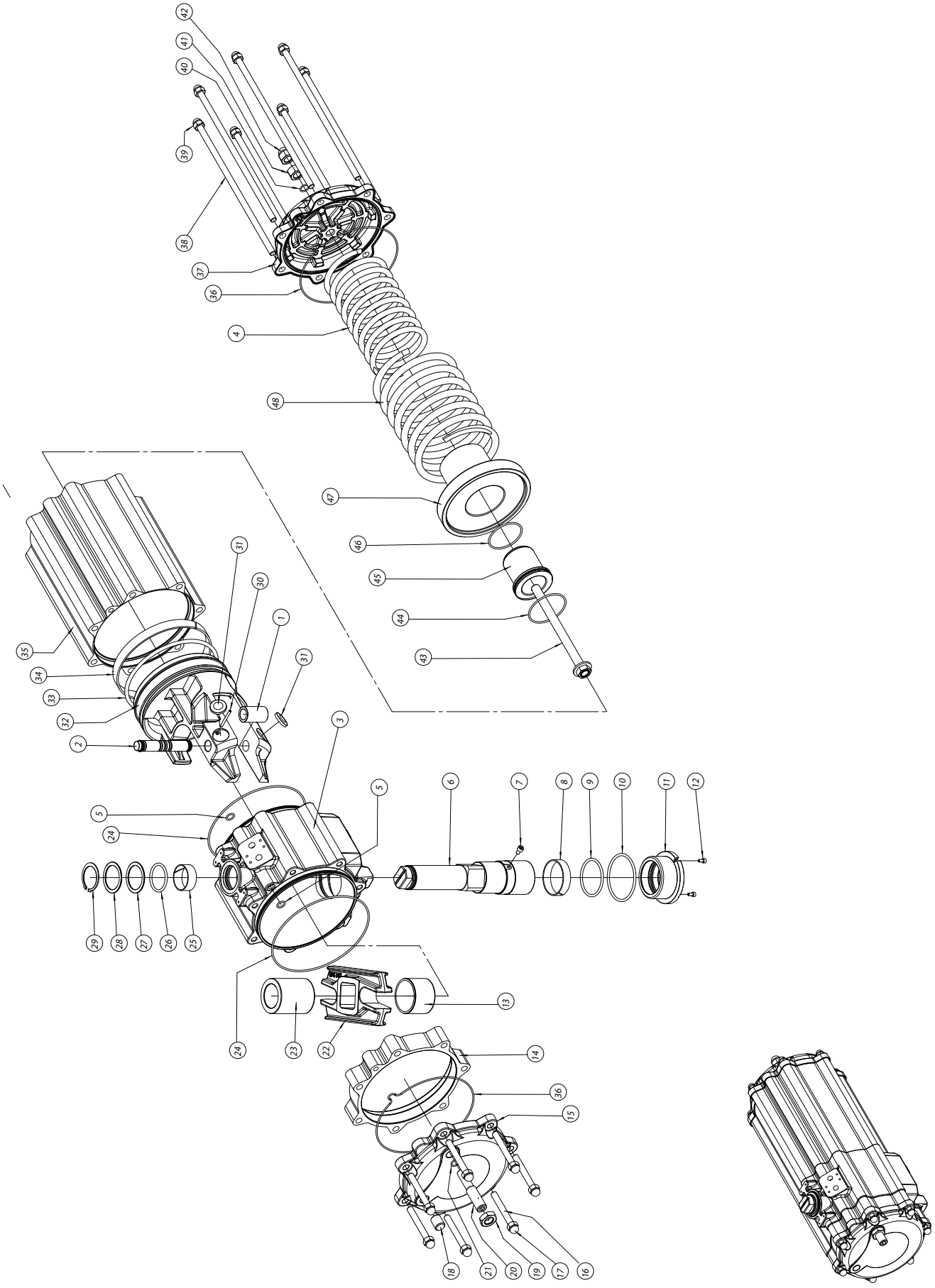
## *SPRING RETURN COMPONENTS SIZES: SRN 15 ÷ SRN 960*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 4 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola di scorrimento *Support bush* | 1 | Resina acetalica *Acetalic resin* |
| 7 | Supporto albero *Shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 8 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 9 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 10* | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Polyurethan* |
| 11* | Dischetto di supporto *Piston's suport* | 4 | *PTFE caric carbo-grafite* |
| 12* | O-ring pistone *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 13 | O-ring albero superiore *O-ring (upper sealing shaft)* | 1 | FKM |
| 14 | Anello di supporto esterno *External support ring* | 1 | Resina acetalica *Acetalic resin* |
| 15 | Rondella di spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 16 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 17 | O-ring albero inferiore *O-ring (lower sealing shaft)* | 1 | FKM |
| 18 | Dado *Nut* | 2 | Lega di alluminio Aluminium alloy |
| 19* | O-ring del tappo *End-cap O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 20 | Viti *Screws* | 8 | Acciaio inox *Stainless steel* |
| 21 | Viti di precarica molla *Spring loading screw* | 2 | Lega di acciaio *Steel alloy* |
| 22 | Contenitore molla *Spring cap* | 2 | Lega di acciaio *Steel alloy* |
| 23 | Molla *Spring* | 2 | Lega di acciaio *Steel alloy* |
| 24* | *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 25 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 26 | Spina elastica interna *Internal elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 27 | Anello di centraggio *Centering ring* | 1 | Lega di alluminio *Aluminium alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPILICE EFFETTO MISURA: SR 1440
## *SPRING RETURN COMPONENTS SIZE: SR 1440*



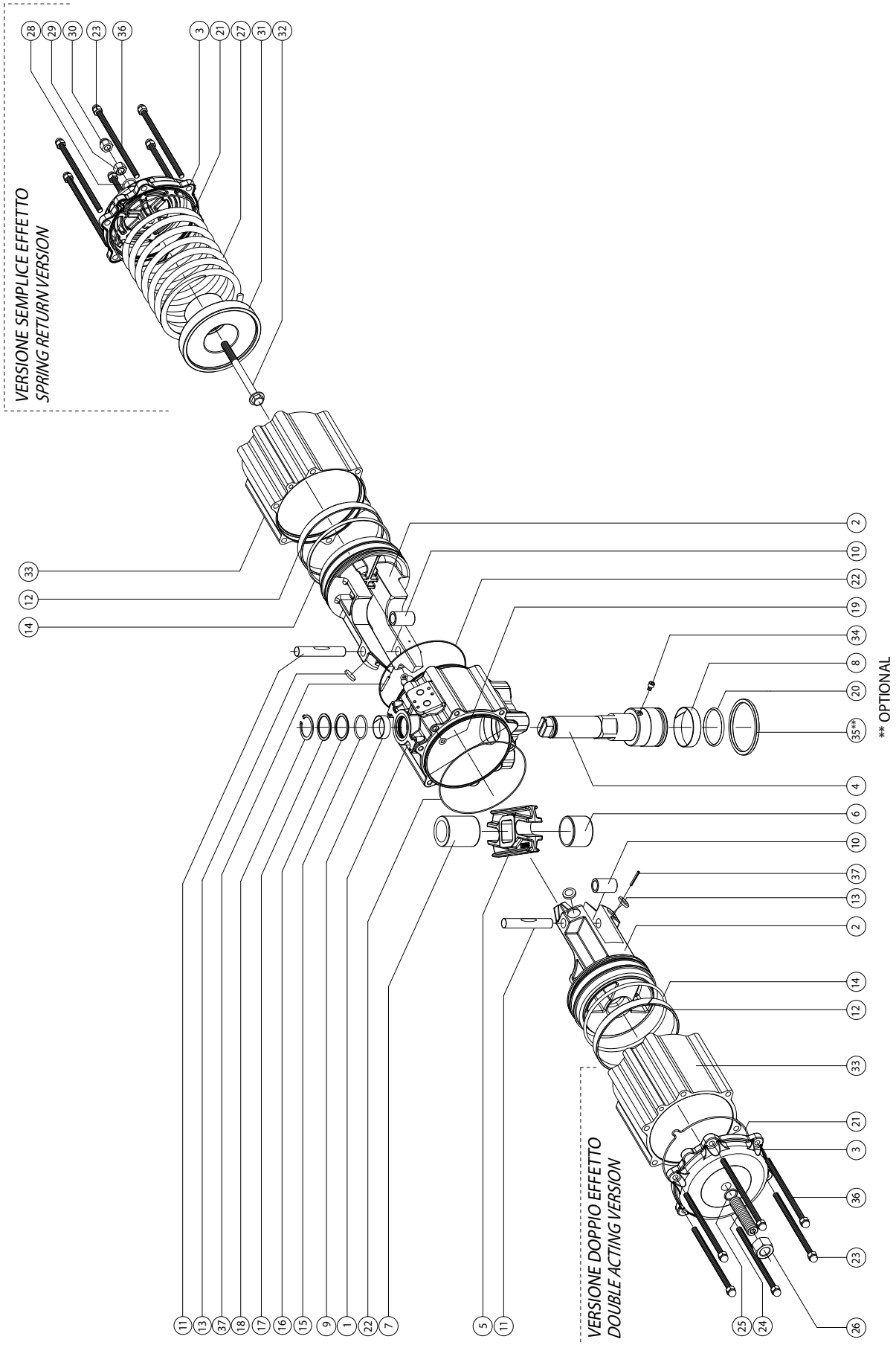
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 1 | Acciaio *Steel alloy* |
| 2 | Spina acciaio *Steel pin* | 1 | Acciaio *Steel alloy* |
| 3 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 4 | Molla interna *Internal spring* | 1 | Acciaio *Steel alloy* |
| 5* | *O-ring* | 2 | NBR |
| 6 | Albero *Shaft* | 1 | Acciaio *Steel alloy* |
| 7 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel alloy* |
| 8* | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resin* |
| 9* | *O-ring* | 1 | FKM |
| 10* | *O-ring* | 1 | FKM |
| 11 | Bussola di supporto inferiore *Low bearing bush* | 1 | Alluminio *Aluminium* |
| 12 | Vite per bussola *Screw* | 2 | Acciaio *Steel alloy* |
| 13 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 14 | Distanziale *Spacer* | 1 | Alluminio *Aluminium* |
| 15 | Tappo *Cap* | 1 | Alluminio *Aluminium* |
| 16 | Vite di assemblaggio *Cap screw* | 7 | Acciaio *Steel alloy* |
| 17 | Dado a calotta *Cap nut* | 7 | Acciaio *Steel alloy* |
| 18 | Grano (tappo) *Grub screw* | 1 | Acciaio *Steel alloy* |
| 19 | Dado *Nut* | 1 | Acciaio *Steel alloy* |
| 20 | Grano di regolazione *Grub screw* | 1 | Acciaio *Steel alloy* |
| 21* | *O-ring* | 1 | NBR |
| 22 | Forcella *Scotch yoke* | 1 | Acciaio *Steel alloy* |
| 23 | Bussola di scorr/supp *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 24* | *O-ring* | 2 | NBR |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 25* | Supporto superiore *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resin* |
| 26* | *O-ring* | 1 | FKM |
| 27* | Anello di supporto esterno *Thrust bearing* | 1 | Resina acetalica *Acetalic resin* |
| 28 | Rondella di spessoramento *Washer* | 1 | Acciaio *Steel alloy* |
| 29 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 30 | Spina antiespulsione *Spring pin* | 1 | Acciaio *Steel alloy* |
| 31* | Dischetti *Bearing (piston back)* | 2 | Resina acetalica *Acetalic resin* |
| 32 | Pistone *Piston* | 1 | Alluminio *Aluminium* |
| 33* | *O-ring* | 1 | NBR |
| 34* | Anello di guida *Bearing (piston head)* | 1 | *P.T.F.E. Carbo-Graphite filled* |
| 35 | Cilindro laterale *Lateral Cylinder* | 1 | Acciaio *Steel alloy* |
| 36* | *O-ring* | 2 | NBR |
| 37 | Tappo *Cap* | 1 | Acciaio *Steel alloy* |
| 38 | Vite di assemblaggio *Cap screws* | 7 | Acciaio *Steel alloy* |
| 39 | Dado a calotta *Nut* | 7 | Acciaio *Steel alloy* |
| 40* | *O-ring* | 1 | NBR |
| 41 | Dado *Nut* | 1 | Acciaio *Steel alloy* |
| 42 | Dado a calotta *Cap Nut* | 1 | Acciaio *Steel alloy* |
| 43 | Vite di precarica molla *Screw* | 1 | Acciaio *Steel alloy* |
| 44 | *O-ring* | 1 | NBR |
| 45 | Cont.molla piccolo *Spring cap* | 1 | Alluminio *Aluminium* |
| 46 | *O-ring* | 1 | NBR |
| 47 | Cont.molla grande *Spring cup* | 1 | Alluminio *Aluminium* |
| 48 | Molla esterna *External spring* | 1 | Acciaio *Steel alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO MISURA: SR 1920
## *SPRING RETURN COMPONENTS SIZE: SR 1920*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 4 | Albero *Shaft* | 1 | Acciaio Inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 7 | Bussola scorrim/supporto *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 8 | Fascetta supp.infer. *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resins* |
| 9 | Fascetta supp.super. *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resins* |
| 10 | Bussola acciaio *Steel bush* | 2 | Lega di acciaio *Steel alloy* |
| 11 | Spina acciaio *Steel pin* | 2 | Lega di acciaio *Steel alloy* |
| 12 | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 13* | Dischetto supporto *Bearing (piston back)* | 4 | Resina acetalica *Acetalic resins* |
| 14* | O-ring del pistone *O-ring* | 2 | NBR |
| 15* | O-ring albero sup. *O-ring* | 1 | FKM |
| 16 | Anello supporto est. *Thrust bearing* | 1 | Resina acetalica *Acetalic resins* |
| 17 | Rondella spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 18 | *Seeger* | 1 | Acciaio Inox *Stainless steel* |
| 19* | O-ring condaria *O-ring* | 2 | NBR |

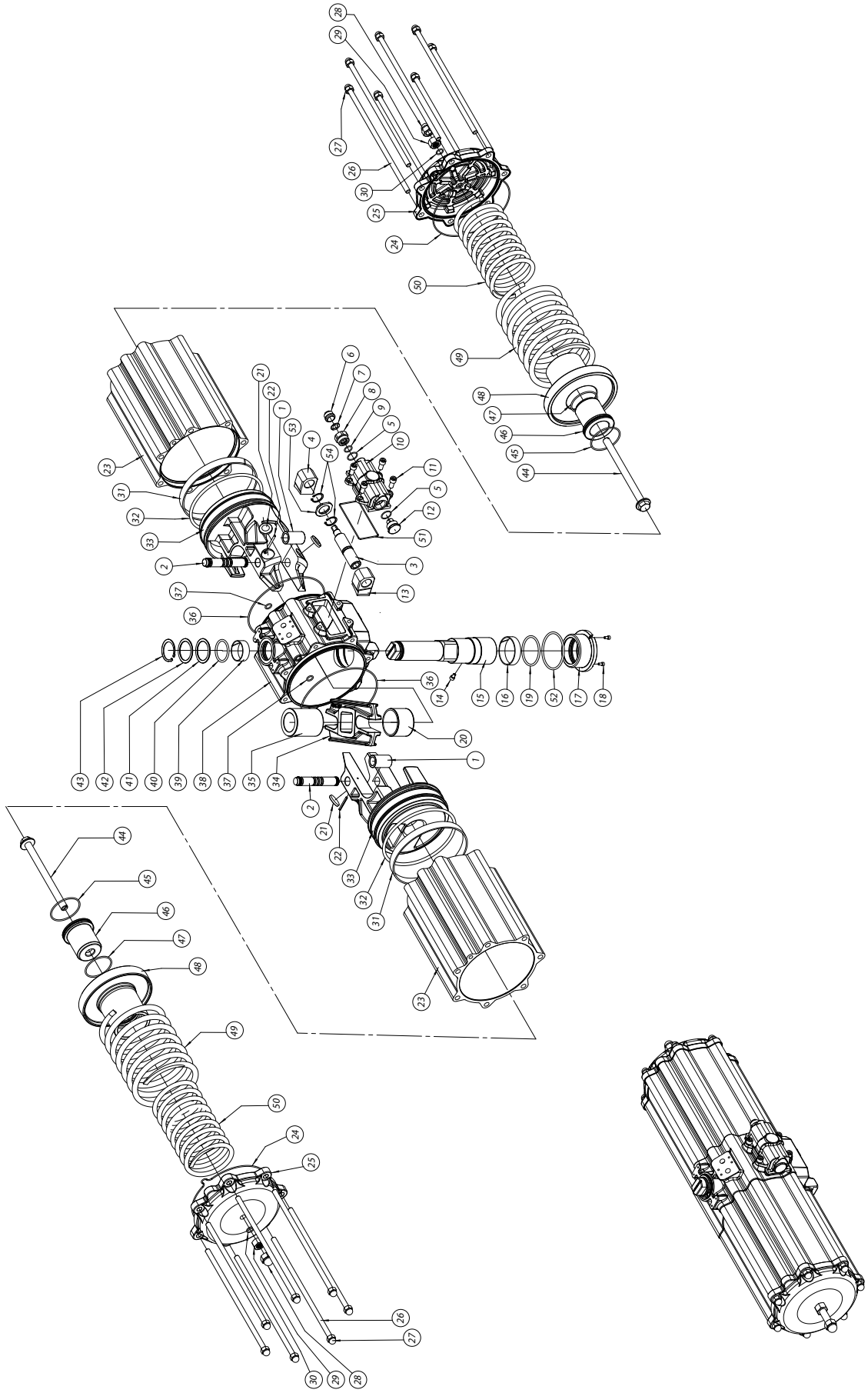
* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 20* | O-ring albero inferiore *O-ring* | 1 | FKM |
| 21* | O-ring tappo *O-ring* | 2 | NBR |
| 22* | O-ring corpo-cilindro *O-ring* | 2 | NBR |
| 23 | Dado a calotta *Cap nut* | 12 | Acciaio inox *Stainless steel* |
| 24 | Grano di regolaz. *Grub screws* | 2 | Acciaio inox *Stainless steel* |
| 25* | O-ring grano *O-ring* | 2 | NBR |
| 26 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 27 | Molla *Spring* | 4 | Lega di acciaio *Steel alloy* |
| 28* | O-ring regolazione *O-ring* | 2 | NBR |
| 29 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 30 | Dado a calotta *Cap nut* | 2 | Acciaio inox *Stainless steel* |
| 31 | Contenitore molla *Spring cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 32 | Vite di prec.molla *Screw* | 2 | Acciaio inox *Stainless steel* |
| 33 | Cilindro laterale *Cylinder* | 2 | Lega di alluminio *Aluminium alloy* |
| 34 | Vite antiespulsione *Screw* | 1 | Acciaio inox *Stainless steel* |
| 35** | Anello di centraggio *Center ring* | 1 | Lega di alluminio *Aluminium alloy* |
| 36 | Vite di assemblaggio *Cap screw* | 12 | Acciaio *Steel alloy* |
| 37 | Spina antiespulsione *Spring pin* | 2 | Lega di acciaio *Steel alloy* |
| | | | |

* Particolari del kit di ricambio *Components of spare part kit*

***OPTIONAL*

# COMPONENTI SEMPLICE EFFETTO MISURA: SR 2880
## *SPRING RETURN COMPONENTS SIZE: SR 2880*



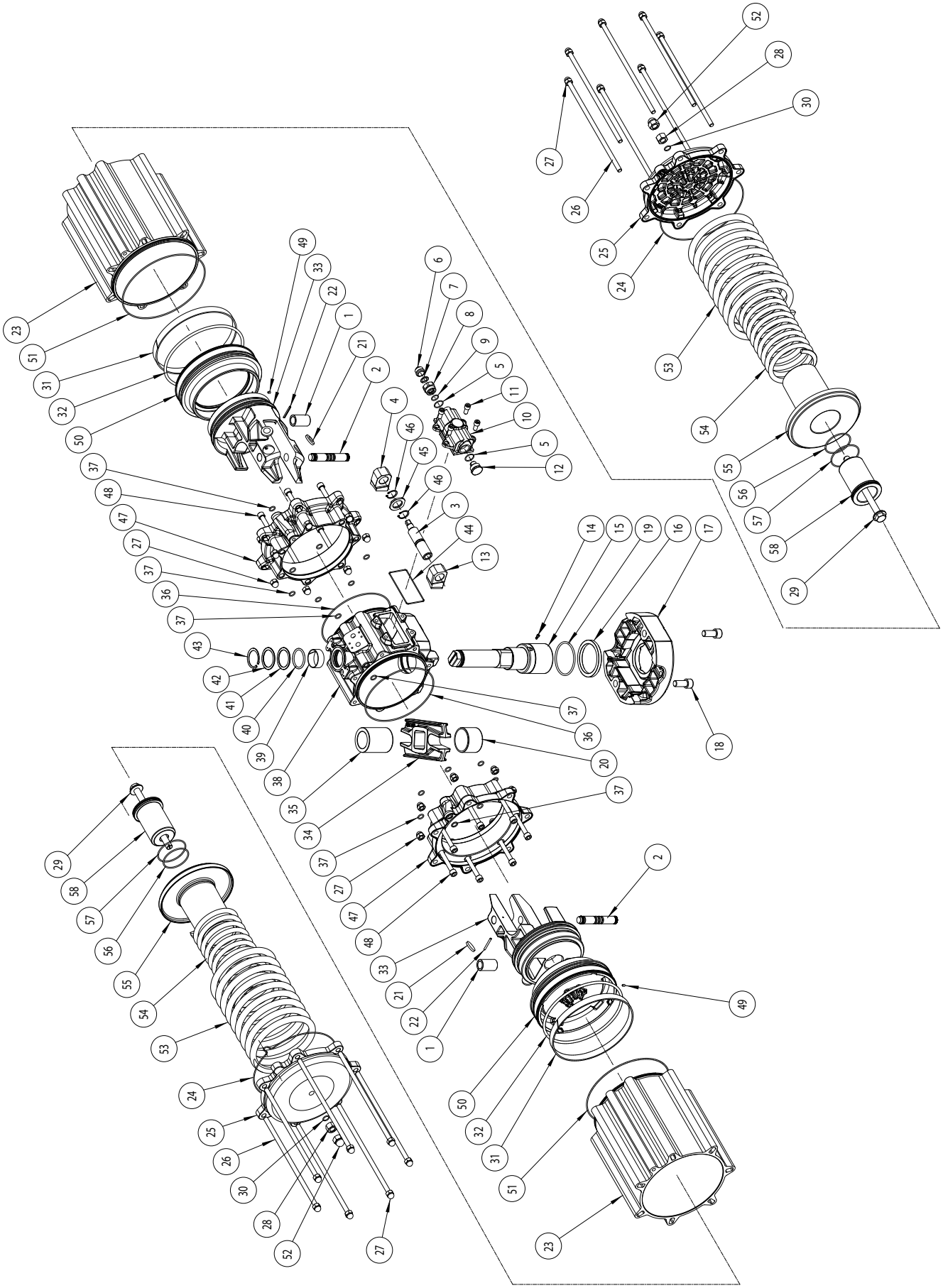
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 2 | Acciaio *Steel alloy* |
| 2 | Spina acciaio *Steel pin* | 2 | Acciaio *Steel alloy* |
| 3 | Vite di regolazione *Adjustment screw* | 1 | Acciaio *Steel alloy* |
| 4 | Fermo sinistro *Left stop* | 1 | Acciaio *Steel alloy* |
| 5* | *O-ring* | 2 | NBR |
| 6 | Tappo di protezione *Protection cap* | 1 | Alluminio *Aluminium* |
| 7 | Rondella antirotazione *Antirotation washer* | 1 | Acciaio *Steel alloy* |
| 8 | Ghiera passante *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 9* | *O-ring* | 1 | NBR |
| 10 | Carter di regolaz *Carter* | 1 | Alluminio *Aluminium* |
| 11 | Vite per carter *Screw* | 4 | Acciaio *Steel alloy* |
| 12 | Ghiera cieca *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 13 | Fermo destro *Right stop* | 1 | Acciaio *Steel alloy* |
| 14 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel alloy* |
| 15 | Albero *Shaft* | 1 | Acciaio *Steel alloy* |
| 16 | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic resins* |
| 17 | Bussola di supporto inferiore *low bearing bush* | 1 | Alluminio *Aluminium* |
| 18 | Vite per bussola *Screw* | 2 | Acciaio *Steel alloy* |
| 19* | *O-ring* | 1 | FKM |
| 20 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 21* | Dischetti *Bearing (piston back)* | 4 | Resina acetalica *Acetalic resins* |
| 22 | Spina antiespulsione *Spring pin* | 2 | Acciaio *Steel alloy* |
| 23 | Cilindro *latarelae Lateral cylinder* | 2 | Alluminio *Aluminium* |
| 24* | *O-ring tappo O-ring* | 2 | NBR |
| 25 | Tappo *Cap* | 2 | Alluminio *Aluminium* |
| 26 | Vite di assemblaggio *Cap screws* | 14 | Acciaio *Steel alloy* |
| 27 | Dado a calotta *Cap nut* | 14 | Acciaio *Steel alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 28 | Dado a calotta *Cap nut* | 2 | Acciaio *Steel alloy* |
| 29 | Dado *Nut* | 2 | Acciaio *Steel alloy* |
| 30* | *O-ring* | 2 | NBR |
| 31* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 32* | O-ring pistone *O-ring* | 2 | NBR |
| 33 | Pistone *Piston* | 2 | Alluminio *Aluminium* |
| 34 | Forcella *Scotch yoke* | 1 | Acciaio *Steel alloy* |
| 35 | Bussola di scorr/supp *Bearing shaft* | 1 | Resina acetalica *Acetalic resins* |
| 36* | *O-ring* | 2 | NBR |
| 37* | *O-ring* | 2 | NBR |
| 38 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 39* | Supporto superiore *Bearing (shaft top)* | 1 | Resina acetalica *Acetalic resins* |
| 40* | *O-ring* | 1 | FKM |
| 41* | Anello di supp.esterno *Thrust bearing* | 1 | Resina acetalica *Acetalic resins* |
| 42 | Rondella di spessoram. *Washer* | 1 | Acciaio *Steel alloy* |
| 43 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 44 | Vite precarica *molla Screw* | 2 | Acciaio *Steel alloy* |
| 45* | *O-ring* | 2 | NBR |
| 46 | Cont.molla piccolo *Spring cap* | 2 | Alluminio *Aluminium* |
| 47* | *O-ring* | 2 | NBR |
| 48 | Cont. molla grande *Spring cap* | 2 | Alluminio *Aluminium* |
| 49 | Molla esterna *External spring* | 2 | Acciaio *Steel alloy* |
| 50 | Molla interna *Internal spring* | 2 | Acciaio *Steel alloy* |
| 51* | Guarnizione carter *Gasket* | 1 | NBR |
| 52* | *O-ring* | 1 | FKM |
| 53 | Rondella di supporto *Washer* | 1 | Acciaio *Steel alloy* |
| 54 | *Seeger* | 2 | Acciaio *Steel alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO MISURA: SR 4000
## *SPRING RETURN COMPONENTS SIZE: SR 4000*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Bussola acciaio *Steel bush* | 2 | Acciaio *Steel Alloy* |
| 2 | Spina acciaio *Steel pin* | 2 | Acciaio *Steel Alloy* |
| 3 | Vite di regolazione *Regulation screw* | 1 | Acciaio *Steel Alloy* |
| 4 | Fermo sinistro *Left stop* | 1 | Acciaio *Steel Alloy* |
| 5* | *O-ring* | 2 | NBR |
| 6 | Tappo di protezione *Protection cap* | 1 | Alluminio *Aluminium* |
| 7 | Rondella antirotazione *Antirotation washer* | 1 | Acciaio *Steel Alloy* |
| 8 | Ghiera passante *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 9* | *O-ring* | 1 | NBR |
| 10 | Carter di regolaz. *Carter* | 1 | Alluminio *Aluminium* |
| 11 | Vite per carter *Screw* | 4 | Acciaio *Steel Alloy* |
| 12 | Ghiera cieca *Metal ring* | 1 | Acciaio inox *Stainless steel* |
| 13 | Fermo destro *Right stop* | 1 | Acciaio *Steel Alloy* |
| 14 | Vite antiespulsione *Screw* | 1 | Acciaio *Steel Alloy* |
| 15 | Albero *Shaft* | 1 | Acciaio *Steel Alloy* |
| 16 | Supporto inferiore *Bearing (shaft bottom)* | 1 | Resina acetalica *Acetalic Resins* |
| 17 | Interfaccia F25 *Interface F25* | 1 | Alluminio Aluminium |
| 18 | Vite per interfaccia *Screw* | 2 | Acciaio *Steel Alloy* |
| 19* | *O-ring* | 1 | FKM |
| 20 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic Resins* |
| 21 | Dischetti *Bearing (piston back)* | 4 | Resina acetalica *Acetalic Resins* |
| 22 | Spina antiespulsione *Spring pin* | 2 | Acciaio *Steel Alloy* |
| 23 | Cilindro laterale *Lateral cylinder* | 2 | Alluminio *Aluminium* |
| 24* | O-ring tappo *O-ring* | 2 | NBR |
| 25 | Tappo *Cap* | 2 | Alluminio *Aluminium* |
| 26 | Vite di assemblaggio *Cap screws* | 14 | Acciaio *Steel Alloy* |
| 27 | Dado a calotta *Cap nut* | 28 | Acciaio *Steel Alloy* |
| 28 | Dado *Nut* | 2 | Acciaio *Steel Alloy* |
| 29 | Vite precarica molla *Screw* | 2 | Acciaio *Steel Alloy* |

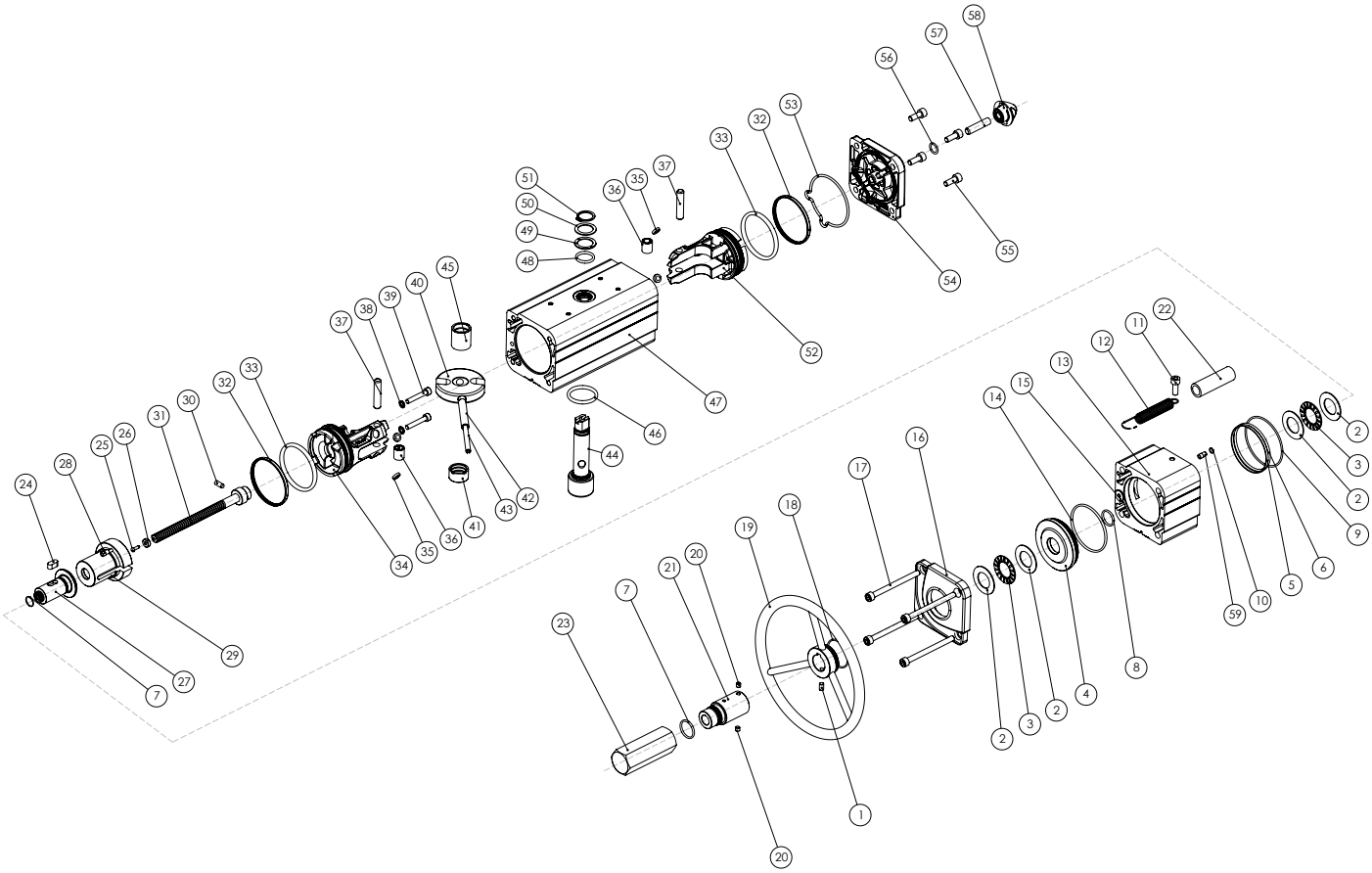
* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 30* | *O-ring* | 2 | NBR |
| 31* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 32* | O-ring pistone *O-ring* | 2 | NBR |
| 33 | Pistone *Piston* | 2 | Alluminio *Aluminium* |
| 34 | Forcella *Scotch Yoke* | 1 | Acciaio *Steel alloy* |
| 35 | Bussola di scorr/supp *Bearing shaft* | 1 | Resina acetalica *Acetalic Resins* |
| 36* | *O-ring* | 2 | NBR |
| 37* | *O-ring* | 18 | NBR |
| 38 | Corpo *Body* | 1 | Alluminio *Aluminium* |
| 39* | Supporto superiore *Bearing (Shaft top)* | 1 | Resina acetalica *Acetalic resins* |
| 40* | *O-ring* | 1 | FKM |
| 41* | Anello di supp.esterno *Thrust bearing* | 1 | Resina acetalica *Acetalic resins* |
| 42 | Rondella di spessoram. *Washer* | 1 | Acciaio *Steel alloy* |
| 43 | *Seeger* | 1 | Acciaio *Steel alloy* |
| 44* | Guarnizione carter *Gasket* | 1 | NBR |
| 45 | Rondella supporto *Washer* | 1 | Acciaio *Steel alloy* |
| 46 | *Seeger* | 2 | Acciaio *Steel alloy* |
| 47 | Flangia rid.cilindro *Flange* | 2 | Alluminio *Aluminium* |
| 48 | Viti flangia *Screw* | 14 | Acciaio *Steel alloy* |
| 49 | Grano *Grub screw* | 2 | Acciaio *Steel alloy* |
| 50 | Flangia rid.pistone *Flange* | 2 | Alluminio *Aluminium* |
| 51* | *O-ring* | 2 | NBR |
| 52 | Dado a calotta *Cap nut* | 2 | Acciaio *Steel alloy* |
| 53 | Molla esterna *External spring* | 2 | Acciaio *Steel alloy* |
| 54 | Molla interna *Internal spring* | 2 | Acciaio *Steel alloy* |
| 55 | Cont. molla grande *Spring cap* | 2 | Alluminio *Aluminium* |
| 56 | *O-ring* | 2 | NBR |
| 57 | *O-ring* | 2 | NBR |
| 58 | Cont.molla piccolo *Spring cap* | 2 | Alluminio *Aluminium* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO EFFETTO CON COMANDO MANUALE INTEGRATO - MISURE: FINO A DANV 1920

## *DOUBLE ACTING COMPONENTS WITH MANUAL INTEGRATED HANDWHEEL - SIZES: UP TO DANV 1920*



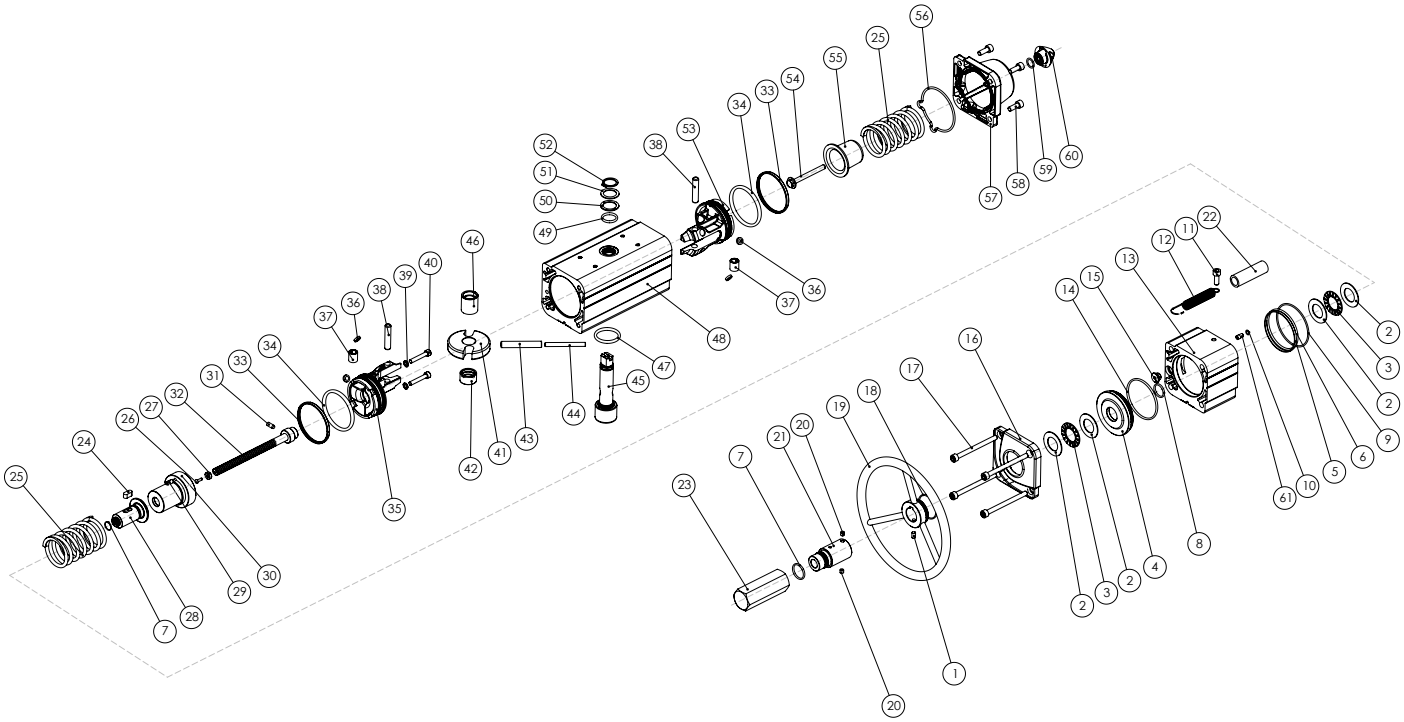
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.** | **Materiale *Material*** |
| 1 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 2* | Rondelle per Cuscinetti a rullini *Washer for roller bearings* | 4 | Lega di acciaio *Steel alloy* |
| 3* | Cuscinetti a rullini *Roller bearings* | 2 | Lega di acciaio *Steel alloy* |
| 4 | Flangia *Flange* | 1 | Lega di alluminio *Aluminium alloy* |
| 5 | Anello di Centraggio (Solo per DANV720) *Centering ring (Only for DANV720)* | 1 | Lega di alluminio *Aluminium alloy* |
| 6* | *O'ring* (Solo per DANV720) *(Only for DANV720)* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 7* | *O'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 8* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 9* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 10* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 11 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 12 | Molla *Spring* | 1 | Acciaio inox *Stainless Steel* |
| 13 | Cilindro distanziale *Cylinder spacer* | 1 | Lega di alluminio *Aluminium alloy* |
| 14* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 15* | Tappo guarnizione *Seal cap* | 1 | Ottone+Gomma nitrilica *Brass+Nitrilic rubber* |
| 16 | Tappo (modificato) *Cap (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 17 | Vite *Screw* | 4 | Acciaio inox *Stainless Steel* |
| 18* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 19 | Volantino di manovra *Handwheel for maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 20 | Grano *Set screw* | 2 | Acciaio inox *Stainless Steel* |
| 21 | Tubo di protezione *Protecting tube* | 1 | Lega di alluminio *Aluminium alloy* |
| 22 | Tubo trasparente *Trasparent tube* | 1 | Policarbonato *Polycarbonate* |
| 23 | Tappo di protezione *Protecting cap* | 1 | Lega di alluminio *Aluminium alloy* |
| 24 | Chiave *Key* | 1 | Lega di acciaio *Steel alloy* |
| 25* | Rivetto *Rivet* | 1 | Lega di acciaio *Steel alloy* |
| 26* | Indicatore *Indicator* | 1 | Polipropilene *Polypropylene* |
| 27 | Chiocciola di manovra *Lead nut maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 28 | Boccola filettata (Solo per DANV480) *Threaded bush (Only for DANV480)* | 2 | Acciaio inox *Stainless Steel* |
| 29 | Contenitore molla speciale *Special spring cap* | 1 | Lega di alluminio *Aluminium alloy* |
| 30 | Spina *Pin* | 1 | Lega di acciaio *Steel alloy* |

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.** | **Materiale *Material*** |
| 31 | Vite di manovra *Screw maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 32* | Anello di tenuta (Pistone) *Dynamic seal (Piston)* | 2 | Poliuretano *Polyurethane* |
| 33* | O'ring pistone *Piston o'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 34 | Pistone (modificato) *Piston (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 35* | Dischetto di supporto *Piston's support* | 4 | *P.T.F.E. + 25%C* |
| 36 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 37 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 38* | Guarnizione *Bounded* | 2 | Lega di acciaio+Gomma nitrilica *Steel alloy+Nitrilic rubber* |
| 39 | Vite *Screw* | 2 | Acciaio inox *Stainless Steel* |
| 40 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 41 | Supporto albero *Shaft support* | 1 | Resina Acetalica *Acetalic resin* |
| 42 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 43 | Spina elastica interna *Internal elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 44 | Albero *Shaft* | 1 | Acciaio inox *Stainless Steel* |
| 45 | Bussola di scorrimento *Support bush* | 1 | Resina Acetalica *Acetalic resin* |
| 46 | O'ring albero inferiore *Lower sealing shaft* | 1 | FKM |
| 47 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 48 | O'ring albero superiore *Upper sealing shaft* | 1 | FKM |
| 49 | Anello di supporto esterno *External support ring* | 1 | Resina Acetalica *Acetalic resin* |
| 50 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 51 | *Seeger* | 1 | Acciaio inox *Stainless Steel* |
| 52 | Pistone (Standard) *Piston (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 53* | O'ring tappo *Cap o'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 54 | Tappo (Standard) *Cap (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 55 | Vite *Screw* | 4 | Acciaio inox *Stainless Steel* |
| 56* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 57 | Grano *Grub screw* | 1 | Acciaio inox *Stainless Steel* |
| 58 | Dado *Nut* | 1 | Lega di alluminio *Aluminium alloy* |
| 59 | Inserto per o'ring *Insert for o'ring (Only for DANV106-240-360-720)* | 1 | Acciaio inox *Stainless Steel* |

*Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO CON COMANDO MANUALE INTEGRATO - MISURE: FINO A SRNV 960

## *SPRING RETURN COMPONENTS WITH MANUAL INTEGRATED HANDWHEEL - SIZES: UP TO SRNV 960*



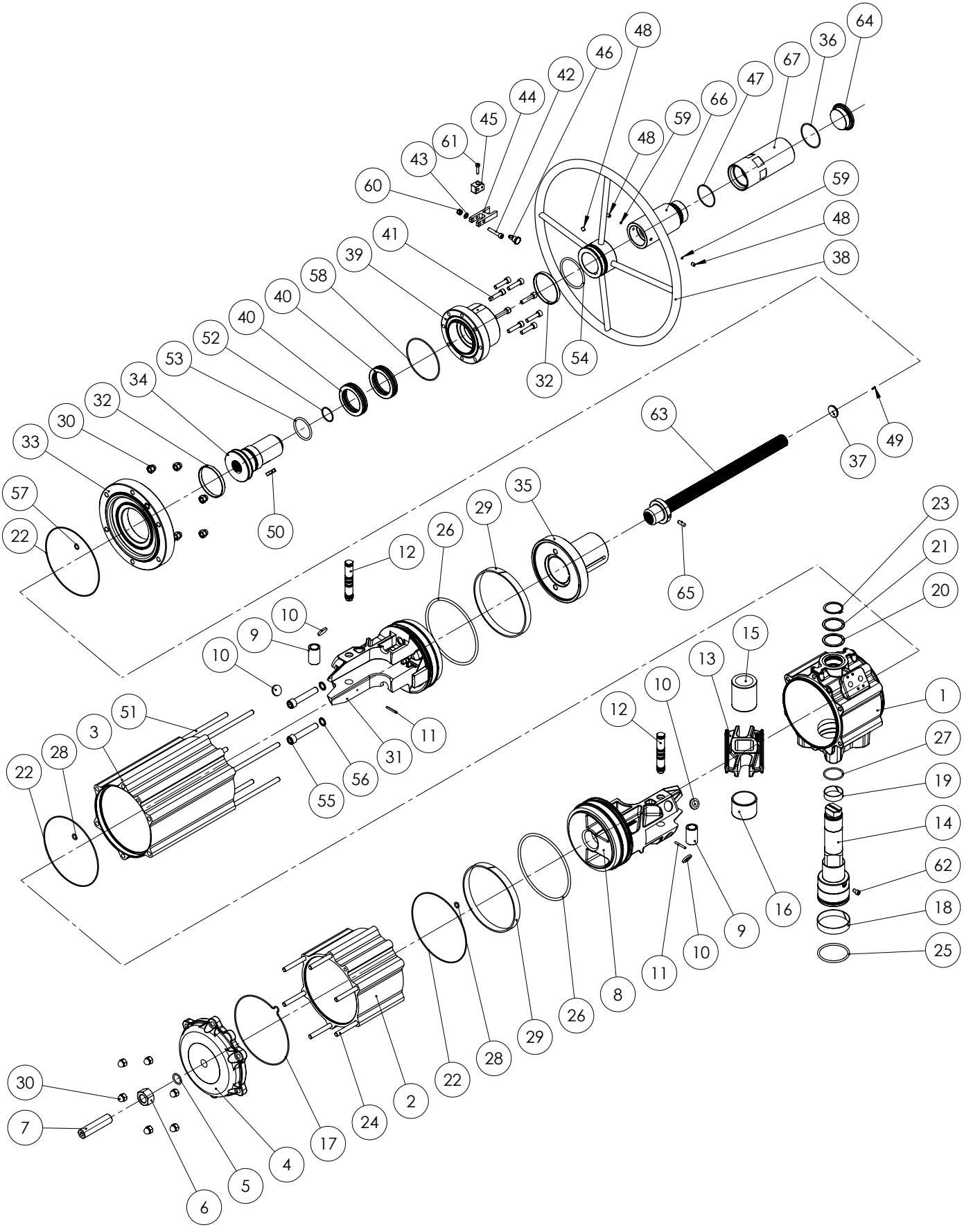
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.** | **Materiale *Material*** |
| 1 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 2* | Rondelle per Cuscinetti a rullini *Washer for roller bearings* | 4 | Lega di acciaio *Steel alloy* |
| 3* | Cuscinetti a rullini *Roller bearings* | 2 | Lega di acciaio *Steel alloy* |
| 4 | Flangia *Flange* | 1 | Lega di alluminio *Aluminium alloy* |
| 5 | Anello di Centraggio (Solo per SRNV360) *Centering ring (Only for SRNV360)* | 1 | Lega di alluminio *Aluminium alloy* |
| 6* | *O'ring* (Solo per SRNV360) *(Only for SRNV360)* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 7* | *O'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 8* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 9* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 10* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 11 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 12 | Molla *Spring* | 1 | Acciaio inox *Stainless Steel* |
| 13 | Cilindro distanziale *Cylinder spacer* | 1 | Lega di alluminio *Aluminium alloy* |
| 14* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 15* | Tappo guarnizione *Seal cap* | 1 | Ottone+Gomma nitrilica *Brass+Nitrilic rubber* |
| 16 | Tappo (modificato) *Cap (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 17 | Vite *Screw* | 4 | Acciaio inox *Stainless Steel* |
| 18* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 19 | Volantino di manovra *Handwheel for maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 20 | Grano *Set screw* | 2 | Acciaio inox *Stainless Steel* |
| 21 | Tubo di protezione *Protecting tube* | 1 | Lega di alluminio *Aluminium alloy* |
| 22 | Tubo trasparente *Trasparent tube* | 1 | Policarbonato *Polycarbonate* |
| 23 | Tappo di protezione *Protecting cap* | 1 | Lega di alluminio *Aluminium alloy* |
| 24 | Chiave *Key* | 1 | Lega di acciaio *Steel alloy* |
| 25 | Molla *Spring* | 2 | Lega di acciaio *Steel alloy* |
| 26* | Rivetto *Rivet* | 1 | Lega di acciaio *Steel alloy* |
| 27* | Indicatore *Indicator* | 1 | Polipropilene *Polypropylene* |
| 28 | Chiocciola di manovra *Lead nut maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 29 | Boccola filettata (Solo per SRNV240) *Threaded bush (Only for SRNV240)* | 2 | Acciaio inox *Stainless Steel* |
| 30 | Contenitore molla speciale *Special spring cap* | 1 | Lega di alluminio *Aluminium alloy* |

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.** | **Materiale *Material*** |
| 31 | Spina *Pin* | 1 | Lega di acciaio *Steel alloy* |
| 32 | Vite di manovra *Screw maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 33* | Anello di tenuta (Pistone) *Dynamic seal (Piston)* | 2 | Poliuretano *Polyurethane* |
| 34* | O'ring pistone *Piston o'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 35 | Pistone (modificato) *Piston (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 36* | Dischetto di supporto *Piston's support* | 4 | *P.T.F.E. + 25%C* |
| 37 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 38 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 39* | Guarnizione *Bounded* | 2 | Lega di acciaio+Gomma nitrilica *Steel alloy+Nitrilic rubber* |
| 40 | Vite *Screw* | 2 | Acciaio inox *Stainless Steel* |
| 41 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 42 | Supporto albero *Shaft support* | 1 | Resina Acetalica *Acetalic resin* |
| 43 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 44 | Spina elastica interna *Internal elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 45 | Albero *Shaft* | 1 | Acciaio inox *Stainless Steel* |
| 46 | Bussola di scorrimento *Support bush* | 1 | Resina Acetalica *Acetalic resin* |
| 47 | O'ring albero inferiore *Lower sealing shaft* | 1 | FKM |
| 48 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 49 | O'ring albero superiore *Upper sealing shaft* | 1 | FKM |
| 50 | Anello di supporto esterno *External support ring* | 1 | Resina Acetalica *Acetalic resin* |
| 51 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 52 | *Seeger* | 1 | Acciaio inox *Stainless Steel* |
| 53 | Pistone (Standard) *Piston (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 54 | Vite di precarica molla *Spring loading screw* | 1 | Acciaio inox *Stainless Steel* |
| 55 | Contenitore molla (Standard) *Spring cap (Standard)* | 1 | Lega di acciaio o Lega di alluminio *Steel alloy or Aluminium alloy* |
| 56* | O'ring tappo *Cap o'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 57 | Tappo (Standard) *Cap (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 58 | Vite *Screw* | 4 | Acciaio inox *Stainless Steel* |
| 59* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 60 | Dado *Nut* | 1 | Lega di alluminio *Aluminium alloy* |
| 61 | Inserto per o'ring *Insert for o'ring (Only for SRNV53-120-180-360)* | 1 | Acciaio inox *Stainless Steel* |

*Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO EFFETTO CON COMANDO MANUALE INTEGRATO - MISURA: DANV 3840

## *DOUBLE ACTING COMPONENTS WITH MANUAL INTEGRATED HANDWHEEL - SIZE: DANV 3840*



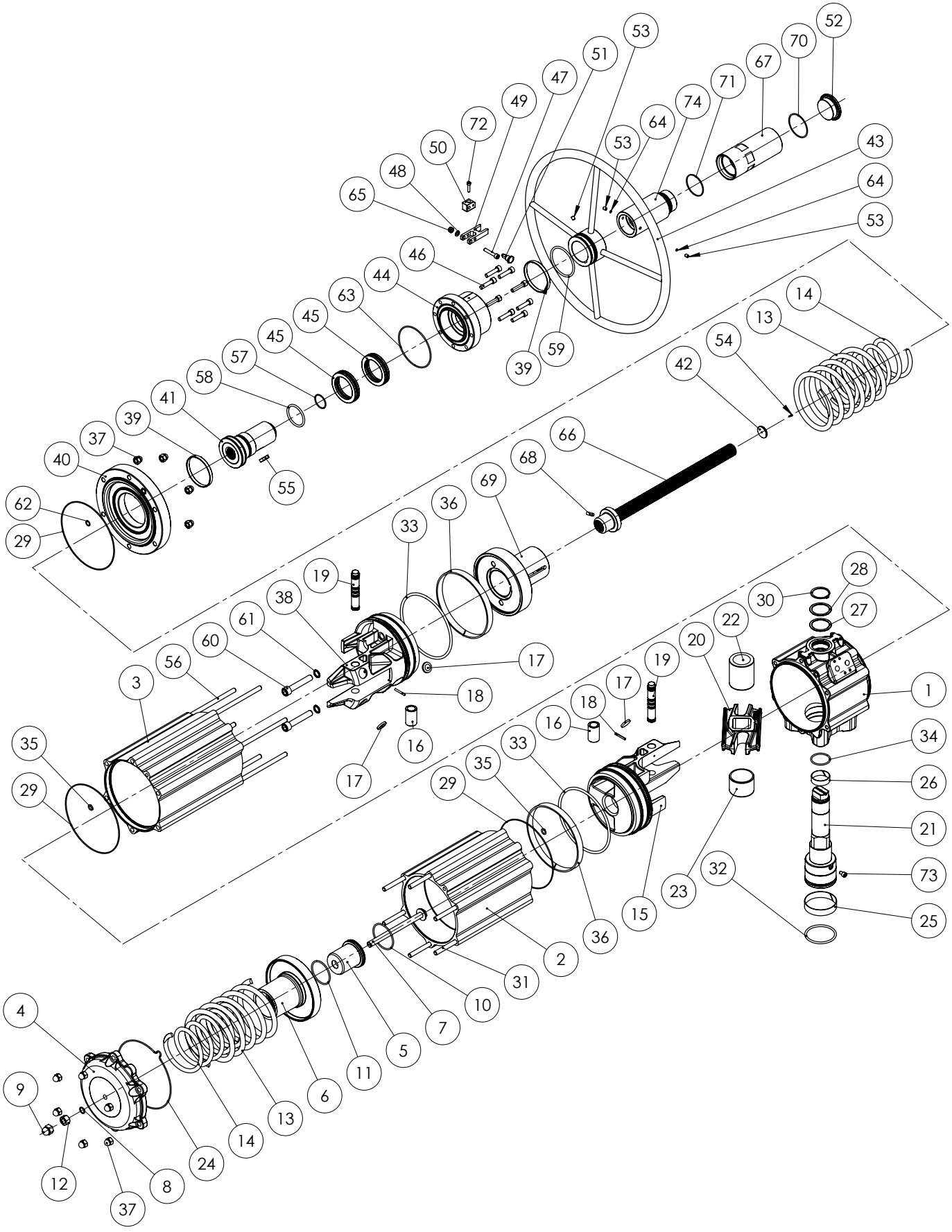
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Cilindro Laterale *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 3 | *Cilindro Laterale Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 4 | Tappo (Standard) *Cap (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 5* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 6 | Dado *Nut* | 1 | Acciaio inox *Stainless Steel* |
| 7 | Grano *Grub screw* | 1 | Acciaio inox *Stainless Steel* |
| 8 | Pistone (Standard) *Piston (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 9 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 10* | Dischetto di supporto *Piston's support* | 4 | Resina Acetalica *Acetalic resin* |
| 11 | Spina *Pin* | 2 | Lega di acciaio *Steel alloy* |
| 12 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 13 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 14 | Albero *Shaft* | 1 | Acciaio inox *Stainless Steel* |
| 15 | Bussola di scorrimento *Support bush* | 1 | Resina Acetalica *Acetalic resin* |
| 16 | Supporto albero *Shaft support* | 1 | Resina Acetalica *Acetalic resin* |
| 17* | O'ring tappo *Cap o'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 18* | Boccola (albero inferiore) *Bearing (shaft bottom)* | 1 | Resina Acetalica *Acetalic resin* |
| 19* | Boccola (albero superiore) *Bearing (shaft top)* | 1 | Resina Acetalica *Acetalic resin* |
| 20* | Anello di supporto esterno *External support ring* | 1 | Resina Acetalica *Acetalic resin* |
| 21 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 22* | *O'ring* | 3 | Gomma nitrilica *Nitrilic rubber* |
| 23 | *Seeger* | 1 | Acciaio inox *Stainless Steel* |
| 24 | Vite *Screw* | 6 | Acciaio inox *Stainless Steel* |
| 25* | O'ring albero inferiore *Lower sealing shaft* | 1 | FKM |
| 26* | O'ring pistone *Piston o'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 27* | O'ring albero superiore *Upper sealing shaft* | 1 | FKM |
| 28* | *O'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 29* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 30 | Dado *Nut* | 12 | Acciaio inox *Stainless Steel* |
| 31 | Pistone (modificato) *Piston (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 32* | Cuscinetto (Volantino) *Bearings (Handwheel)* | 2 | Poliuretano *Polyurethane* |
| 33 | Tappo (modificato) *Cap (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 34 | Chiocciola di manovra *Lead nut maneuever* | 1 | Lega di acciaio *Steel alloy* |

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 35 | Contenitore molla speciale *Special spring cap* | 1 | Lega di acciaio *Steel alloy* |
| 36* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 37* | Indicatore *Indicator* | 1 | Polipropilene *Polypropylene* |
| 38 | Volantino di manovra *Handwheel for maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 39 | Flangia *Flange* | 1 | Lega di alluminio *Aluminium alloy* |
| 40* | Cuscinetto *Thrust bearings* | 2 | Lega di acciaio *Steel alloy* |
| 41 | Vite *Screw* | 8 | Acciaio inox *Stainless Steel* |
| 42 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 43 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 44 | Chiusura forcella *Closing fork* | 1 | Lega di alluminio *Aluminium alloy* |
| 45 | Supporto forcella *Fork support* | 1 | Lega di alluminio *Aluminium alloy* |
| 46 | Lucchettaggio *Lock wheel* | 1 | Acciaio inox *Stainless Steel* |
| 47* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 48 | Vite *Screw* | 3 | Acciaio inox *Stainless Steel* |
| 49* | Rivetto *Rivet* | 1 | Acciaio inox *Stainless Steel* |
| 50 | Chiave *Key* | 1 | Acciaio inox *Stainless Steel* |
| 51 | Vite *Screw* | 6 | Lega di acciaio *Steel alloy* |
| 52* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 53* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 54* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 55 | Vite *Screw* | 2 | Acciaio inox *Stainless Steel* |
| 56* | Guarnizione *Bounded* | 2 | Lega di acciaio+Gomma nitrilica *Steel alloy+Nitrilic rubber* |
| 57* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 58* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 59* | Tappo *Plug* | 2 | P.T.F.E |
| 60 | Dado *Nut* | 1 | Acciaio inox *Stainless Steel* |
| 61 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 62 | Vite di sicurezza *Safety screw* | 1 | Acciaio inox *Stainless Steel* |
| 63 | Vite di manovra *Screw maneuever* | 1 | Acciaio inox *Stainless Steel* |
| 64 | Tappo di protezione *Protecting cap* | 1 | Lega di alluminio *Aluminium alloy* |
| 65 | Spina *Pin* | 1 | Acciaio inox *Stainless Steel* |
| 66 | Tubo di protezione *Protecting tube* | 1 | Lega di alluminio *Aluminium alloy* |
| 67 | Tubo di protezione removibile *Protecting removable tube* | 1 | Lega di alluminio *Aluminium alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO CON COMANDO MANUALE INTEGRATO - MISURA: SRNV 1920

## *SPRING RETURN COMPONENTS WITH MANUAL INTEGRATED HANDWHEEL - SIZE: SRNV 1920*

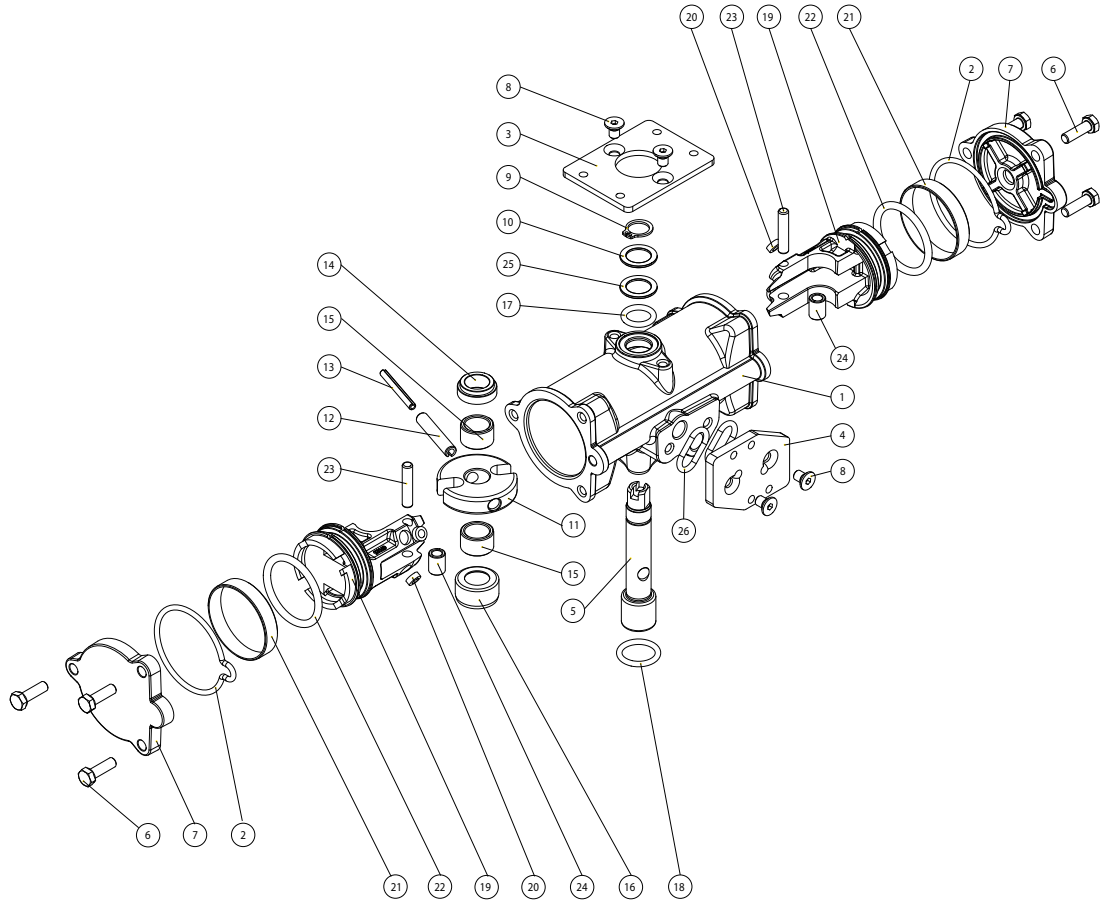


| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 3 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 4 | Tappo (Standard) *Cap (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 5 | Supporto interno molle *Internal spring support* | 1 | Lega di alluminio *Aluminium alloy* |
| 6 | Supporto esterno molle *External spring support* | 1 | Lega di alluminio *Aluminium alloy* |
| 7 | Vite di precarica molle *Spring loading screw* | 1 | Acciaio inox *Stainless Steel* |
| 8* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 9 | Dado A Calotta *Cap Nut* | 1 | Acciaio inox *Stainless Steel* |
| 10 | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 11 | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 12 | Dado *Nut* | 1 | Acciaio inox *Stainless Steel* |
| 13 | Molla esterna *External spring* | 2 | Lega di acciaio *Steel alloy* |
| 14 | Molla interna *Internal spring* | 2 | Lega di acciaio *Steel alloy* |
| 15 | Pistone (Standard) *Piston (Standard)* | 1 | Lega di alluminio *Aluminium alloy* |
| 16 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 17* | Dischetto di supporto *Piston's support* | 4 | Resina Acetalica *Acetalic resin* |
| 18 | Spina *Pin* | 2 | Lega di acciaio *Steel alloy* |
| 19 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 20 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 21 | Albero *Shaft* | 1 | Acciaio inox *Stainless Steel* |
| 22 | Bussola di scorrimento *Support bush* | 1 | Resina Acetalica *Acetalic resin* |
| 23 | Supporto albero *Shaft support* | 1 | Resina Acetalica *Acetalic resin* |
| 24* | O'ring tappo *Cap o'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 25* | Boccola (albero inferiore) *Bearing (shaft bottom)* | 1 | Resina Acetalica *Acetalic resin* |
| 26* | Boccola (albero superiore) *Bearing (shaft top)* | 1 | Resina Acetalica *Acetalic resin* |
| 27* | Anello di supporto esterno *External support ring* | 1 | Resina Acetalica *Acetalic resin* |
| 28 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 29* | *O'ring* | 3 | Gomma nitrilica *Nitrilic rubber* |
| 30 | *Seeger* | 1 | Acciaio inox *Stainless Steel* |
| 31 | Vite *Screw* | 6 | Acciaio inox *Stainless Steel* |
| 32* | O'ring albero inferiore *Lower sealing shaft* | 1 | FKM |
| 33* | O'ring pistone *Piston o'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 34* | O'ring albero superiore *Upper sealing shaft* | 1 | FKM |
| 35* | *O'ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 36* | Anello di guida *Bearing (piston head)* | 2 | *P.T.F.E. Carbo-Graphite filled* |
| 37 | Dado *Nut* | 12 | Acciaio inox *Stainless Steel* |

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 38 | Pistone (modificato) *Piston (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 39* | Cuscinetto (Volantino) *Bearings (Handwheel)* | 2 | Poliuretano *Polyurethane* |
| 40 | Tappo (modificato) *Cap (modified)* | 1 | Lega di alluminio *Aluminium alloy* |
| 41 | Chiocciola di manovra *Lead nut maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 42* | Indicatore *Indicator* | 1 | Polipropilene *Polypropylene* |
| 43 | Volantino di manovra *Handwheel for maneuever* | 1 | Lega di acciaio *Steel alloy* |
| 44 | Flangia *Flange* | 1 | Lega di alluminio *Aluminium alloy* |
| 45* | Cuscinetto *Thrust bearings* | 2 | Lega di acciaio *Steel alloy* |
| 46 | Vite *Screw* | 8 | Acciaio inox *Stainless Steel* |
| 47 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 48 | Rondella *Washer* | 1 | Acciaio inox *Stainless Steel* |
| 49 | Chiusura forcella *Closing fork* | 1 | Lega di alluminio *Aluminium alloy* |
| 50 | Supporto forcella *Fork support* | 1 | Lega di alluminio *Aluminium alloy* |
| 51 | Lucchettaggio *Lock wheel* | 1 | Acciaio inox *Stainless Steel* |
| 52 | Tappo di protezione *Protecting cap* | 1 | Lega di alluminio *Aluminium alloy* |
| 53 | Vite *Screw* | 3 | Acciaio inox *Stainless Steel* |
| 54* | Rivetto *Rivet* | 1 | Acciaio inox *Stainless Steel* |
| 55 | Chiave *Key* | 1 | Acciaio inox *Stainless Steel* |
| 56 | Vite *Screw* | 6 | Lega di acciaio *Steel alloy* |
| 57* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 58* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 59* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 60 | Vite *Screw* | 2 | Acciaio inox *Stainless Steel* |
| 61* | Guarnizione *Bounded* | 2 | Lega di acciaio+Gomma nitrilica *Steel alloy+Nitrilic rubber* |
| 62* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 63* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 64* | Tappo *Plug* | 2 | P.T.F.E |
| 65 | Dado *Nut* | 1 | Acciaio inox *Stainless Steel* |
| 66 | Vite di manovra *Screw maneuever* | 1 | Acciaio inox *Stainless Steel* |
| 67 | Tubo di protezione removibile *Protecting removable tube* | 1 | Lega di alluminio *Aluminium alloy* |
| 68 | Spina *Pin* | 1 | Acciaio inox *Stainless Steel* |
| 69 | Contenitore molla speciale *Special spring cap* | 1 | Lega di acciaio *Steel alloy* |
| 70* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 71* | *O'ring* | 1 | Gomma nitrilica *Nitrilic rubber* |
| 72 | Vite *Screw* | 1 | Acciaio inox *Stainless Steel* |
| 73 | Vite di sicurezza *Safety screw* | 1 | Acciaio inox *Stainless Steel* |
| 74 | Tubo di protezione *Protecting tube* | 1 | Lega di alluminio *Aluminium alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

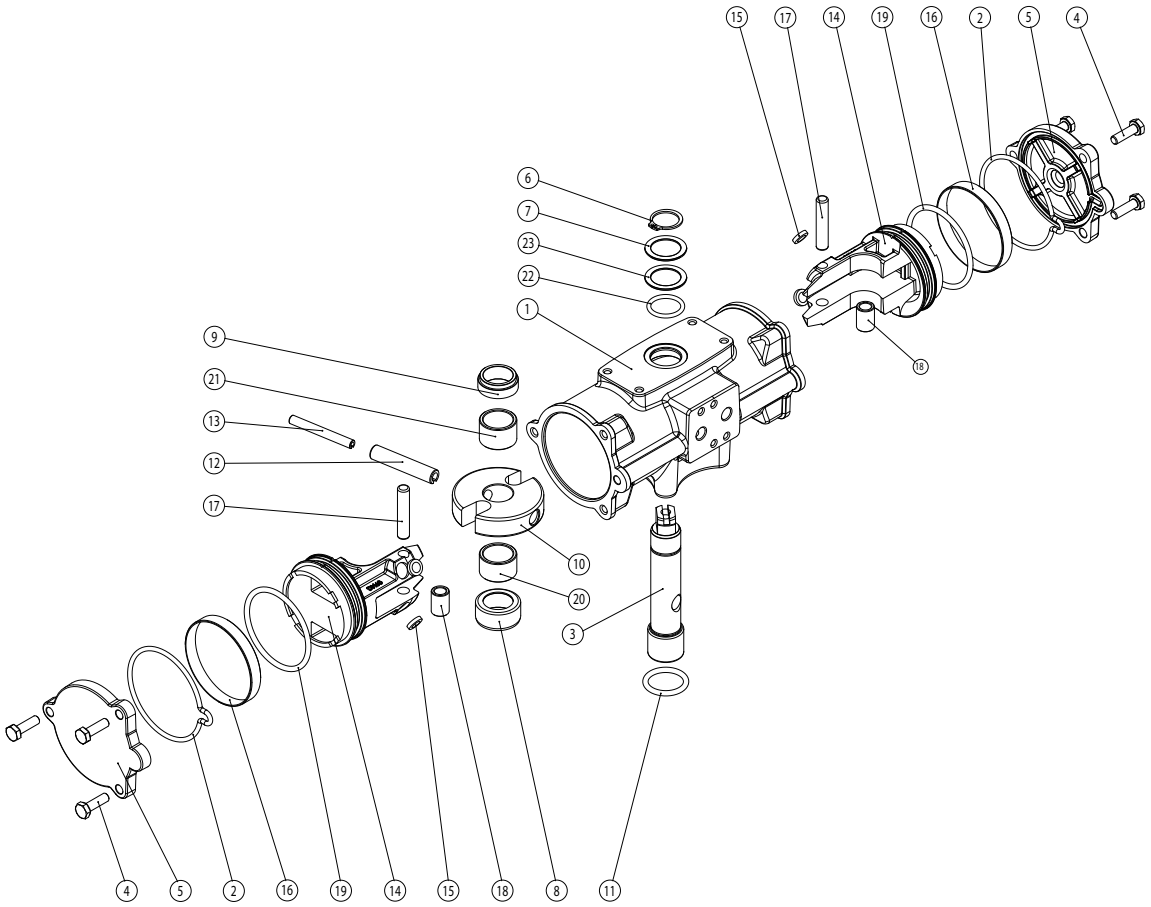
# COMPONENTI DOPPIO EFFETTO "DA" CF8M MICROFUSO MISURE: DA 15 ÷ DA 30
## *CASTING CF8M DOUBLE ACTING "DA" COMPONENTS SIZES: DA 15 ÷ DA 30*




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio inox *Stainless steel CF8M* |
| 2* | Tappo o-ring *Cap o-ring* | 2 | *Gomma nitrilica Bitrilic rubber* |
| 3 | *VDI/VDE* Basetta *Plate* | 1 | Acciaio inox *Stainless steel* |
| 4 | Basetta NAMUR *NAMUR plate* | 1 | Acciaio inox *Stainless steel* |
| 5 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 6 | Vite *Screw* | 6 | Acciaio inox *Stainless steel* |
| 7 | Tappo *Cap* | 2 | Acciaio inox *Stainless steel* |
| 8 | Vite *Screw (optional)* | 4 | Acciaio inox *Stainless steel* |
| 9 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 10 | Rondella *Washer* | 1 | Acciaio inox *Stainless steel* |
| 11 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 12 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 13 | Spina elastica interna *Internal elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 14 | Supporto albero superiore *Upper shaft support* | 1 | Resina acetalica *Acetalic resins* |
| 15 | Supporto bussola *Support bush* | 2 | Resina acetalica *Acetalic resins* |
| 16 | Supporto albero inferiore *Lower shaft support* | 1 | Resina acetalica *Acetalic resins* |
| 17 | O-ring albero superiore *O-ring (upper sealing shaft)* | 1 | FKM |
| 18 | O-ring albero inferiore *O-ring (low sealing shaft)* | 1 | FKM |
| 19 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 20* | Supporto pistone *Piston's support* | 4 | PTFE caricato carbo-grafite *PTFE Carbo-graphite filled* |
| 21* | Anello di tenuta *Dinamic seal (piston)* | 2 | Poliuretano *Polyurethane* |
| 22* | O-ring pistone *Piston o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 23 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 24 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 25 | Anello di supporto esterno *External support ring* | 1 | Resina acetalica *Acetalic resins* |
| 26 | *O-ring (optional)* | 2 | Gomma nitrilica *Nitrilic rubber* |

* Particolari del kit di ricambio *Components of spare part kit*

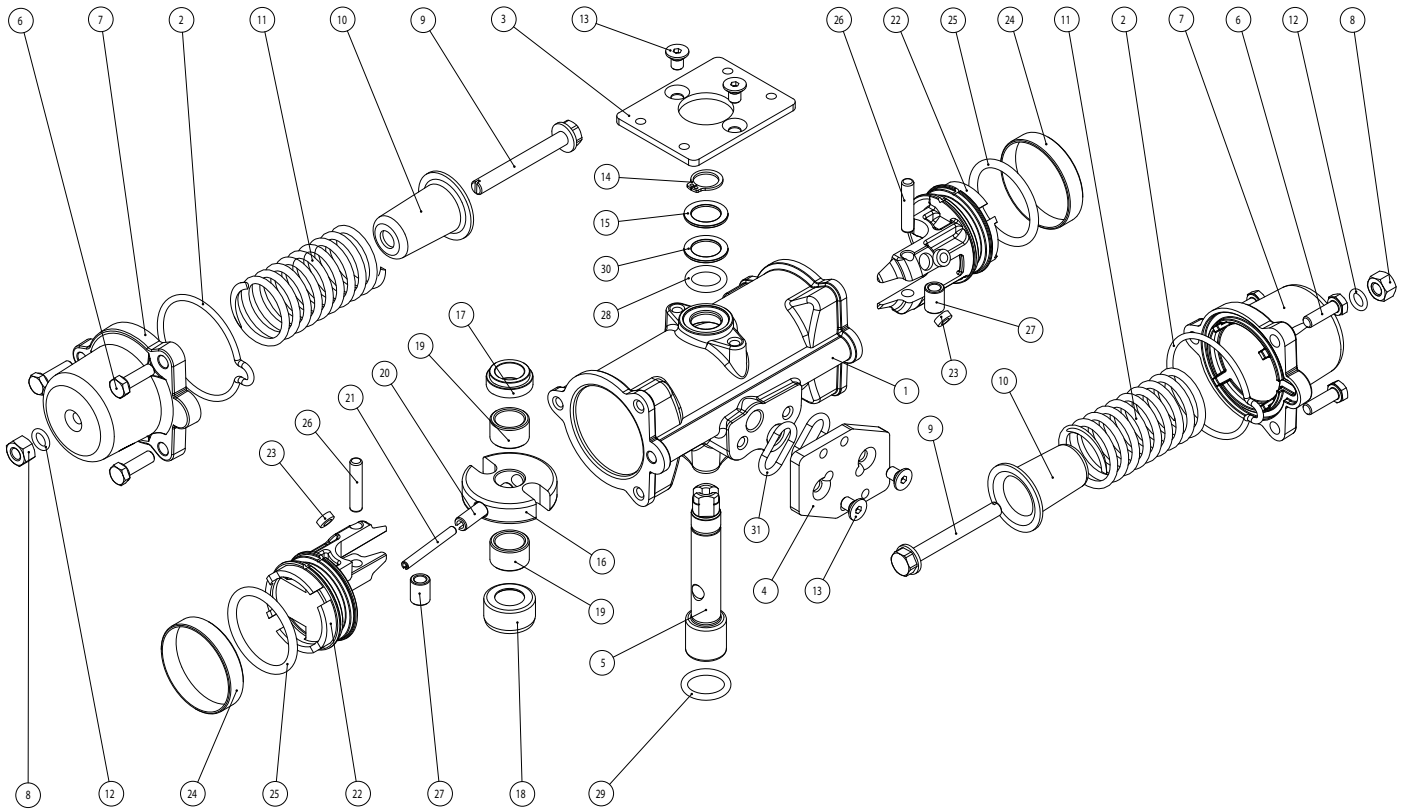
# COMPONENTI DOPPIO EFFETTO "DA" CF8M MICROFUSO MISURE: DA 60 ÷ DA 480
## *CASTING CF8M DOUBLE ACTING "DA" COMPONENTS SIZES: DA 60 ÷ DA 480*




| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio inox *Stainless steel* |
| 2* | Tappo o-ring *Cap o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 3 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 4 | Vite *Screw* | 6 | Acciaio inox *Stainless steel* |
| 5 | Tappo *Cap* | 2 | Acciaio inox *Stainless steel* |
| 6 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 7 | Rondella *Washer* | 1 | Acciaio inox *Stainless steel* |
| 8 | Supporto albero inferiore *Lower shaft support* | 1 | Resina acetalica *Acetalic resins* |
| 9 | Supporto albero superiore *Upper shaft support* | 1 | Resina acetalica *Acetalic resins* |
| 10 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 11 | O-ring albero inferiore *O-ring (low sealing shaft)* | 1 | FKM |
| 12 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega di acciaio *Steel alloy* |
| 13 | Spina elastica interna *Internal elastic pin of yoke* | 1 | Lega di acciaio *Steel alloy* |
| 14 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 15* | Supporto pistone *Piston's support* | 4 | PTFE caricato carbo grafite *PTFE carbo-graphite filled* |
| 16* | Anello di tenuta *Dynamic seal (piston)* | 2 | Poliuretano *Polyurethane* |
| 17 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 18 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 19* | O-ring pistone *Piston o-ring* | 2 | Gomma nitrilica Nitrilic rubber |
| 20 | Supporto bussola inferiore *Lower support bush* | 1 | Resina acetalica *Acetalic resins* |
| 21 | Supporto bussola superiore *Upper support bush* | 1 | Resina acetalica *Acetalic resins* |
| 22 | O-ring albero superiore *O-ring (upper sealing shaft)* | 1 | FKM |
| 23 | Anello di supporto esterno *External support ring* | 1 | Resina acetalica *Acetalic resins* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO "SR" CF8M MICROFUSO MISURA: SR 15
## *CASTING CF8M SPRING RETURN "SR" COMPONENTS SIZE: SR 15*



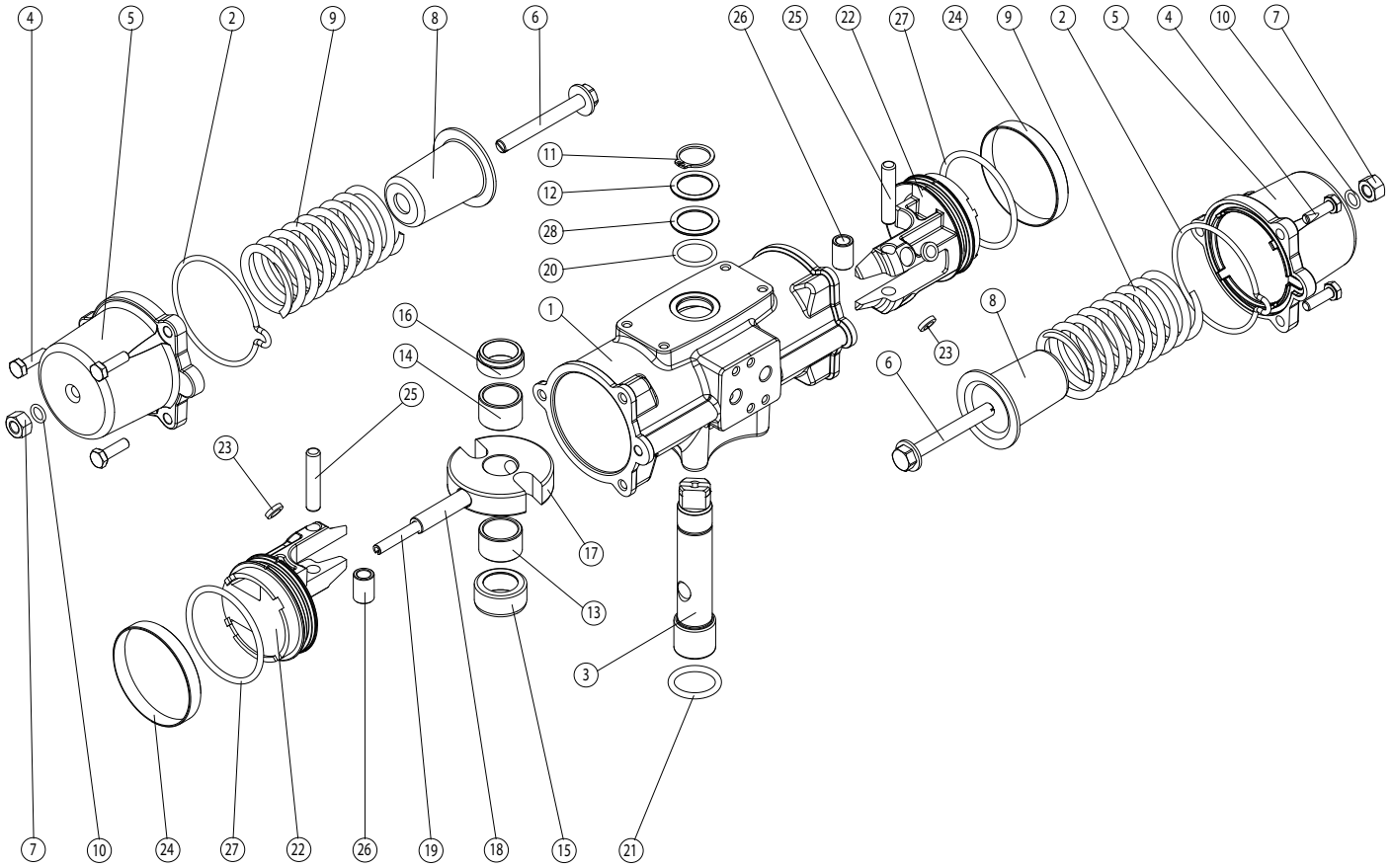
| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio inox *Stainless steel* |
| 2* | Tappo o-ring *Cap o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 3 | *VDI/VDE* Basetta *Plate (optional)* | 1 | Acciaio inox *Stainless steel* |
| 4 | Basetta NAMUR *NAMUR plate* | 1 | Acciaio inox *Stainless steel* |
| 5 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 6 | Vite *Screw* | 6 | Acciaio inox *Stainless steel* |
| 7 | Tappo *Cap* | 2 | Acciaio inox *Stainless steel* |
| 8 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 9 | Vite di precarica molla *Spring loading screw* | 2 | Acciaio inox *Stainless steel* |
| 10 | Contenitore molla *Spring cap* | 2 | Lega d'acciaio *Steel alloy* |
| 11 | Molla *Spring* | 2 | Lega d'acciaio *Steel alloy* |
| 12* | *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 13 | Vite *Screw* | 4 | Acciaio inox *Stainless steel* |
| 14 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 15 | Rondella *Washer* | 1 | Acciaio inox *Stainless steel* |
| 16 | Forcella *Scotch yoke* | 1 | Lega d'acciaio *Steel alloy* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 17 | Supporto superiore albero *Upper shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 18 | Supporto inferiore albero *Lower shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 19 | Bussola di supporto *Support bush* | 2 | Resina acetalica *Acetalic resin* |
| 20 | Spina elastica esterna *External elastic pin of the yoke* | 1 | Lega d'acciaio *Steel alloy* |
| 21 | Spina elastica internal *Internal elastic pin of the yoke* | 1 | Lega d'acciaio *Steel alloy* |
| 22 | Pistone *Piston* | 2 | Lega d'alluminio *Aluminium alloy* |
| 23* | Dischetto di supporto *Piston's support* | 4 | *PTFE caric carbo-grafite* |
| 24* | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Polyurethane* |
| 25 | O-ring pistone *Piston o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 26 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 27 | Bussola *Bush* | 2 | Lega d'acciaio *Steel alloy* |
| 28 | *O-ring* | 1 | FKM |
| 29 | *O-ring* | 1 | FKM |
| 30 | Anello di supporto esterno *External support ring* | 1 | Resina acetalica *Acetalic resin* |
| 31 | *NAMUR o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI SEMPLICE EFFETTO "SR" CF8M MICROFUSO MISURE: SR 30 ÷ SR 240
## *CASTING CF8M SPRING RETURN "SR" COMPONENTS SIZES: SR 30 ÷ SR 240*



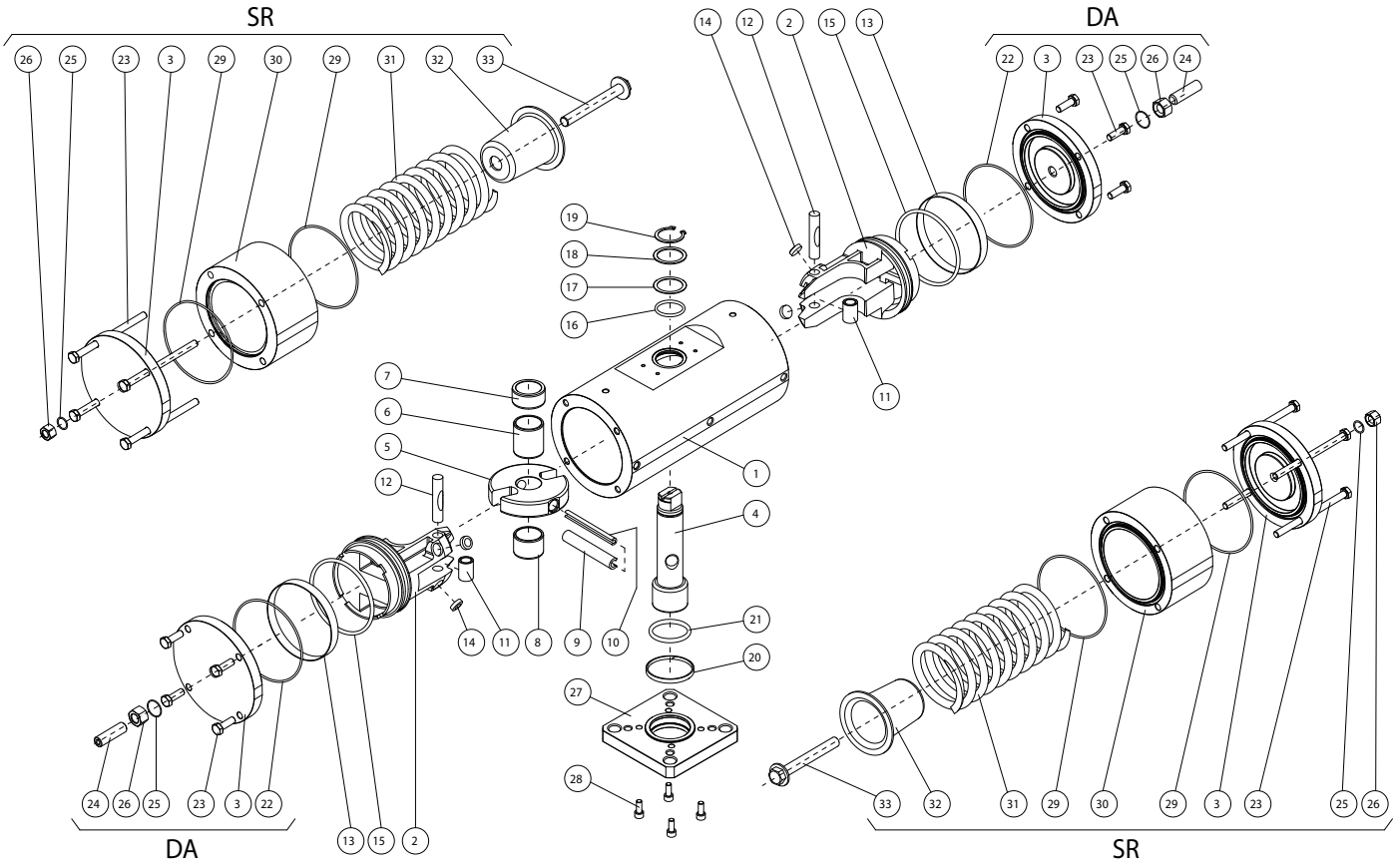

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio inox *Stainless steel* |
| 2* | Tappo o-ring *Cap o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 3 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 4 | Vite *Screw* | 6 | Acciaio inox *Stainless steel* |
| 5 | Tappo *Cap* | 2 | Acciaio inox *Stainless steel* |
| 6 | Vite di precarica molla *Spring loading screw* | 2 | Acciaio inox *Stainless steel* |
| 7 | Dado *Nut* | 2 | Acciaio inox *Stainless steel* |
| 8 | Contenitore molla *Spring cap* | 2 | Lega di acciaio *Steel alloy* |
| 9 | Molla *Spring* | 2 | Lega di acciaio *Steel alloy* |
| 10* | *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 11 | *Seeger* | 1 | Lega di acciaio *Steel alloy* |
| 12 | Rondella *Washer* | 1 | Lega di acciaio *Steel alloy* |
| 13 | Supporto bussola inferiore *Lower support bush* | 1 | Resina acetalica *Acetalic resin* |
| 14 | Supporto bussola superiore *Upper support bush* | 1 | Resina acetalica *Acetalic resin* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 15 | Supporto albero inferiore *Lower shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 16 | Supporto albero superiore *Upper shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 17 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 18 | Spina elastica esterna *External elastic pin of yoke* | 1 | Lega di acciaio *Steel alloy* |
| 19 | Spina elastica interna *Internal elastic pin of yoke* | 1 | Lega di acciaio *Steel alloy* |
| 20 | O-ring albero superiore *O-ring upper sealing shaft* | 1 | FKM |
| 21 | O-ring albero inferiore *O-ring low sealing shaft* | 1 | FKM |
| 22 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 23* | Supporto pistone *Piston's support* | 4 | *PTFE caric. carbo-grafite* |
| 24 | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Polyurethane* |
| 25 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 26 | Bussola *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 27* | O-ring pistone *Piston o-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 28 | Anello di supporto esterno *External support o-ring* | 1 | Resina acetalica *Acetalic resin* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO E SEMPLICE EFFETTO 316 DA BARRA
## *316 FROM BAR DOUBLE ACTING AND SPRING RETURN COMPONENTS*



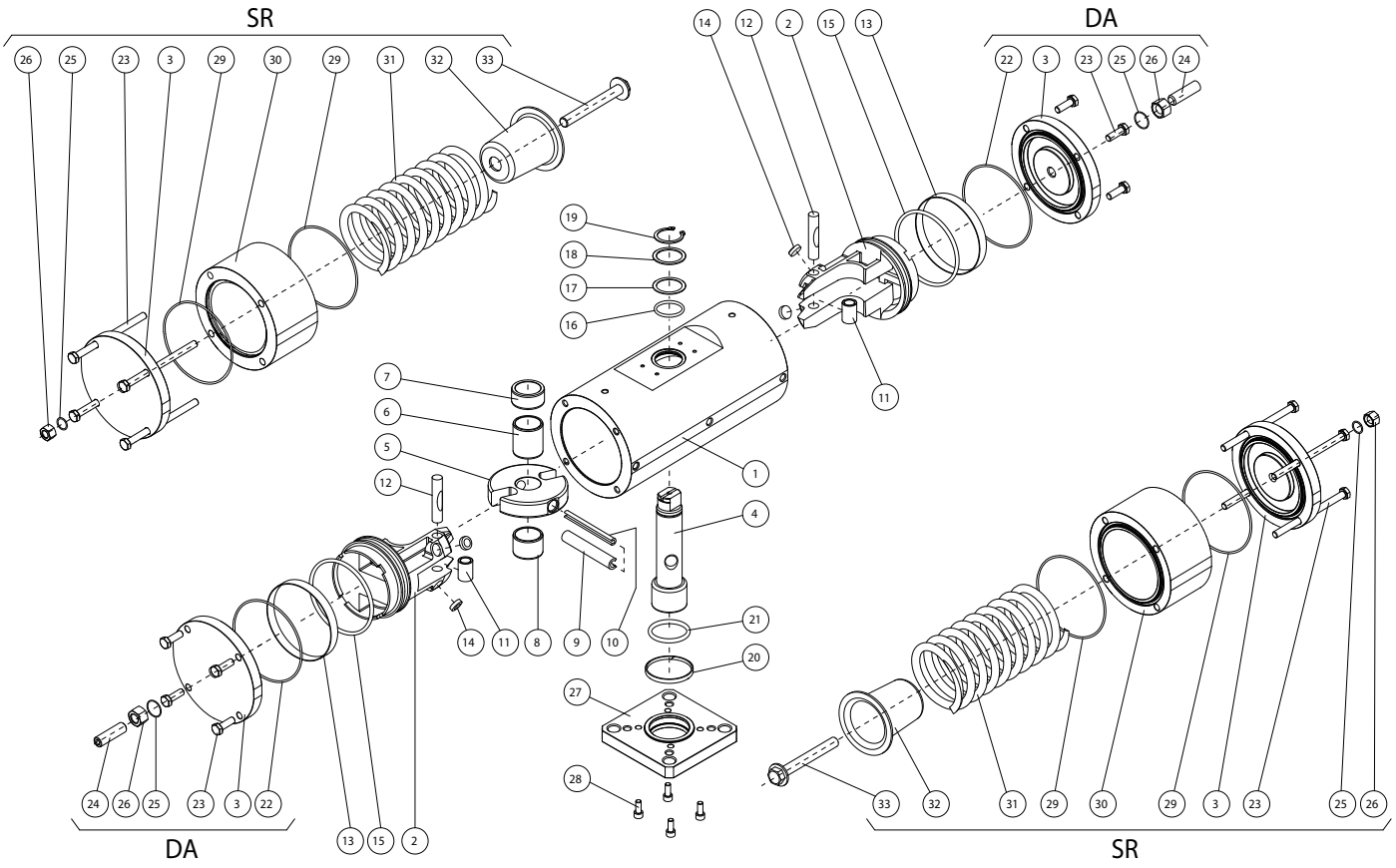

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.ty** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio inox *Stainless steel* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Acciaio inox *Stainless steel* |
| 4 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola scorrim/supporto *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 7 | Anello di supporto superiore *Upper shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 8 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 9 | Spina elastica est. *Ext.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 10 | Spina elastica int. *Int.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 11 | Bussola acciaio *Steel bush* | 2 | Lega di acciaio *Steel alloy* |
| 12 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 13* | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Plyurethane* |
| 14* | Dischetto supporto *Support disk* | 4 | *PTFE caric carbo-grafite* |
| 15* | O-ring del pistone *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 16 | O-ring albero sup. *O-ring* | 1 | FKM |
| 17 | Anello supporto est *Thrust bearing* | 1 | Resina acetalica *Acetalic resin* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | **Q.ty** | **Materiale *Material*** |
| 18 | Rondella spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 19 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 20 | Fascetta di supporto inferiore *Lower shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 21 | O-ring albero inferiore *O-ring* | 1 | FKM |
| 22* | O-ring tappo *GD O-ring* | 2 | NBR |
| 23 | Viti *Screws* | 8 | Acciaio inox *Stainless steel* |
| 24 | Grano di regolazione *Grub screws* | 2 | Acciaio inox *Stainless steel* |
| 25 | O-ring regolazione *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 26 | Controdado *Adjusting nut* | 2 | Acciaio inox *Stainless steel* |
| 27 | Flangia di fissaggio *Fixing flange* | 1 | Acciaio inox *Stainless steel* |
| 28 | Viti *Screws* | 4 | Acciaio inox *Stainless steel* |
| 29* | O-ring tappo *GS O-ring* | 4 | NBR |
| 30 | Cilindro distanziale *Cylinder spacer* | 2 | Acciaio inox *Stainless steel* |
| 31 | Molla *Spring* | 2 | Lega di acciaio *Steel alloy* |
| 32 | Contenitore molla *Spring cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 33 | Viti di precarica molla *Spring loading screw* | 2 | Acciaio inox *Stainless steel* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOPPIO E SEMPLICE EFFETTO A105 DA BARRA
## *A105 FROM BAR DOUBLE ACTING AND SPRING RETURN COMPONENTS*



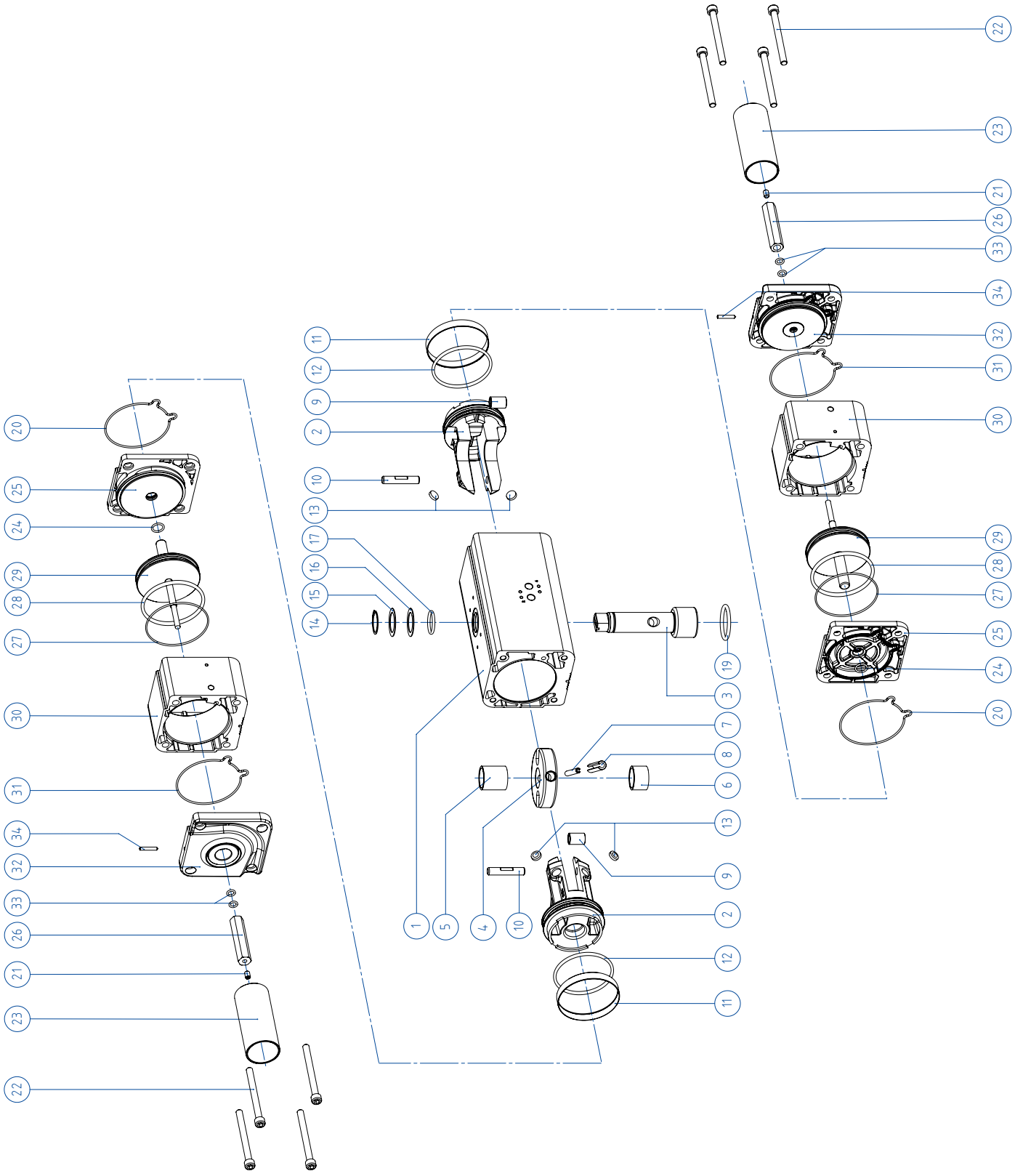

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Acciaio *Steel alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Tappo *Cap* | 2 | Acciaio *Steel alloy* |
| 4 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 5 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 6 | Bussola scorrim/supporto *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 7 | Anello di supporto superiore *Upper shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 8 | Bussola di scorrimento *Bearing shaft* | 1 | Resina acetalica *Acetalic resin* |
| 9 | Spina elastica est. *Ext.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 10 | Spina elastica int. *Int.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 11 | Bussola acciaio *Steel bush* | 2 | Lega di acciaio *Steel alloy* |
| 12 | Perno *Rotative sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 13* | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Plyurethane* |
| 14* | Dischetto supporto *Support disk* | 4 | *PTFE caric carbo-grafite* |
| 15* | O-ring del pistone *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 16 | O-ring albero sup. *O-ring* | 1 | FKM |
| 17 | Anello supporto est *Thrust bearing* | 1 | Resina acetalica *Acetalic resin* |

* Particolari del kit di ricambio *Components of spare part kit*

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 18 | Rondella spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 19 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 20 | Fascetta di supporto inferiore *Lower shaft support* | 1 | Resina acetalica *Acetalic resin* |
| 21 | O-ring albero inferiore *O-ring* | 1 | FKM |
| 22* | O-ring tappo *GD O-ring* | 2 | NBR |
| 23 | Viti *Screws* | 8 | Acciaio inox *Stainless steel* |
| 24 | Grano di regolazione *Grub screws* | 2 | Acciaio inox *Stainless steel* |
| 25 | O-ring regolazione *O-ring* | 2 | Gomma nitrilica *Nitrilic rubber* |
| 26 | Controdado *Adjusting nut* | 2 | Acciaio inox *Stainless steel* |
| 27 | Flangia di fissaggio *Fixing flange* | 1 | Acciaio *Steel alloy* |
| 28 | Viti *Screws* | 4 | Acciaio inox *Stainless steel* |
| 29* | O-ring tappo *GS O-ring* | 4 | NBR |
| 30 | Cilindro distanziale *Cylinder spacer* | 2 | Acciaio *Steel alloy* |
| 31 | Molla *Spring* | 2 | Lega di acciaio *Steel alloy* |
| 32 | Contenitore molla *Spring cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 33 | Viti di precarica molla *Spring loading screw* | 2 | Acciaio inox *Stainless steel* |

* Particolari del kit di ricambio *Components of spare part kit*

# COMPONENTI DOSATORE MISURE: DDN 30 ÷ DDN 480
## *TWO STAGE COMPONENTS SIZES: DDN 30 ÷ DDN 480*



| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 1 | Cilindro *Cylinder* | 1 | Lega di alluminio *Aluminium alloy* |
| 2 | Pistone *Piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 3 | Albero *Shaft* | 1 | Acciaio inox *Stainless steel* |
| 4 | Forcella *Scotch yoke* | 1 | Lega di acciaio *Steel alloy* |
| 5 | Bussola scorrimento supporto *Bush* | 1 | Resina acetalica *Acetalic resin* |
| 6 | Bussola di scorrimento *Bush* | 1 | Resina acetalica *Acetalic resin* |
| 7 | Spina elastica interna *Int.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 8 | Spina elastica esterna *Ext.elastic pin* | 1 | Lega di acciaio *Steel alloy* |
| 9 | Bussola acciaio *Bush* | 2 | Lega di acciaio *Steel alloy* |
| 10 | Perno *Sleeve* | 2 | Lega di acciaio *Steel alloy* |
| 11 | Anello di tenuta *Dynamic seal* | 2 | Poliuretano *Polyurethan* |
| 12 | O-ring del pistone *O-ring* | 2 | Gomma nitrilica *NBR* |
| 13 | Dischetto di supporto *Support disks* | 4 | *PTFE caric carbo-grafite* |
| 14 | *Seeger* | 1 | Acciaio inox *Stainless steel* |
| 15 | Rondella di spessoramento *Washer* | 1 | Acciaio inox *Stainless steel* |
| 16 | Anello supporto esterno *Ext.support ring* | 1 | Resina acetalica *Acetalic resin* |
| 17 | O-ring albero superiore *O-ring* | 1 | FKM |

| MATERIALI *MATERIALS* | | | |
|---|---|---|---|
| **Pos** | **Denominazione *Denomination*** | ***Q.ty*** | **Materiale *Material*** |
| 18 | Anello di centraggio *Centering ring* | 1 | Lega di alluminio *Aluminium alloy* |
| 19 | O-ring inferiore albero *O-ring* | 1 | FKM |
| 20 | O-ring tenuta tappo *O-ring* | 2 | Gomma nitrilica *NBR* |
| 21 | Grano bloccaggio regolazione *Grub screw* | 2 | Acciaio inox *Stainless steel* |
| 22 | Viti *screws* | 8 | Acciaio inox *Stainless steel* |
| 23 | Protezione *protection* | 2 | Lega di alluminio *Aluminium alloy* |
| 24 | O-ring int.tappo intermedio *Support bush* | 2 | FKM |
| 25 | Tappo intermedio *Intermediate cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 26 | Controdado di regolazione *Adjusting nut* | 2 | Lega di alluminio *Aluminium alloy* |
| 27 | O-ring est.tappo intermedio *O-ring* | 2 | Gomma nitrilica *NBR* |
| 28 | O-ring pistone ausiliario *O-ring* | 2 | Gomma nitrilica *NBR* |
| 29 | Pistone ausiliario *Auxiliary piston* | 2 | Lega di alluminio *Aluminium alloy* |
| 30 | Cilindro ausialiario *Auxiliary cylinder* | 2 | Lega di alluminio *Aluminium alloy* |
| 31 | O-ring tappo finale *O-ring* | 2 | Gomma nitrilica *NBR* |
| 32 | Tappo finale *Terminal cap* | 2 | Lega di alluminio *Aluminium alloy* |
| 33 | O-ring interne tappo finale *O-ring* | 4 | FKM |
| 34 | Grano bloccaggio protezione *Grub screw* | 2 | Acciaio inox *Stainless steel* |

# Versioni speciali a richiesta - attuatori doppio effetto "DA"
## *Special version on request - double acting "DA" actuators*

I codici indicati fanno riferimento agli attuatori in alluminio. *The codes indicated refer to the aluminium actuator.*

| ATTUATORI DOPPIO EFFETTO CON VERNICIATURA EPOSSIDICA *DOUBLE ACTING ACTAUTOR WITH EPOXY PAINTING* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DA8 F03** | **DAN15 F03** | **DAN15 F04** | **DAN30 F03-F05** | **DAN30 F04** | **DAN45 F04** | **DAN45 F03-F05** | **DAN60 F04** | **DAN60 F05-F07** | **DAN106 F05-F07** | **DAN120 F05-F07** |
| DA008V01S | DAN0015V11S | DAN0015V12S | DAN0030V11S | DAN0030V12S | DAN0045V11S | DAN0045V12S | DAN0060V11S | DAN0060V12S | DAN0106V11S | DAN0120V11S |
| **DAN180 F07-F10** | **DAN240 F07-F10** | **DAN360 F07-F10** | **DAN480 F10-F12** | **DAN720 F10-F12** | **DAN960 F10-F12** | **DAN960 F14** | **DAN1440 F12** | **DAN1440 F14** | **DAN1920 F12-F16** | **DAN1920 F14** |
| DAN0180V11S | DAN0240V11S | DAN0360V11S | DAN0480V11S | DAN0720V11S | DAN0960V11S | DAN0960V12S | DAN1440V12S | DAN1440V11S | DAN1920V12S | DAN1920V11S |

| ATTUATORI DOPPIO EFFETTO ALTA TEMPERATURA (-20°C / +150°C) *HIGH TEMPERATURE DOUBLE ACTING ACTUATOR (-20°C / +150°C)* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **DAN15 F03** | **DAN15 F04** | **DAN30 F03-F05** | **DAN30 F04** | **DAN45 F04** | **DAN45 F03-F05** | **DAN60 F04** | **DAN60 F05-F07** | **DAN106 F05-F07** | **DAN120 F05-F07** |
| | DAN0015451S | DAN0015452S | DAN0030451S | DAN0030452S | DAN0045451S | DAN0045452S | DAN0060451S | DAN0060452S | DAN0106451S | DAN0120451S |
| **DAN180 F07-F10** | **DAN240 F07-F10** | **DAN360 F07-F10** | **DAN480 F10-F12** | **DAN720 F10-F12** | **DAN960 F10-F12** | **DAN960 F14** | **DAN1440 F12** | **DAN1440 F14** | **DAN1920 F12-F16** | **DAN1920 F14** |
| DAN0180451S | DAN0240451S | DAN0360451S | DAN0480451S | DAN0720451S | DAN0960451S | DAN0960452S | DAN1440452S | DAN1440451S | DAN1920452S | DAN1920451S |

| ATTUATORI DOPPIO EFFETTO BASSA TEMPERATURA (-50°C / +60°C) *LOW TEMPERATURE DOUBLE ACTING ACTUATOR (-50°C / +60°C)* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **DAN15 F03** | **DAN15 F04** | **DAN30 F03-F05** | **DAN30 F04** | **DAN45 F04** | **DAN45 F03-F05** | **DAN60 F04** | **DAN60 F05-F07** | **DAN106 F05-F07** | **DAN120 F05-F07** |
| | DAN0015551S | DAN0015552S | DAN0030551S | DAN0030552S | DAN0045551S | DAN0045552S | DAN0060551S | DAN0060552S | DAN0106551S | DAN0120551S |
| **DAN180 F07-F10** | **DAN240 F07-F10** | **DAN360 F07-F10** | **DAN480 F10-F12** | **DAN720 F10-F12** | **DAN960 F10-F12** | **DAN960 F14** | **DAN1440 F12** | **DAN1440 F14** | **DAN1920 F12-F16** | **DAN1920 F14** |
| DAN0180551S | DAN0240551S | DAN0360551S | DAN0480551S | DAN0720551S | DAN0960551S | DAN0960552S | DAN1440552S | DAN1440551S | DAN1920552S | DAN1920551S |

**A richiesta esecuzioni per taglie superiori** ***On request executions for larger sizes***

# Versioni speciali a richiesta - attuatori semplice effetto "SR"
## *Special version on request - spring return "SR" actuators*

I codici indicati fanno riferimento agli attuatori in alluminio. *The codes indicated refer to the aluminium actuator.*

| ATTUATORI SEMPLICE EFFETTO CON VERNICIATURA EPOSSIDICA *SPRING RETURN ACTUATOR WITH EPOXY PAINTING* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015V01S | SRN0015V02S | SRN0030V01S | SRN0030V02S | SRN0053V01S | SRN0060V01S | SRN0090V01S | SRN0120V01S | SRN0180V01S | SRN0240V01S | SRN0360V01S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480V01S | SRN0480V02S | SRN0720V02S | SRN0720V01S | SRN0960V02S | SRN0960V01S | | | | | |

| ATTUATORI SEMPLICE EFFETTO ALTA TEMPERATURA (-20°C / +150°C) *HIGH TEMPERATURE SPRING RETURN ACTUATOR (-20°C / +150°C)* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015450S | SRN0015452S | SRN0030450S | SRN0030452S | SRN0053450S | SRN0060450S | SRN0090450S | SRN0120450S | SRN0180450S | SRN0240450S | SRN0360450S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480450S | SRN0480452S | SRN0720452S | SRN0720450S | SRN0960452S | SRN0960450S | | | | | |

| ATTUATORI SEMPLICE EFFETTO BASSA TEMPERATURA (-50°C / +60°C) *LOW TEMPERATURE SPRING RETURN ACTUATOR (-50°C / +60°C)* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015550S | SRN0015552S | SRN0030550S | SRN0030552S | SRN0053550S | SRN0060550S | SRN0090550S | SRN0120550S | SRN0180550S | SRN0240550S | SRN0360550S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480550S | SRN0480552S | SRN0720552S | SRN0720550S | SRN0960552S | SRN0960550S | | | | | |

| ATTUATORI SEMPLICE EFFETTO 40 PSI ÷ 2,8 bar *SPRING RETURN ACTUATOR 40 PSI ÷ 2,8 bar* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015441S | SRN0015442S | SRN0030441S | SRN0030442S | SRN0053441S | SRN0060441S | SRN0090441S | SRN0120441S | SRN0180441S | SRN0240441S | SRN0360441S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480441S | SRN0480442S | SRN0720442S | SRN0720441S | SRN0960442S | SRN0960441S | | | | | |

| ATTUATORI SEMPLICE EFFETTO 50 PSI ÷ 3,5 bar *SPRING RETURN ACTUATOR 50 PSI ÷ 3,5 bar* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015455S | SRN0015456S | SRN0030455S | SRN0030456S | SRN0053455S | SRN0060455S | SRN0090455S | SRN0120455S | SRN0180455S | SRN0240455S | SRN0360455S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480455S | SRN0480456S | SRN0720456S | SRN0720455S | SRN0960456S | SRN0960455S | | | | | |

| ATTUATORI SEMPLICE EFFETTO 60 PSI ÷ 4,2 bar *SPRING RETURN ACTUATOR 60 PSI ÷ 4,2 bar* | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SRN15 F03-F05** | **SRN15 F04** | **SRN30 F04** | **SRN30 F05-F07** | **SRN53 F05-F07** | **SRN60 F05-F07** | **SRN90 F07-F10** | **SRN120 F07-F10** | **SRN180 F07-F10** | **SRN240 F10-F12** | **SRN360 F10-F12** |
| SRN0015461S | SRN0015462S | SRN0030461S | SRN0030462S | SRN0053461S | SRN0060461S | SRN0090461S | SRN0120461S | SRN0180461S | SRN0240461S | SRN0360461S |
| **SRN480 F10-F12** | **SRN480 F14** | **SRN720 F12** | **SRN720 F14** | **SRN960 F12-F16** | **SRN960 F14** | | | | | |
| SRN0480461S | SRN0480462S | SRN0720462S | SRN0720461S | SRN0960462S | SRN0960461S | | | | | |

**A richiesta esecuzioni per taglie superiori** ***On request executions for larger sizes***

# ACCESSORI ATTUATORI PNEUMATICI
## *PNEUMATIC ACTUATOR ACCESSORIES*




BOX DI SEGNALAZIONE CON FINECORSA
*LIMIT SWITCH BOX*





OPERATORE MANUALE DI SBLOCCO
*MANUAL OVERRIDE WITH HAND WHEEL*



ELETTROVALVOLE
*SOLENOID VALVES*



ELETTROVALVOLE NAMUR
*NAMUR SOLENOID VALVES*



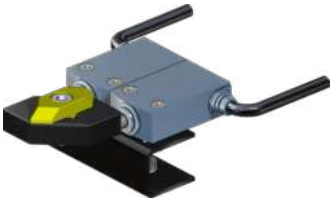
POSIZIONATORE ELETTROPNEUMATICO
(SICUREZZA INTRINSECA)
*ELECTROPNEUMATIC POSITIONER*
*(INTRINSICALLY SAFE)*



POSIZIONATORE PNEUMATICO
*PNEUMATIC POSITIONER*



FINECORSA DI PROSSIMITA'
*PROXIMITY LIMIT SWITCHES*



FINECORSA ELETTROMECCANICI
*ELECTROMECHANICAL LIMIT SWITCHES*



FINECORSA PNEUMATICI
*PNEUMATIC LIMIT SWITCHES*



FINECORSA ANTIDEFLAGRANTI II2GD ExdIIC
*EXPLOSION PROOF LIMIT SWITCHES II2GD ExdIIC*

Per maggiori informazioni consultare **Catalogo Accessori OMAL.** *For more information check the **OMAL Accessories Catalogue.***



Appareil non électrique destiné à être utilisé en atmosphères explosibles
*Non electrical equipment intended for use in potentially explosive atmospheres*
*Apparecchi non elettrici destinati ad essere utilizzati in atmosfera potenzialmente esplosiva*

Directive 2014/34/UE
*Directive 2014/34/EU / Direttiva 2014/34/UE*

**ACCUSÉ DE RECEPTION D'UN DOSSIER TECHNIQUE**
*ACKNOWLEDGE RECEIPT OF TECHNICAL DOCUMENTATION*
*AVVISO DI RICEVIMENTO DEL FASCICOLO TECNICO*

Appareil / Equipment / Apparecchiatura :
PNEUMATIC ACTUATORS

Type(s)/ Type(s) / Tipo(i) : DA-DAN-DANV-SR-SRN-SRNV-DD

Marquage/ Marking / Marcatura : II 2G Ex h IIB/IIC T6..T3 GbX
II 2D Ex h IIIC T85°C..T175°C Db X

Dépositaire / Applicant / Richiedente : OMAL S.p.A.
Via Ponte Nuovo 11
25050 Rodengo Saiano (BS)

L'INERIS, organisme notifié et identifié sous le numéro 0080, conformément aux articles 17 et 21 de la Directive du Conseil 2014/34/UE du 26 février 2014, accuse réception du dossier conformément à la procédure décrite au chapitre 3, article 13 1) b) ii) de la Directive.

INERIS, notified body and identified under number 0080, in accordance with articles 17 and 21 of Council Directive 2014/34/EU of the 26 february 2014, acknowledges receipt of file according to the procedure described chapiter 3, article 13 1) b) ii) of the Directive.

L'INERIS, organismo notificato e identificato con il n.0080 conformemente agli articoli 17 e 21 della Direttiva 2014/34/UE del Consiglio dell'Unione Europea del 26 febbraio 2014, conferma il ricevimento del fascicolo in conformita alla procedura prevista nella rubrica 3, articolo 13 1) b) ii) della Direttiva.

La documentation technique référencée : AP-18 dated 02/09/2019 est consignée sous le numéro d'enregistrement : n° INERIS-EQEN 034995/19.
Dans le cadre de cet enregistrement, l'INERIS n'a pas examiné le contenu de la documentation technique.
Date de fin de validité : 2029.10.01

The technical documentation referenced : AP-18 dated 02/09/2019 is consigned under the reference : no INERIS-EQEN 034995/19.
Within the scope of the recording, INERIS did not examine the contain of the technical documentation.
Validity completion date : 2029.10.01

La documentazione tecnica di riferimento : AP-18 dated 02/09/2019 è depositata con il numero di registrazione : n° INERIS-EQEN 034995/19.
Nel quadro di questa registrazione, INERIS non ha esaminato il contenuto della documentazione tecnica.
Data di fine di validità : 2029.10.01

Verneuil-en-Halatte, le 2019.10.01

Le Directeur Général de l'INERIS, Par délégation,
The Chief Executive Officer of INERIS, By delegation,
Il Direttore generale dell' INERIS, Per Delega,

Parc Technologique Alata BP 2 F-60550 Verneuil-en-Halatte
tél. +33(0)3 44 55 66 77 fax +33(0)3 44 55 66 99 internet www.ineris.fr

**▲ ATEX (Pneumatic actuator ATEX compliance)**

OMAL progetta e produce i propri prodotti in conformità alla direttiva ATEX, la quale regola l'impiego di apparecchiature in ambienti con atmosfere esplosive.

*OMAL designs and manufactures our products in accordance with the ATEX directive, which regulates the use of equipment in explosive atmospheres.*



TÜV NORD

**CERTIFICATE**

This certifies that the company

**Omal S.p.A.**
**Via Ponte Nuovo, 11**
**25050 Rodengo Saiano (BS)**
**Italy**

Is authorized to provide the product mentioned below

Description of product: **Pneumatic scotch-yoke spring return and double acting actuator series SR, SRN, DA, DAN**

In accordance with: **EN 61508:2010 Parts 1, 2, 3, 4, 5, 6, 7**

Registration No 20 20293 01
Test Report No PS-20293-20-L
File reference 20293-01

Validity
from 2020-07-03
until 2023-07-03

TÜV NORD Italia S.r.l. (TÜV NORD Group)
Via Turati, 70 - 20023 Cerro Maggiore (MI)
www.tuev-nord.it

Cerro Maggiore, 2020-07-03
prodotto@tuev-nord.it

*Please also pay attention to the information stated overleaf*

**▲ SIL (Pneumatic actuator certificate)**

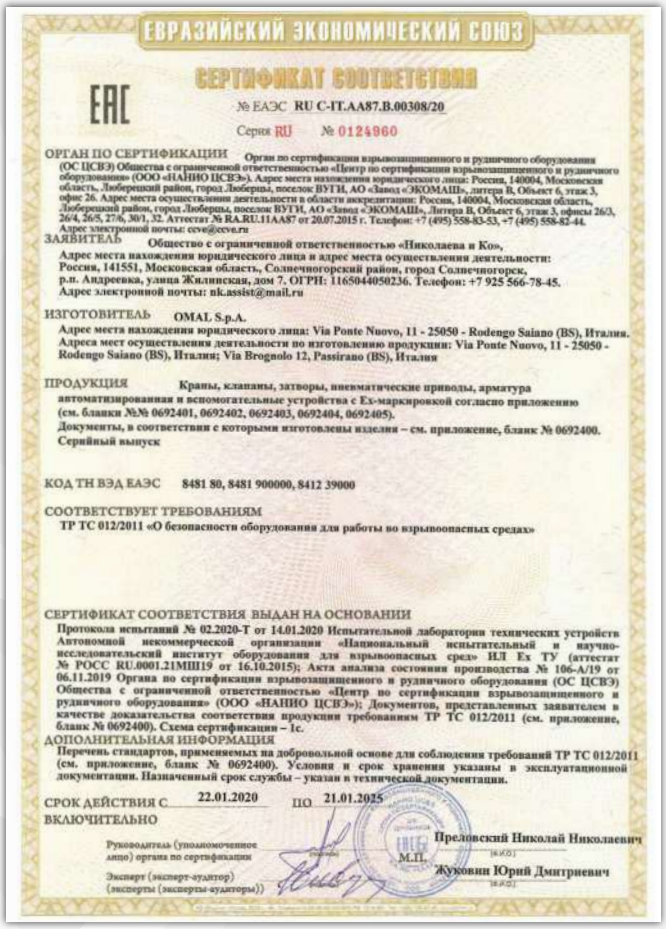
Certificazione di conformità alla norma IEC 61508, del livello di sicurezza funzionale del prodotto destinato ad essere integrato in sistemi con un livello di integrità funzionale fino a SIL 3.

*Certification in compliance with the IEC 61508 functional safety level requirements, meant for products intended to be integrated in safety integrity level systems up to SIL 3.*



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

**Заявитель** Общество с ограниченной ответственностью "Николаева и Ко".
ОГРН: 1165044050236.
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности: 141551, РОССИЯ, Московская область, Солнечногорский район, рабочий поселок Андреевка, улица Жилинская, дом 7. Телефон: +792556678 45. Адрес электронной почты: nk.assist@mail.ru.
**в лице** генерального директора Николаевой Нины Сергеевны
**заявляет, что** Арматура промышленная трубопроводная: пневматические приводы, серии DA, DAV, DAN, DANV, SR, SRV, SRN, SRNV, DD, в комплектации по приложению (см. Приложение №1 на 1 листе).
**изготовитель** "OMAL S.p.A".
Место нахождения (адрес юридического лица) и адрес места осуществления деятельности по изготовлению продукции: ИТАЛИЯ, Via Ponte Nuovo, 11 – 25050 – Rodengo Saiano, Brescia.
Код ТН ВЭД ЕАЭС 8412390009. Серийный выпуск.
**соответствует требованиям**
Технического регламента Таможенного союза "О безопасности машин и оборудования" (ТР ТС 010/2011)
**Декларация о соответствии принята на основании**
Протоколы испытаний Испытательной лаборатории изготовителя № ОА 013539 от 01.07.2015, № ВМ 002138 от 27.05.2015.
Обоснование безопасности АР.12 ОБ.
Технические паспорта АР.12, AS.12.
Руководства по установке и эксплуатации rif. 8_0483 AP12, rif. 8_0081-1501.
Сертификат соответствия системы менеджмента качества требованиям UNI EN ISO 9001:2015 № 236889-2017-AQ-ITA-ACCREDIA срок действия с 09.06.2017 до 09.06.2020, выдан органом по сертификации DNV GL Business Italia S.r.l. (Италия).
Схема декларирования: 1д.
**Дополнительная информация**
Применяемый стандарт: ГОСТ Р 52869-2007 "Пневмоприводы. Требования безопасности".
Условия хранения продукции: хранить в закрытых помещениях с естественной вентиляцией, исключающих воздействие прямых солнечных лучей, атмосферных осадков и агрессивных сред, при температуре воздуха от -10°С до +60°С. Срок хранения без переконсервации – не более 24 месяцев.
Срок службы – 10 лет.
Общество с ограниченной ответственностью "Николаева и Ко" - уполномоченное изготовителем лицо на основании договора № 05/2017 от 22.03.2017.
**Декларация о соответствии действительна с даты регистрации по 17.07.2020 включительно**
(подпись) Николаева Нина Сергеевна (Ф.И.О. заявителя)
"Николаева и Ко"
**Регистрационный номер декларации о соответствии: ЕАЭС N RU Д-IT.СП28.В.10614**
**Дата регистрации декларации о соответствии: 18.07.2017**



ЕВРАЗИЙСКИЙ ЭКОНОМИЧЕСКИЙ СОЮЗ
СЕРТИФИКАТ СООТВЕТСТВИЯ
№ ЕАЭС RU C-IT.AA87.B.00308/20
Серия RU № 0124960

ОРГАН ПО СЕРТИФИКАЦИИ Орган по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»). Адрес места нахождения юридического лица: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», литера В, Объект 6, этаж 3, офис 26. Адрес места осуществления деятельности в области аккредитации: Россия, 140004, Московская область, Люберецкий район, город Люберцы, поселок ВУГИ, АО «Завод «ЭКОМАШ», Литера В, Объект 6, этаж 3, офисы 26/3, 26/4, 26/5, 27/6, 30/1, 32. Аттестат № BA.RU.11АА87 от 20.07.2015 г. Телефон: +7 (495) 558-83-53, +7 (495) 558-82-44. Адрес электронной почты: ccve@ccve.ru
ЗАЯВИТЕЛЬ Общество с ограниченной ответственностью «Николаева и Ко», Адрес места нахождения юридического лица и адрес места осуществления деятельности: Россия, 141551, Московская область, Солнечногорский район, город Солнечногорск, р.п. Андреевка, улица Жилинская, дом 7. ОГРН: 1165044050236. Телефон: +7 925 566-78-45. Адрес электронной почты: nk.assist@mail.ru
ИЗГОТОВИТЕЛЬ OMAL S.p.A. Адрес места нахождения юридического лица: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия. Адреса мест осуществления деятельности по изготовлению продукции: Via Ponte Nuovo, 11 - 25050 - Rodengo Saiano (BS), Италия; Via Brognolo 12, Passirano (BS), Италия
ПРОДУКЦИЯ Краны, клапаны, затворы, пневматические приводы, арматура автоматизированная и вспомогательные устройства с Ex-маркировкой согласно приложению (см. бланки №№ 0692401, 0692402, 0692403, 0692404, 0692405). Документы, в соответствии с которыми изготовлены изделия – см. приложение, бланк № 0692400. Серийный выпуск
КОД ТН ВЭД ЕАЭС 8481 80, 8481 900000, 8412 39000
СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ ТР ТС 012/2011 «О безопасности оборудования для работы во взрывоопасных средах»
СЕРТИФИКАТ СООТВЕТСТВИЯ ВЫДАН НА ОСНОВАНИИ Протокола испытаний № 02.2020-Т от 14.01.2020 Испытательной лаборатории технических устройств Автономной некоммерческой организации «Национальный испытательный и научно-исследовательский институт оборудования для взрывоопасных сред» ИЛ Ex ТУ (аттестат № РОСС RU.0001.21МШ19 от 16.10.2015); Акта анализа состояния производства № 106-А/19 от 06.11.2019 Органа по сертификации взрывозащищенного и рудничного оборудования (ОС ЦСВЭ) Общества с ограниченной ответственностью «Центр по сертификации взрывозащищенного и рудничного оборудования» (ООО «НАНИО ЦСВЭ»); Документов, представленных заявителем в качестве доказательства соответствия продукция требованиям ТР ТС 012/2011 (см. приложение, бланк № 0692400). Схема сертификации – 1с.
ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ Перечень стандартов, применяемых на добровольной основе для соблюдения требований ТР ТС 012/2011 (см. приложение, бланк № 0692400). Условия и срок хранения указаны в эксплуатационной документации. Назначенный срок службы – указан в технической документации.
СРОК ДЕЙСТВИЯ С 22.01.2020 ПО 21.01.2025 ВКЛЮЧИТЕЛЬНО
Руководитель (уполномоченное лицо) органа по сертификации — Преловский Николай Николаевич
М.П.
Эксперт (эксперт-аудитор) (эксперты (эксперты-аудиторы)) — Жуковин Юрий Дмитриевич

**▲ EAC - EAC "EX"**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili nell'unione doganale EuroAsec (Russia, Kazakhstan, Bielorussia, Armenia).

*Certification of the compliance of the product with the Technical Regulations applicable in the EuroAsec Customs Union (Russia, Kazakhstan, Belarus, Armenia).*



СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ
СЕРТИФІКАТ ЕКСПЕРТИЗИ ТИПУ / TYPE EXAMINATION CERTIFICATE

Зареєстровано в реєстрі органу з оцінки відповідності «ПРОМТЕСТ» за № UA.TR.034.2323-17
Registered at the Record of conformity assessment body "PROMTEST" under №

Термін дії з 25.07.2017 р. до 03.09.2020 р.
Срок действия с / Term of validity is from

Сертифікат видано 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія
Сертификат выдан/Certificate is issued on

Продукція / Продукция / Production: Приводи пневматичні, серій: DA, DAV, DAN, DANV, SR, SRV, SRN, SRNV, DD (без електричного обладнання) В комплектації з монтажними комплектами приводів, типів: KBE, KBF, KBN, KCF; соленоїдним клапаном типу ER8188, кінцевими вимикачами, типів: KSSB, KSSP, KSSA, KSSF, KSSS, KXSB, KSRW, KI, RFD, RW; індикаторами положення — 8412
(повна назва, тип, вид, марка, торгова марка (товарний знак)) (полное название, тип, вид, марка, торговая марка (товарный знак)) (complete product name, type, kind, model, merchandise mark (trademark))

Відповідає вимогам / Соответствует требованиям / Comply with the requirements: ДСТУ EN 60079-0:2017 (EN 60079-0:2012, IDT) Технічного регламенту обладнання та захисних систем, призначених для застосування в потенційно вибухонебезпечному середовищі (назва та позначення нормативних документів) (name and designation of normative documents)

Виробник / Производитель / Producer: 'OMAL S.p.A.', Via Ponte Nuovo 11, 25050 Rodengo Saiano (BS), Італія

Місце виробництва / Место производства / Place of production: Via Brognolo 12, 25050 Passirano (BS), Італія

Додаткова інформація / Дополнительная информация / Additional information

Сертифікат видано органом з оцінки відповідності "ПРОМТЕСТ" Призначений орган з оцінки відповідності вимогам технічних регламентів № UA.TR.034 згідно наказу № 396 Міністерства економічного розвитку і торгівлі України від 21.04.2015 р.
Сертифікат видан органом оценки соответствия/Certificate is issued by the conformity assessment body

На підставі / На основании / On the grounds of: Звіту про оцінювання технічного проекту від 22.07.2017 р. ООВ 'ПРОМТЕСТ'

Керівник органу з оцінки відповідності / Руководитель органа оценки соответствия / Director of the conformity assessment body — Самотой В.І.
(підпис, ініціали, прізвище) (signature, initials, family name)
М.П. / M.U. / M.I. Stamp

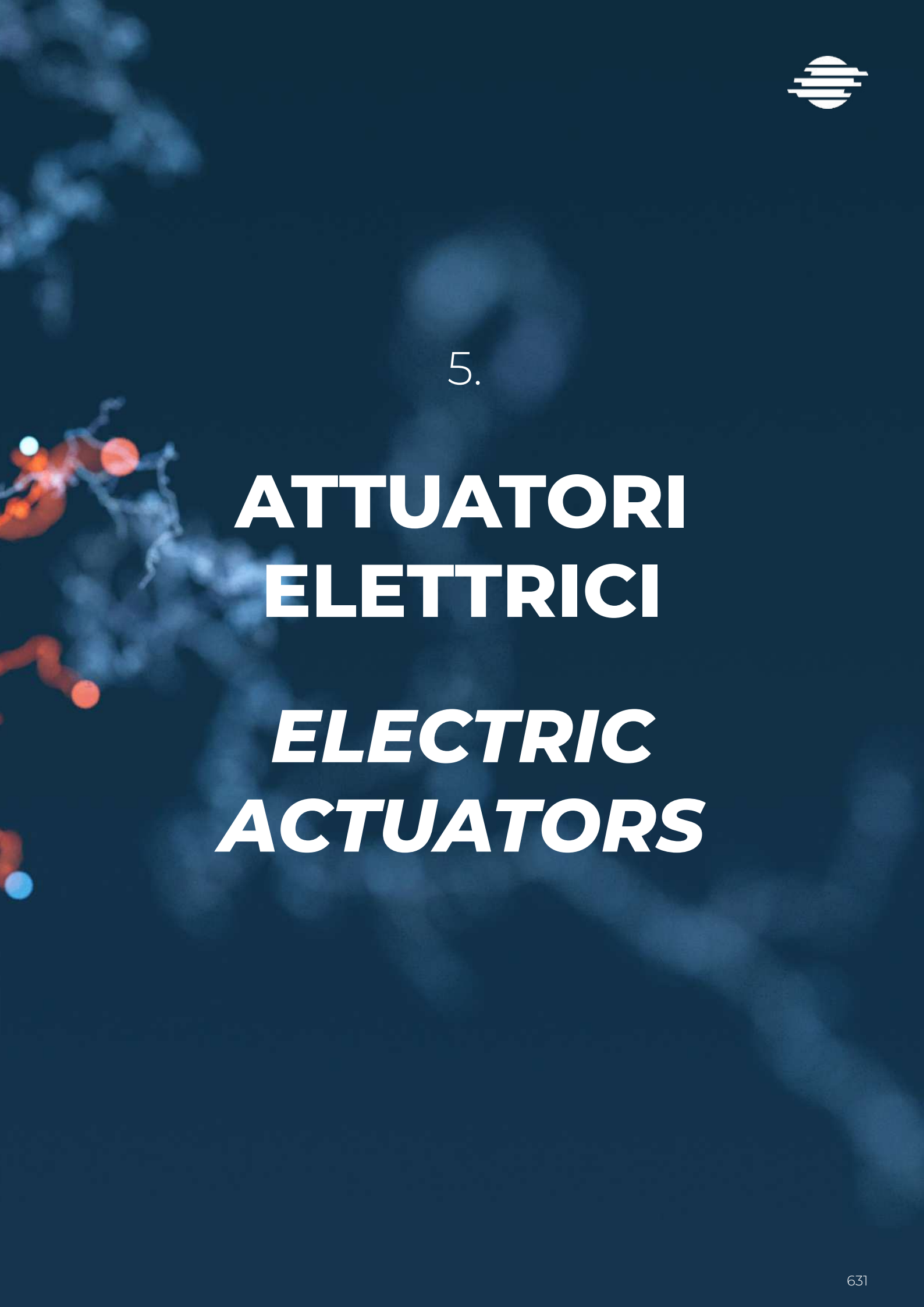
Чинність сертифіката відповідності можна перевірити за адресою органу з оцінки відповідності, що розмістила на www.promtest.com.ua
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**UKR ▶**

Certificazione di conformità del prodotto ai regolamenti tecnici applicabili in Ucraina.

*Certification of compliance of the product with the Technical Regulations applicable in Ukraine.*





5.

# ATTUATORI ELETTRICI

# *ELECTRIC ACTUATORS*

# ATTUATORI ELETTRICI · INDICE

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# ATTUATORE ELETTRICO TIPO ROTATIVO "AE" ON-OFF

# *ELECTRIC ACTUATOR "AE" ON-OFF ROTARY TYPE*



## DATI TECNICI

- Attuatore ON-OFF angolo di lavoro 90° (100° Max.). Servizio 50%.
- Coppia massima da 10 a 1960 Nm. (vedi tabella).
- Tensione di alimentazione 230 Vac (±10%) 50/60 Hz 1Ph.
- Resistenza di isolamento 100 MΩ / 500 Vdc.
- Isolamento a tensione 1500 Vac / 1 minuto.
- Motore con isolamento in classe E.
- Temperatura di esercizio da -25 °C a +55 °C (in caso di utilizzo con temperature minori di 0°C si consiglia di richiedere la resistenza anti-condensa).
- Grado di protezione secondo norma NEMA 4,4X (IP65).
- Attacchi per valvola normalizzati da F03 a F14 ISO 5211.
- Protezione termostatica auto-reset interna al motore.
- Finecorsa aperto/chiuso con camme regolabili su tutta la corsa.
- Finecorsa meccanici di sicurezza regolabili.
- Finecorsa ausiliari con camme regolabili su tutta la corsa.
- Indicatore visivo di posizione graduato.
- Leva per azionamento manuale in dotazione.
- Collegamenti elettrici con morsetti a vite.
- Bloccaggio cavi di alimentazione tramite pressacavi.
- Rumorosità massima durante il funzionamento <70 dB (A).

## *TECHNICAL DATA*

- *Actuator ON-OFF; working angle 90° (100° Max.). Service 50%.*
- *Maximum torque from 10 to 1960 Nm. (see the table).*
- *Supply voltage 230 Vac (±10%) 50/60 Hz 1Ph.*
- *Insulation resistance 100 M /500 Vdc.*
- *Tension insulation 1500 Vac/1 minute.*
- *Motor with Class E insulation.*
- *Working temperature from –25°C to + 55°C (for use in temperatures below 0°C, we suggest anti-condensate elements).*
- *Protection according to NEMA 4,4X rules (IP65).*
- *Coupling flange for the valve from F03 to F14: ISO 5211.*
- *Auto-reset thermostatic protection in the motor.*
- *Open/close limit switch with cams adjustable along the whole stroke.*
- *Auxiliary limit switches with cams adjustable along the whole stroke.*
- *Safety adjustable mechanical limit switches.*
- *Graduated visual position indicator.*
- *Detachable lever for manual operation.*
- *Electric connections with screw terminals.*
- *Locking of supply cables by means of cable presses.*
- *Maximum working noise <70 dB (A).*

## OPTIONAL (DA SPECIFICARE IN FASE D'ORDINE)

- Tensioni di alimentazione 115 Vac - 24 Vac (*) - 24 Vdc (**).
- Limitatori di coppia.
- Potenziometro di posizione 135 / 500 / 1000 ohms.
- Convertitore di posizione R/I 4÷20 mA DC (***).
- Unità di regolazione della velocità (***).
- Resistenza anticondensa.
- Volantino a disinnesto per azionamento manuale in sostituzione della leva (solo su AE100 e AE200).
- Giunto per accoppiamento attuatore/valvola.

* solo AE 10÷AE 200
** solo AE 40÷AE 200
*** solo AE 100÷AE 2000 (Vac)

## *OPTIONAL (MUST BE REQUESTED WHEN PLACING THE ORDER)*

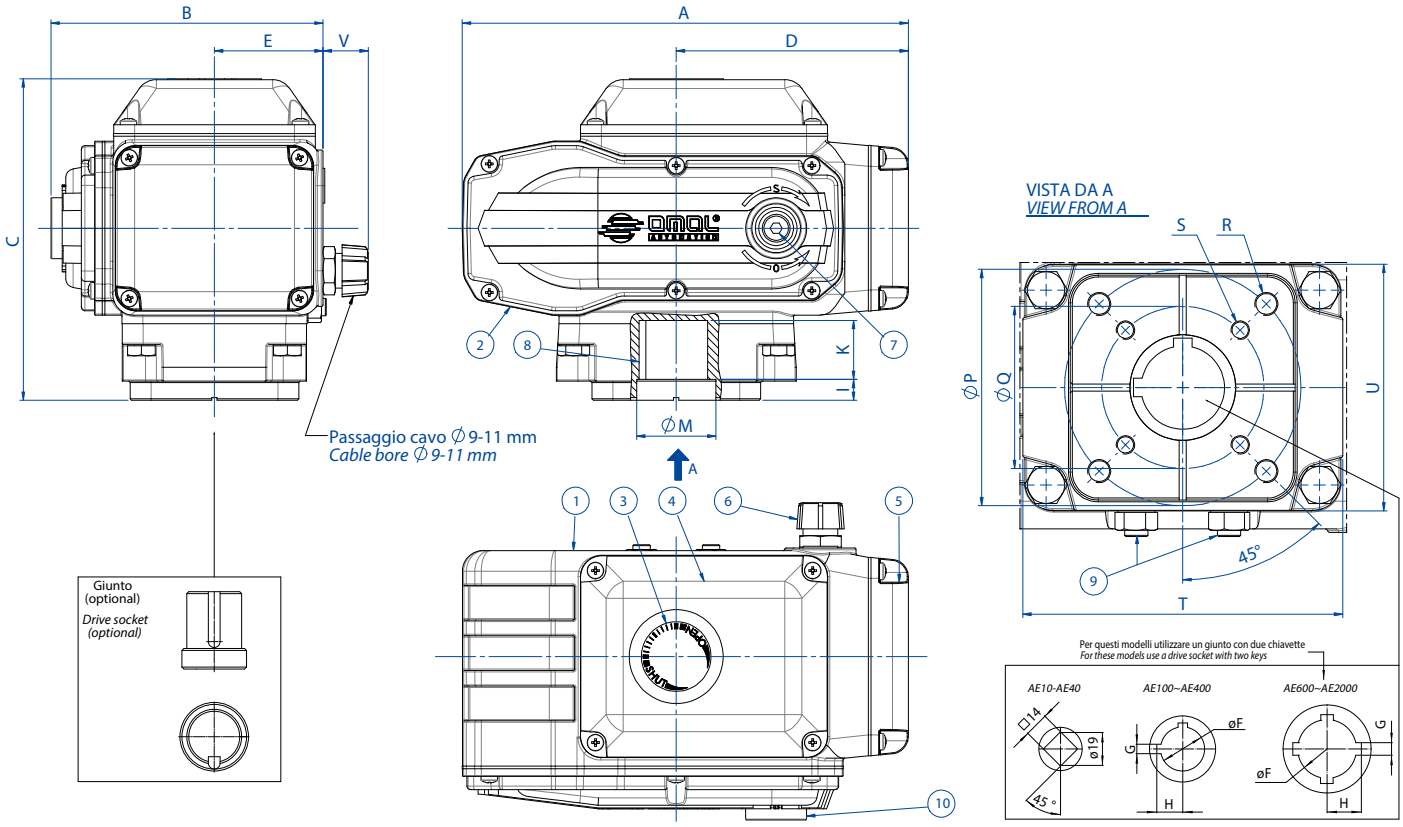
- *Feeding voltage 115 Vac - 24 Vac (*) - 24 Vdc (**).*
- *Torque limiters.*
- *Positional potentiometer 135 / 500 / 1K ohms.*
- *Positional converter R/I 4÷20 mA DC (***).*
- *Speed control unit 30÷240 s (***).*
- *Space heater.*
- *Emergency gear box (available on AE100 and AE200).*
- *Drive socket.*

* *AE 10÷AE 200 only*
** *AE 40÷AE 200 only*
*** *AE 100÷AE 2000 only (Vac)*

## SCHEDA TECNICA *DATA SHEET*

| MODELLO - MODEL | | AE 10 | AE 40 | AE 100 | AE 200 | AE 400 | AE 600 | AE 1000 | AE 1500 | AE 2000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Coppia *Torque* | Nm | 10 | 39 | 98* | 196 | 390 | 590 | 980 | 1470 | 1960 |
| Tempo di manovra *Time of cycle* (50 Hz) | sec. | 4 | 15 | 30 | 30 | 30 | 30 | 30 | 45 | 60 |
| Tempo di manovra *Time of cycle* (60 Hz) | sec. | 3,3 | 12,5 | 25 | 25 | 25 | 25 | 25 | 38 | 50 |
| Tempo di manovra *Time of cycle* 24Vdc | sec. | ---- | 9,5 | 16 | 30 | ---- | ---- | ---- | ---- | ---- |
| Assorbimento *Power consumption* 230Vac 50/60Hz | A | 0,4/0,5 | 0,4/0,5 | 0,35/0,4 | 0,55/0,6 | 0,9/1 | 1/1,1 | 1,5/1,6 | 1,8/1,9 | 1,9/2 |
| Assorbimento *Power consumption* 115Vac 50/60Hz | A | 0,8/0,9 | 0,8/0,9 | 0,6/0,7 | 1,1/1,2 | 1,9/2 | 1,9/2 | 2,9/3 | 3,4/3,5 | 3,4/3,5 |
| Assorbimento *Power consumption* 24Vac 50/60Hz | A | 1,2/1,3 | 1,2/1,3 | 1,7/1,8 | 2,3/2,4 | ---- | ---- | ---- | ---- | ---- |
| Assorbimento *Power consumption* 24Vdc | A | ---- | 2 | 2,5 | 2 | ---- | ---- | ---- | ---- | ---- |

* Alimentazione *Supply* 24 Vdc: 68 Nm




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo - *Body* | Alluminio - *Aluminium* |
| 2 | Coperchio del riduttore - *Gear box cap* | Alluminio - *Aluminium* |
| 3 | Indicatore di posizione - *Position indicator* | Vetro - *Glass* |
| 4 | Coperchio gruppo elettrico - *Electric-set cap* | Alluminio - *Aluminium* |
| 5 | Coperchio morsettiera - *Terminal-box cap* | Alluminio - *Aluminium* |
| 6 | Pressacavi - *Cable gland* | Lega di zinco - *Zinc alloy* (AE 10 - AE 40: Nylon) |
| 7 | Attacco per leva - *Lever connection* | Acciaio - *Steel* |
| 8 | Albero femmina - *Female shaft* | Lega di zinco - Zinc alloy (AE 1500 - AE 2000: Acciaio/*Steel*) |
| 9 | Fermi di sicurezza - *Security stops* | Acciaio inox - *Stainless steel* |
| 10 | Protezione attacco per leva - *Protections for lever connection* | NBR |
| 11 | Leva - *Lever* (non rappresentata - *not represented*) | Acciaio inox - *Stainless steel* |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MODELLO - MODEL** | **AE 10** | **AE 40** | **AE 100** | **AE 200** | **AE 400** | **AE 600** | **AE 1000** | **AE 1500** | **AE 2000** |
| A mm. | 158,5 | 158,5 | 207,5 | 256,5 | 256,5 | 381 | 381 | 381 | 381 |
| B mm. | 114,5 | 114,5 | 122,5 | 156,5 | 156,5 | 242 | 242 | 253,5 | 253,5 |
| C mm. | 119,5 | 119,5 | 163,5 | 185 | 185 | 234 | 234 | 234 | 234 |
| D mm. | 76 | 76 | 110 | 133,5 | 133,5 | 199,5 | 199,5 | 199,5 | 199,5 |
| E mm. | 51 | 51 | 54,5 | 62,5 | 62,5 | 105 | 105 | 105 | 105 |
| ØF mm. | ---- | ---- | 28 | 36 | 36 | 56 | 56 | 56 | 56 |
| G mm. | ---- | ---- | 6 | 8 | 8 | 10 | 10 | 10 | 10 |
| H mm. | ---- | ---- | 16,5 | 21,3 | 21,3 | 31,3 | 31,3 | 31,3 | 31,3 |
| I mm. | 1 | 1 | 11,5 | 12 | 12 | 8 | 8 | 8 | 8 |
| K mm. | 16 | 16 | 29 | 34 | 34 | 54 | 54 | 54 | 54 |
| L mm. | 12 | 12 | 40,5 | 46 | 46 | 62 | 62 | 62 | 62 |
| ØM mm. | 26 | 26 | 35 | 40 | 40 | 65 | 65 | 65 | 65 |
| ØP mm. | 50 F05* | 50 F05* | 70 F07 | 102 F10 | 102 F10 | 125 F12 ** | 125 F12 ** | 140 F14 | 140 F14 |
| ØQ mm. | 36 F03* | 36 F03* | 50 F05 | 70 F07 | 70 F07 | 102 F10 ** | 102 F10 ** | ---- | ---- |
| R x prof. *depth* mm. | M6x12* | M6x12* | M8x12 | M10x16 | M10x16 | M12x20 ** | M12x20 ** | M16x25 | M16x25 |
| S x prof. *depth* mm. | M5x10* | M5x10* | M6x10 | M8x8 | M8x8 | M10x20 ** | M10x20 ** | ---- | ---- |
| T mm. | 80 | 80 | 98 | 135 | 135 | 160 | 160 | 160 | 160 |
| U mm. | 72 | 72 | 86 | 106 | 106 | 140 | 140 | 140 | 140 |
| V mm. | 26 | 26 | 26 | 26 | 26 | ---- | ---- | ---- | ---- |
| Peso *Weight* Kg. | 2,7 | 2,7 | 4,5 | 8,5 | 9 | 20,5 | 21,5 | 22,5 | 22,5 |

* A richiesta é disponibile la flangia con foratura M5x10 su Ø42 F04 - *On request the flange is available with M5x10 on Ø42 F04 holes*
** A richiesta é disponibile la flangia con foratura M16x25 su Ø100 F14 - *On request the flange is available with M16x25 on Ø100 F14 holes*

# ATTUATORE ELETTRICO TIPO ROTATIVO "AM" MODULANTE

# *ELECTRIC ACTUATOR "AM" ROTARY MODULAR TYPE*



## DATI TECNICI

- Attuatore MODULANTE a controllo elettronico.
- Angolo di lavoro 90° (100° Max.).
- Coppia massima da 20 a 1960 Nm. (vedi tabella).
- Tensione di alimentazione 230 Vac (±10%) 50/60 Hz 1Ph.
- Segnale di comando 4~20 mA (o 1~5 Vdc).
- Segnale di uscita 4~20 mA (1~5 Vdc per AM 20).
- Risoluzione 1/250 (regolabile 1/200 ~ 1/400).
- Regolazione zero/span.
- Selettore di funzione diretta/inversa.
- Selettore di modalità in mancanza di segnale OPEN - CLOSE - STOP.
- Resistenza di isolamento 100 MΩ / 500 Vdc.
- Isolamento a tensione 1500 Vac / 1 minuto.
- Motore con isolamento in classe E.
- Temperatura di esercizio da -25 °C a +55 °C (in caso di utilizzo con temperature minori di 0°C si consiglia di richiedere la resistenza anti-condensa).
- Grado di protezione secondo norma NEMA 4,4X (IP65).
- Attacchi per valvola normalizzati da F03 a F14 ISO 5211.
- Protezione termostatica auto-reset interna al motore.
- Finecorsa aperto/chiuso con camme regolabili su tutta la corsa.
- Finecorsa meccanici di sicurezza regolabili.
- Indicatore visivo di posizione graduato.
- Leva per azionamento manuale in dotazione.
- Collegamenti elettrici con morsetti a vite.
- Bloccaggio cavi di alimentazione tramite pressacavi.
- Rumorosità massima durante il funzionamento <70 dB(A).

## *TECHNICAL DATA*

- *Electronic control MODULATING Actuator.*
- *Working angle 90° (100° Max.).*
- *Maximum torque from 20 to 1960 Nm. (see the table).*
- *Voltage 230 Vac 1Ph 50/60 Hz.*
- *Input signal 4~20 mA (1~5 Vdc).*
- *Output signal 4~20 mA (1~5 Vdc AM 20).*
- *High resolution 1/250 (adjustable 1/200 ~ 1/400).*
- *Adjustable zero/span.*
- *Direct/reverse function selector.*
- *Mode selector without OPEN-CLOSE-STOP signal.*
- *Insulation resistance 100 M /500 Vdc.*
- *Tension insulation 1500 Vac/1 minute.*
- *Motor with Class E insulation.*
- *Working temperature from –25°C to + 55°C (for use in temperatures below 0°C, we suggest anti-condensate elements).*
- *Protection according to NEMA 4,4X rules (IP65).*
- *Coupling flange for the valve from F03 to F14: ISO 5211.*
- *Auto-reset thermostatic protection in the motor.*
- *Open/close limit switches with cams adjustable along the whole stroke.*
- *Limit switches with adjustable cams.*
- *Safety adjustable mechanical limit switches.*
- *Graduated visual position indicator.*
- *Detachable lever for manual operation.*
- *Electric connections with screw terminals.*
- *Locking of supply cables by means of cable presses.*
- *Maximum working noise <70 dB* (A).

## OPTIONAL (DA VERIFICARE IN FASE D'ORDINE)

- Tensioni di alimentazione 115 Vac - 24 Vac. (*).
- Segnale di comando 4~12 mA (1~3 Vdc) - 12~20 mA (3~5 Vdc).
- Finecorsa ausiliari.
- Limitatori di coppia.
- Resistenza anticondensa.
- Giunto di accoppiamento.
- Volantino a disinnesto per azionamento manuale. (**).

* solo AM 50-AM 100
** solo AM 50-AM 100-AM 200

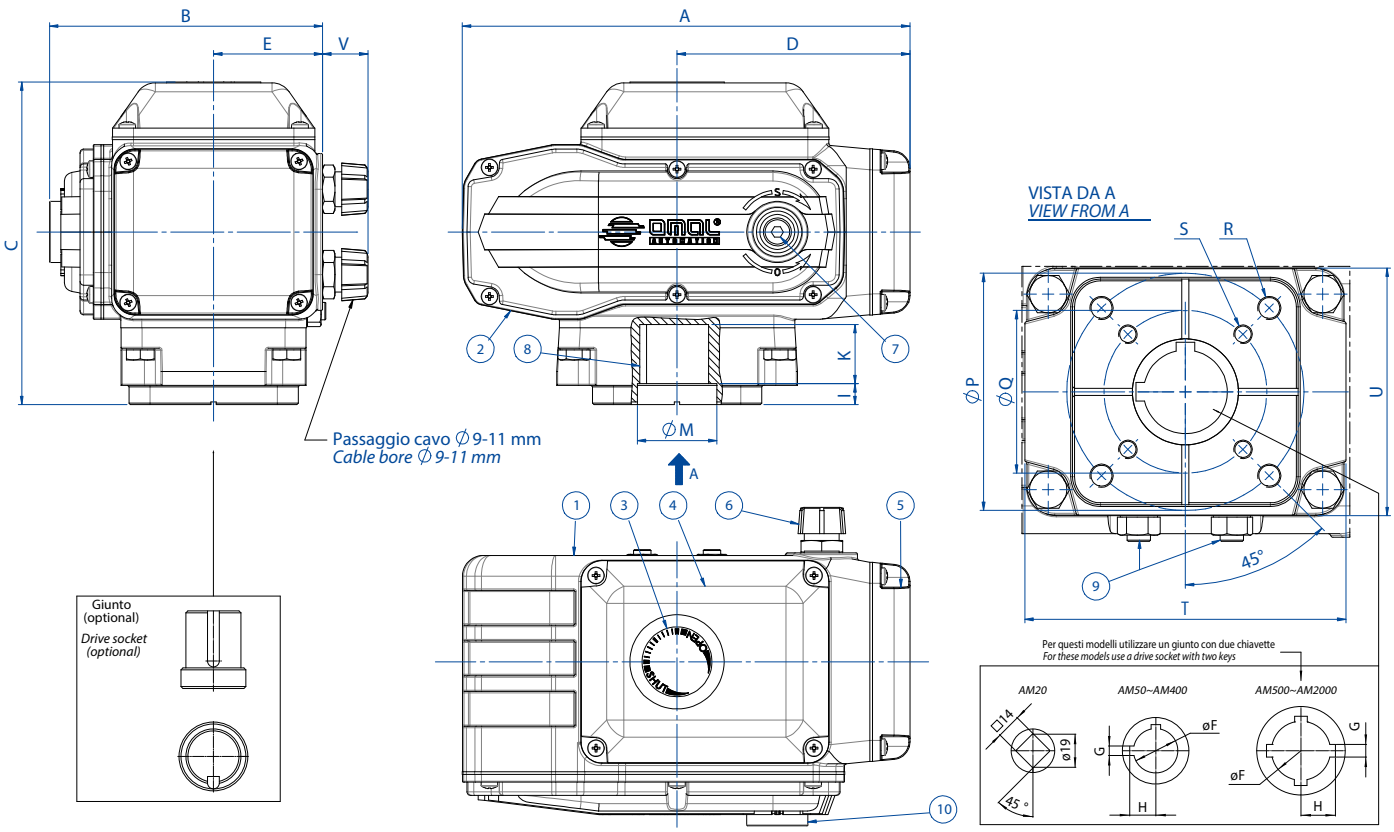
## *OPTIONAL (MUST BE REQUESTED WHEN PLACING THE ORDER)*

- *Feeding voltage 115 Vac - 24 Vac. (*).*
- *Input signal 4~12 mA (1~3 Vdc) - 12~20 mA (3~5 Vdc).*
- *Auxiliary limit switches.*
- *Torque limiters.*
- *Space heater.*
- *Drive socket.*
- *Emergency gear box. (**).*

* *AM 50-AM 100*
** *AM 50-AM 100-AM 200*

## SCHEDA TECNICA *DATA SHEET*

| MODELLO - MODEL | AM 20 | AM 50 | AM 100 | AM 200 | AM 400 | AM 500 | AM 1000 | AM 1500 | AM 2000 |
|---|---|---|---|---|---|---|---|---|---|
| Coppia *Torque* Nm | 20 | 49 | 98 | 196 | 390 | 490 | 980 | 1470 | 1960 |
| Tempo di manovra *Time of cycle* (50 Hz) sec. | 15 | 15 | 30 | 15 | 30 | 15 | 30 | 45 | 60 |
| Tempo di manovra *Time of cycle* (60 Hz) sec. | 12,5 | 12,5 | 25 | 12,5 | 25 | 12,5 | 25 | 38 | 50 |
| Assorbimento *Power consumption* 230Vac 50/60Hz A | 0,4/0,5 | 0,35/0,4 | 0,35/0,4 | 0,9/1 | 0,9/1 | 1,3/1,4 | 1,3/1,4 | 1,3/1,4 | 1,3/1,4 |
| Assorbimento *Power consumption* 115Vac 50/60Hz A | 0,8/0,9 | 0,6/0,7 | 0,6/0,7 | 1,9/2 | 1,9/2 | 2,5/2,6 | 2,5/2,6 | 2,5/2,6 | 2,5/2,6 |
| Assorbimento *Power consumption* 24Vac 50/60Hz A | ---- | 1,7/1,8 | 1,7/1,8 | ---- | ---- | ---- | ---- | ---- | ---- |




| MATERIALI *MATERIALS* | | |
|---|---|---|
| 1 | Corpo - *Body* | Alluminio - *Aluminium* |
| 2 | Coperchio del riduttore - *Gear box cap* | Alluminio - *Aluminium* |
| 3 | Indicatore di posizione - *Position indicator* | Vetro - *Glass* |
| 4 | Coperchio gruppo elettrico - *Electric-set cap* | Alluminio - *Aluminium* |
| 5 | Coperchio morsettiera - *Terminal-box cap* | Alluminio - *Aluminium* |
| 6 | Pressacavi - *Cable gland* | Lega di zinco - *Zinc alloy* |
| 7 | Attacco per leva - *Lever connection* | Acciaio - *Steel* |
| 8 | Albero femmina - *Female shaft* | Lega di zinco - *Zinc alloy* (AM 1500-AM 2000:Acciaio/*Steel*) |
| 9 | Fermi di sicurezza - *Security stops* | Acciaio inox - *Stainless steel* |
| 10 | Protezione attacco per leva - *Protections for lever connection* | NBR |
| 11 | Leva - *Lever* (non rappresentata - *not represented*) | Acciaio inox - *Stainless steel* |

| DIMENSIONI *DIMENSIONS* | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MODELLO - *MODEL*** | **AM 20** | **AM 50** | **AM 100** | **AM 200** | **AM 400** | **AM 500** | **AM 1000** | **AM 1500** | **AM2000** |
| A mm. | 165,8 | 207,5 | 207,5 | 256,5 | 256,5 | 381 | 381 | 381 | 381 |
| B mm. | 114,5 | 122,5 | 122,5 | 156,5 | 156,5 | 242 | 242 | 253,5 | 253,5 |
| C mm. | 119,5 | 163,5 | 163,5 | 185 | 185 | 234 | 234 | 234 | 234 |
| D mm. | 83,3 | 110 | 110 | 133,5 | 133,5 | 199,5 | 199,5 | 199,5 | 199,5 |
| E mm. | 51 | 54,5 | 54,5 | 62,5 | 62,5 | 105 | 105 | 105 | 105 |
| ØF mm. | ---- | 28 | 28 | 36 | 36 | 56 | 56 | 56 | 56 |
| G mm. | ---- | 6 | 6 | 8 | 8 | 10 | 10 | 10 | 10 |
| H mm. | ---- | 16,5 | 16,5 | 21,3 | 21,3 | 31,3 | 31,3 | 31,3 | 31,3 |
| I mm. | 1 | 11,5 | 11,5 | 12 | 12 | 8 | 8 | 8 | 8 |
| K mm. | 16 | 29 | 29 | 34 | 34 | 54 | 54 | 54 | 54 |
| L mm. | 12 | 40,5 | 40,5 | 46 | 46 | 62 | 62 | 62 | 62 |
| ØM mm. | 26 | 35 | 35 | 40 | 40 | 65 | 65 | 65 | 65 |
| ØP mm. | 50-F05 | 70-F07 | 70-F07 | 102-F10 | 102-F10 | 125-F12* | 125-F12* | 140-F14 | 140-F14 |
| ØQ mm. | 36-F03 | 50-F05 | 50-F05 | 70-F07 | 70-F07 | 102-F10* | 102-F10* | ---- | ---- |
| R x prof. *depth* mm. | M6x12 | M8x12 | M8x12 | M10x16 | M10x16 | M12x20* | M12x20* | M16x25 | M16x25 |
| S x prof. *depth* mm. | M5x10 | M6x10 | M6x10 | M8x13 | M8x13 | M10x20* | M10x20* | ---- | ---- |
| T mm. | 80 | 98 | 98 | 135 | 135 | 160 | 160 | 160 | 160 |
| U mm. | 72 | 86 | 86 | 106 | 106 | 140 | 140 | 140 | 140 |
| V mm. | 40 | 44 | 44 | 44 | 44 | ---- | ---- | ---- | ---- |
| Peso *Weight* Kg. | 3,1 | 4,5 | 4,5 | 8,7 | 8,7 | 22,8 | 22,8 | 22,8 | 22,8 |

* A richiesta é disponibile la flangia con foratura M16x25 su Ø100 F14 - *On request the flange is available with M16x25 on Ø100 F14 holes*

# ATTUATORI ELETTRICI *ELECTRIC ACTUATOR*
# CODIFICA ED ACCESSORI *CODES AND OPTIONS*

## ATTUATORE ELETTRICO "AE" ON-OFF ATTACCHI NORMALIZZATI F03÷F14
## *ELECTRICAL ACTUATOR "AE" ON-OFF TYPE F03÷F14 ATTACHMENT*

| | Taglie di attuatori e relativi codici *Sizes and actuator codes* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Voltaggio *Voltage*** | AE 10 F03-F05 | AE 10 F04 | AE 40 F03-F05 | AE 40 F04 | AE 100 F05-F07 | AE 200 F07-F10 | AE 400 F07-F10 | AE 600 F10-F12 | AE 600 F14 | AE 1000 F10-F12 | AE 1000 F14 | AE 1500 F14 | AE 2000 F14 |
| **230V 50/60 Hz** | AE160001 | AE161001 | AE160004 | AE161004 | AE160010 | AE160020 | AE160040 | AE160060 | AE161060 | AE160100 | AE161100 | AE160150 | AE160200 |
| **115V 50/60 Hz** | AE150001 | AE151001 | AE150004 | AE151004 | AE150010 | AE150020 | AE150040 | AE150060 | AE151060 | AE150100 | AE151100 | AE150150 | AE150200 |
| **24V 50/60 Hz** | AE120001 | AE121001 | AE120004 | AE121004 | AE120010 | AE120020 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| **24V dc** | ----- | ----- | AE020004 | AE021004 | AE020007 | AE020020 | ----- | ----- | ----- | ----- | ----- | ----- | ----- |

## ATTUATORE ELETTRICO "AM" MODULANTE ATTACCHI NORMALIZZATI F05÷F14
## *ELECTRICAL ACTUATOR "AM" MODULATING TYPE F05÷F14 ATTACHMENT*

| **Voltaggio *Voltage*** | AM 20 F03-F05 | AM 50 F05-F07 | AM 100 F05-F07 | AM 200 F07-F10 | AM 400 F07-F10 | AM 500 F10-F12 | AM 500 F14 | AM 1000 F10-F12 | AM 1000 F14 | AM 1500 F14 | AM 2000 F14 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **230V 50/60 Hz** | AM160002 | AM160005 | AM160010 | AM160020 | AM160040 | AM160050 | AM161050 | AM160100 | AM161100 | AM160150 | AM160200 |
| **115V 50/60 Hz** | AM150002 | AM150005 | AM150010 | AM150020 | AM150040 | AM150050 | AM151050 | AM150100 | AM151100 | AM150150 | AM150200 |
| **24V 50/60 Hz** | ---- | AM120005 | AM120010 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |

## ACCESSORI DISPONIBILI PER ATTUATORI ELETTRICI E RELATIVO IDENTIFICATORE
## *EXTRA ACCESSORIES FOR ELECTRICAL ACTUATORS AND CORRESPONDANT IDENTIFICATION*

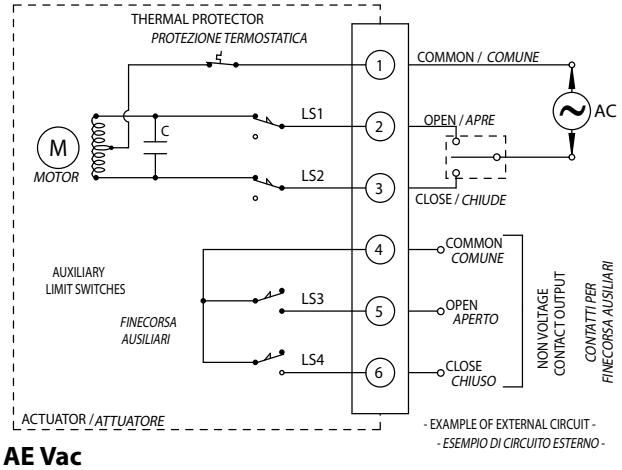
| **DESCRIZIONE *DESCRIPTION*** | **CONFIGURATORE *CONFIGURATOR*** |
|---|---|
| 2 finecorsa ausiliari *2 auxiliary limit-switches* | **AL2** |
| Potenziometro 135 ohm *Potentiometer 135 ohm* | **AP1** |
| Potenziometro 500 ohm *Potentiometer 500 ohm* | **AP2** |
| Potenziometro 1000 ohm *Potentiometer 1000 ohm* | **AP3** |
| Convertitore R/I 4÷20 mA *R/I convertor 4÷20 mA* | **ARI** |
| Controllo della velocità *Speed control* | **ASC** |
| Limitatore di coppia in chiusura *Close torque limiter* | **AT1 - (AT5 AE600÷2000 AM 500÷2000)** |
| Limitatore di coppia in chiusura ed apertura *Open and close torque limiter* | **AT2 - (AT6 AE600÷2000 AM 500÷2000)** |
| Resistenza anticondensa *Anti-condensate element* | **ASH** |
| Volantino per azionamento manuale *Wheel for manual operation* | **AHW** |

## CONFIGURAZIONI MASSIME DI FORNITURA PER ATTUATORI CON OPTIONAL
## *MAXIMUM CONFIGURATION FOR THE SUPPLY OF ACTUATORS*

| | **AP(1-2-3)** | **AT1/AT2 AT5/AT6** | **ASH** | **ARI** | **ASC** | **AHW** | **AL2** |
|---|---|---|---|---|---|---|---|
| **AE 10 - AE 40 Tensione *Voltage* AC - DC** | SI/YES | SI/YES(T1) | SI/YES | NO | NO | NO | STD |
| **AE 100 - AE 200 Tensione *Voltage* AC** | SI/YES | SI/YES | SI/YES | NO | SI/YES | SI/YES | STD |
| **AE 100 - AE 200 Tensione *Voltage* AC** | NO | SI/YES | SI/YES | SI/YES | NO | SI/YES | STD |
| **AE 100 - AE 200 Tensione *Voltage* DC** | SI/YES | SI/YES | SI/YES | NO | NO | SI/YES | STD |
| **AE 400 ÷ AE 2000 Tensione *Voltage* AC** | SI/YES | SI/YES | SI/YES | NO | SI/YES | NO | STD |
| **AE 400 ÷ AE 2000 Tensione *Voltage* AC** | SI/YES | SI/YES | SI/YES | SI/YES | NO | NO | STD |
| **AM 20** | NO | NO | NO | NO | NO | NO | NO |
| **AM 50 ÷ AM 200** | NO | SI/YES | NO | NO | NO | SI/YES | SI/YES |
| **AM 50 ÷ AM 200** | NO | SI/YES | SI/YES | NO | NO | SI/YES | NO |
| **AM 400 ÷ AM 2000** | NO | SI/YES | SI/YES | NO | NO | NO | SI/YES |

**Legenda** *Legend*
SI/YES = accessorio disponibile sul modello di attuatore *available accessory*
NO = accessorio non disponibile sul modello di attuatore *accessory not available*
**Nota/*Note*:** Tutti gli accessori devono necessariamente essere specificati in fase d'ordine. *All extra accessories must be requested when placing the order.*

# ATTUATORI ELETTRICI *ELECTRIC ACTUATOR*
## SCHEMI ELETTRICI ED ESEMPI DI COLLEGAMENTO *ELECTRIC PLAN AND CONNECTION EXAMPLES*




**AE Vac**

### AE Vac

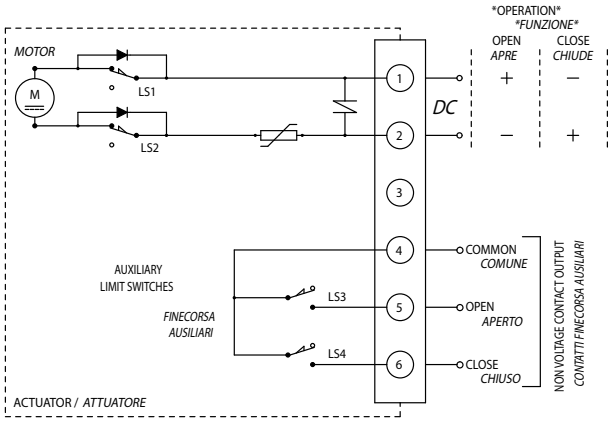
**Attuatore elettrico ON-OFF modello AE**
Esempio di circuito di collegamento in configurazione standard con alimentazione in tensione alternata.

***Electrical actuator ON-OFF AE type***
*Example of standard connection circuit with alternative tension feeding.*

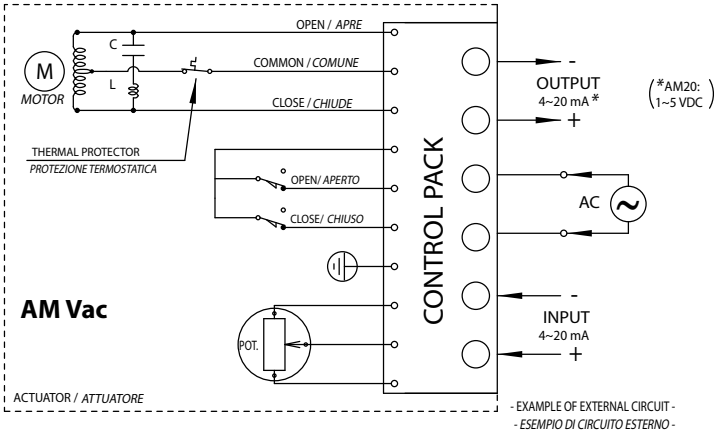
### AE Vdc

**Attuatore elettrico ON-OFF modello AE**
Esempio di circuito di collegamento in configurazione standard con alimentazione in tensione continua

***Electrical actuator ON-OFF AE type***
*Example of standard connection circuit with direct tension feeding.*




**AE Vdc**




**AM Vac**

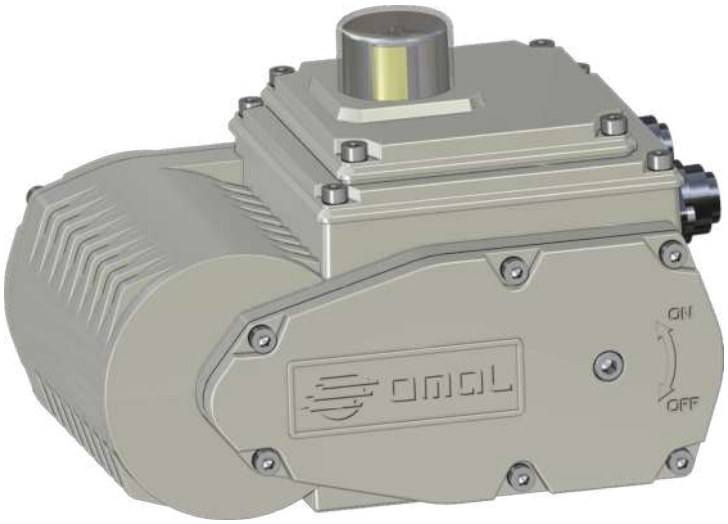
### AM Vac

**Attuatore elettrico Modulante modello AM**
Esempio di circuito di collegamento in configurazione standard con alimentazione in tensione alternata.

***Electrical actuator Modulating AM type***
*Example of standard connection circuit with alternative tension feeding.*

# ATTUATORE ELETTRICO TIPO ROTATIVO "EA" ON-OFF

# *ELECTRIC ACTUATOR "EA" ON-OFF ROTARY TYPE*




## DATI TECNICI

- Angolo di lavoro nominale: 90° regolabile tra 20° e 95°.
- Tipo di regolazione: continua mediante camme autofrenate e finecorsa elettromeccanici.
- Coppia di lavoro nominale: da 35 a 240 Nm.
- Tempo di manovra (0° - 90°): vedi diagramma.
- Servizio: S3 ED 50% secondo CEI 60034.
- Rispondenza alle norme: Direttiva bassa tensione 2014/35/UE; Direttiva compatibilità elettromagnetica 2014/30/CE.
- Grado di protezione: IP67 secondo EN60529.
- Temperatura ambiente di lavoro: -25° +60° C.
- Temperatura limite di stoccaggio: -40° +90°C.
- Protezione termostatica autoreset interna al motore.
- Avvolgimento motore con isolamento in classe F (155°).
- Rotore supportato su cuscinetti a sfera.
- Attacco per azionamento manuale di emergenza (chiave esagonale in dotazione).
- Indicatore visivo esterno a semaforo con zona superiore graduata.
- Resistenza anticondensa di serie.
- Collegamenti elettrici tramite connettori IP67, disponibili a richiesta con cavo precablato.
- 2 finecorsa elettromeccanici SPDT per indicazione ausiliaria con camme regolabili su tutta la corsa.
- Rumorosità massima durante il funzionamento <70 dB (A).
- Tensione di alimentazione: 230 Vac 50/60 Hz ±10 % monofase; 115 Vac 50/60 Hz ±10 % monofase; 24 V ac/dc ±10%; 24 V dc ±5%.

## *TECHNICAL DATA*

- *Nominal working angle: 90º, adjustable between 20º and 95º.*
- *Type of setting: continuous by means of self-locking cams and electromechanical limt-switches.*
- *Nominal working torque: from 35 to 240 Nm.*
- *Operation time (0° - 90°): see diagram.*
- *Service: S3 ED 50% in compliance with CEI 60043.*
- *Applicable regulations: Low Voltage Directive 2014/35/UE; Electromagnetic Compatibility Directive 2014/30/CE.*
- *Enclosure: IP67 in compliance with EN60529.*
- *Working temperature: -25º +60ºC.*
- *Storage temperature: -40º +90ºC.*
- *Motor built-in auto-reset thermostatic protection.*
- *Motor with Class F insulation (155ºC).*
- *Rotor supported by ball bearings.*
- *Connection for emergengy manual lever (hexagonal wrench in equipment).*
- *External visual position indicator with graduated top.*
- *Space heater (standard).*
- *IP67 connectors also available, on request with pre-wired cable.*
- *No. 2 SPDT auxiliary electromechanical limit switches with cams adjustable all along the stroke.*
- *Maximum working noise: <70 dB (A).*
- *Supply voltage: 230 Vac 50/60 Hz ±10% monophase; 115 Vac 50/60 Hz ±10% monophase; 24 V ac/dc ±10%; 24 V dc ±5%.*

| COPPIE *TORQUE* | | | | | |
|---|---|---|---|---|---|
| **MODELLO *MODEL*** | | **EA0035** | **EA0070** | **EA0130** | **EA0240** |
| Coppia nominale di lavoro *Nominal working torque* | Nm | 35 | 70 | 130 | 240 |
| Coppia max. per transitori *Maximum peak torque* | Nm | 45 | 85 | 160 | 280 |

## CODICI DI ORDINAZIONE ATTUATORE *ACTUATORS ORDERING CODES*

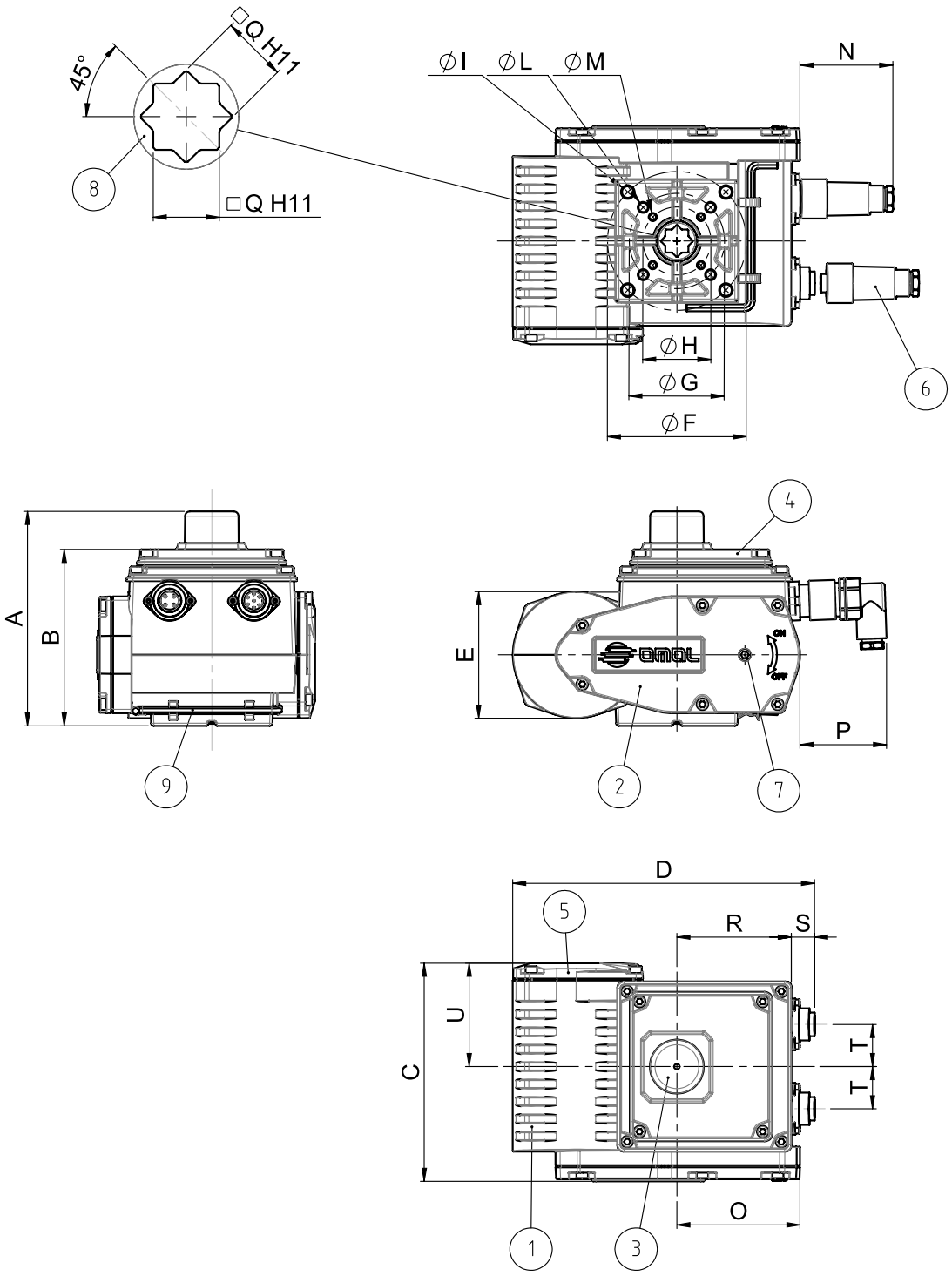
**EA - - - - - - - - 00**

**Coppia *Torque***
**0035** = 35 Nm
**0070** = 70 Nm
**0130** = 130 Nm
**0240** = 240 Nm

**Alimentazione elettrica *Voltage***
**A4** = 115 Vac 50/60 Hz
**A5** = 230 Vac 50/60 Hz
**U2** = 24 V ac/dc
**C2** = 24 Vdc

**Connettore *Connector***
**C0** = connettore diritto *straight connector*
**P0** = connettore a pipa *L shape connector*

| Codici attuatore elettrico "EA" on-off *Codes electrical actuator "EA" on-off* | | | | |
|---|---|---|---|---|
| **Voltaggio *Voltage*** | **Taglie di attuatori e relativi codici *Sizes and actuator codes*** | | | |
| **MODELLO *MODEL*** | EA0035<br>F03-F05-F07 | EA0070<br>F05-F07 | EA0130<br>F05-F07-F10 | EA0240<br>F07-F10 |
| **230V 50/60 Hz** | EA0035A5C000 | EA0070A5C000 | EA0130A5C000 | EA0240A5C000 |
| **115V 50/60 Hz** | EA0035A4C000 | EA0070A4C000 | EA0130A4C000 | EA0240A4C000 |
| **24Vac/dc universale *universal*** | EA0035U2C000 | EA0070U2C000 | EA0130U2C000 | EA0240U2C000 |
| **24V dc** | EA0035C2C000 | EA0070C2C000 | EA0130C2C000 | EA0240C2C000 |



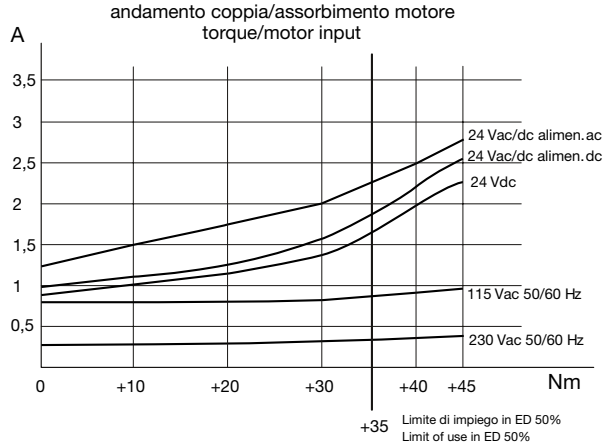

| MATERIALI | *MATERIALS* | |
|---|---|---|
| 1 | Corpo - *Body* | Alluminio - *Aluminium* |
| 2 | Coperchio del riduttore - *Gear box cap* | Alluminio - *Aluminium* |
| 3 | Indicatore di posizione - *Position indicator* | PMMA |
| 4 | Coperchio gruppo elettrico - *Electric-set cap* | Alluminio - *Aluminium* |
| 5 | Coperchio morsettiera - *Terminal-box cap* | Alluminio - *Aluminium* |
| 6 | Connettore - *Connector* | PA6 / PBT |
| 7 | Attacco per leva - *Lever connection* | Acciaio - *Steel* |
| 8 | Albero femmina - *Female shaft* | Acciaio inox - *Stainless steel* |
| 9 | Leva - *Lever* | Acciaio inox - *Stainless steel* |

**DIMENSIONI** ***DIMENSIONS***

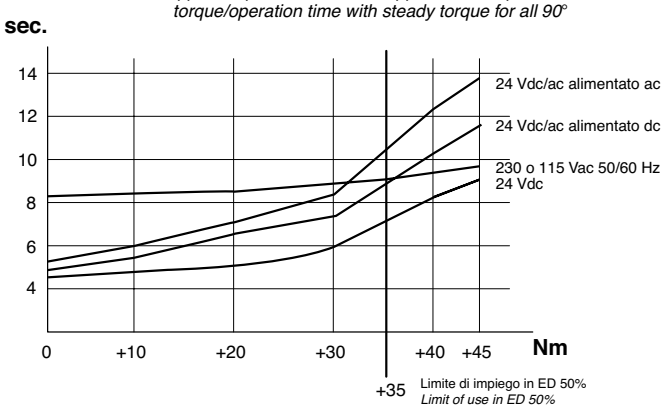
| | A | B | C | D | E | øF | øG | øH | øI | øL | øM | N | O | P | □Q | R | S | T | U | Kg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EA0035** | 137 | 109 | 132 | 190 | 84 | 70 | 50 | 36 | M8 | M6 | M5 | 70 | 74 | 59 | 14 | 69 | 18 | 26 | 67,5 | 3,6 |
| **EA0070** | 137 | 109 | 136 | 190 | 84 | 70 | 50 | - - | M8 | M6 | - - | 70 | 74 | 59 | 14 | 69 | 18 | 26 | 67,5 | 3,8 |
| **EA0130** | 157,5 | 129,5 | 160 | 221,5 | 93 | 102 | 70 | 50 | M10 | M8 | M6 | 67,5 | 90,5 | 57 | 17 | 84 | 17 | 31 | 76 | 7,2 |
| **EA0240** | 157,5 | 129,5 | 163,5 | 221,5 | 93 | 102 | 70 | - - | M10 | M8 | - - | 67,5 | 90,5 | 57 | 22 | 84 | 17 | 31 | 76 | 7,5 |

## DIAGRAMMI DI FUNZIONAMENTO EA0035
## *EA0035 WORKING DIAGRAMS*

andamento coppia/assorbimento motore
torque/motor input

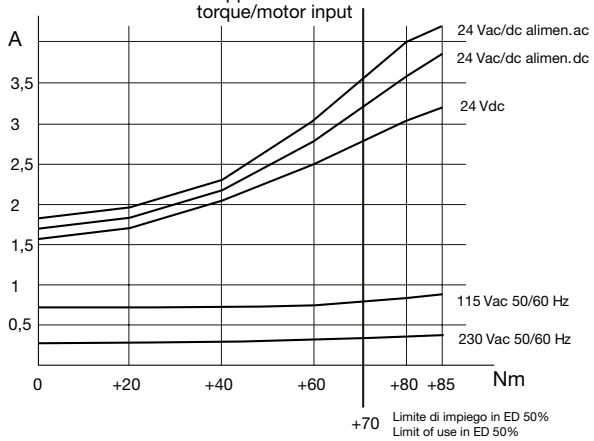


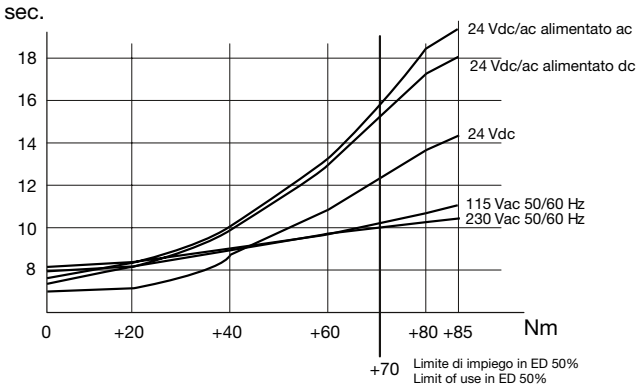

andamento coppia/tempo di manovra a coppia costante per tutti i 90° di lavoro
*torque/operation time with steady torque for all 90°*




## DIAGRAMMI DI FUNZIONAMENTO EA0070
## *EA0070 WORKING DIAGRAMS*

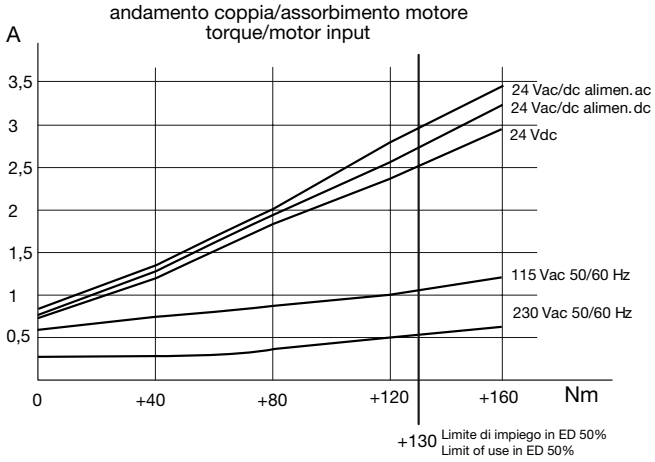
andamento coppia/assorbimento motore
torque/motor input



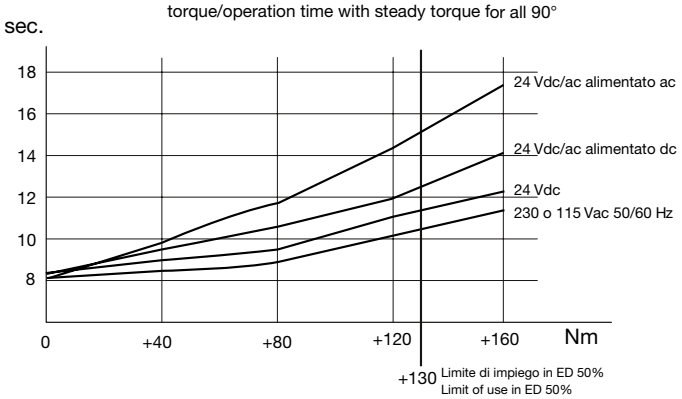




## DIAGRAMMI DI FUNZIONAMENTO EA0130
## *EA0130 WORKING DIAGRAMS*

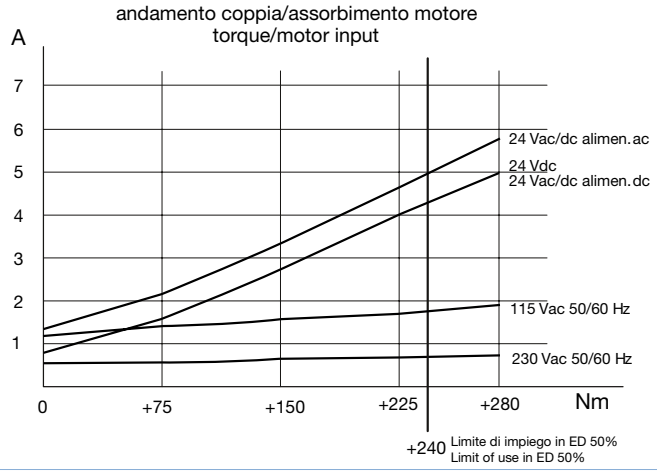
andamento coppia/assorbimento motore
torque/motor input

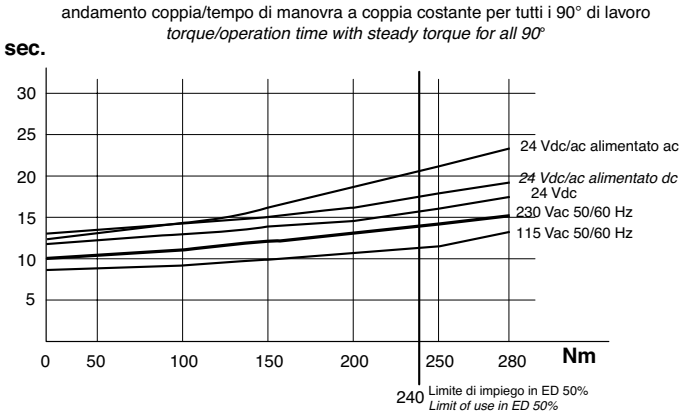


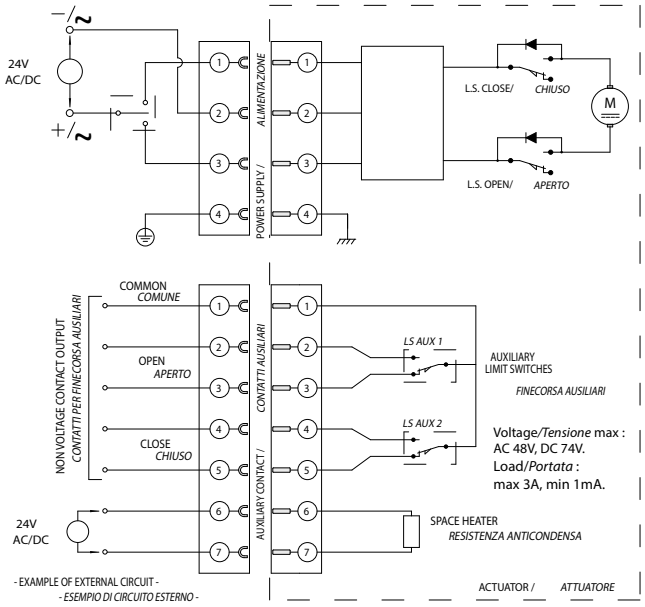

andamento coppia/tempo di manovra a coppia costante per tutti i 90° di lavoro
torque/operation time with steady torque for all 90°



## DIAGRAMMI DI FUNZIONAMENTO EA0240
## *EA0240 WORKING DIAGRAMS*

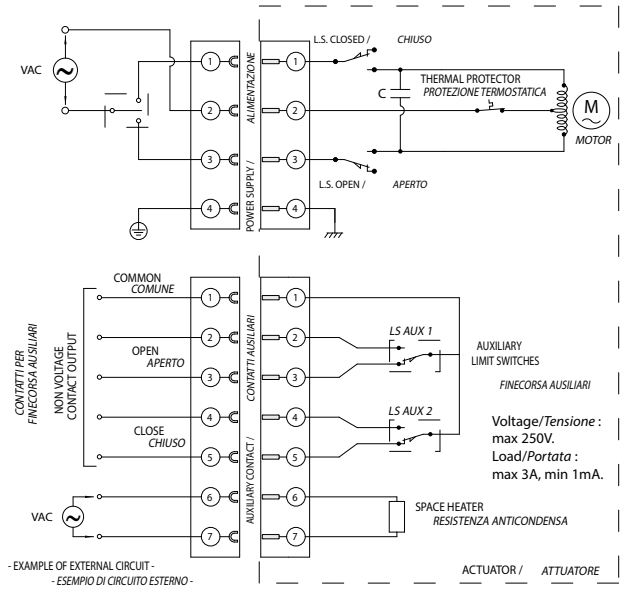



## SCHEMA ELETTRICO DI COLLEGAMENTO PER ALIMENTAZIONE 24 Vac/dc - 24 Vdc

## *ELECTRIC WIRING FOR 24 Vac/dc - 24 Vdc SUPPLY*




## SCHEMA ELETTRICO DI COLLEGAMENTO PER ALIMENTAZIONE 115 - 230 Vac

## *ELECTRIC WIRING FOR 115 - 230 Vac SUPPLY*

# ATTUATORE ELETTRICO ROTATIVO TIPO EF 25-250

# *ROTARY ELECTRIC ACTUATOR TYPE EF 25-250*



## DATI TECNICI

- Attuatore elettrico tipo rotativo utilizzabile in applicazioni aperto/chiuso e modulante.
- Usato per valvole con angolo di rotazione da 90° a 180°.
- Posizione aperto/chiuso/intermedio.
- Coppia nominale: 10-100 Nm.
- Coppia di picco: 25-250 Nm.
- Tensione di alimentazione: AC 100-230 V, 50/60 Hz;
  AC/DC 24 V, 50/60 Hz.
- Tolleranza di alimentazione ±15%.
- Classe di protezione IP65 (IP67 con pressacavo e installazione verticale) secondo EN 60529.
- Attuatori per valvole industriali EN 15714-2.
- Temperatura di esercizio: da -10°C* a +50°C.
- Umidità relativa: Max. 90% senza condensa.
- Materiale corpo: PP caricato vetro.

*A temperature inferiori a -10°C e in presenza di umidità l'elemento riscaldante deve essere attivato.

## *TECHNICAL DATA*

- *Rotating electric actuator that can be utilized in either open/close or modulating applications.*
- *Used to operate valves with rotating angle from 90° to 180°.*
- *Open/close/middle position.*
- *Nominal torque: 10-100 Nm.*
- *Peak torque: 25-250 Nm.*
- *Rated voltage: : AC 100-230 V, 50/60 Hz;*
  *AC/DC 24 V, 50/60 Hz.*
- *Rated voltage tollerance: +/- 15%.*
- *Protection class: IP 65 (IP 67 when used with cable glands and vertical installation) per EN60529.*
- *Actuators for industrial valves EN 15714-2.*
- *Ambient temperature: -10°C* +50°C.*
- *Allowable humidity: Max. 90% relative humidity, non-condensing.*
- *Housing material: glass-filled PP.*

**At temperature below -10°C and if there is condensation, the heating element should be activated.*

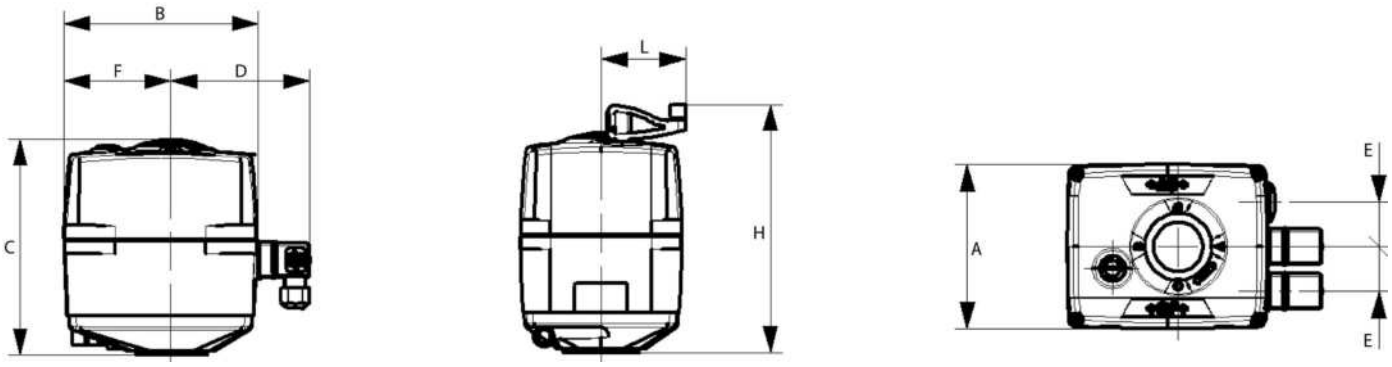
## OPTIONAL A RICHIESTA

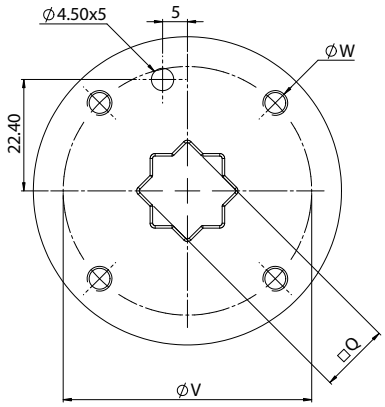
- Posizionatore: Corrente, tensione.
- Connessione: Profibus DP.
- Ritorno in posizione di sicurezza: Batteria interna, alimentazione dall'esterno.
- Moduli aggiuntivi: Monitoraggio cicli, contatore cicli, monitoraggio corrente motore.

## *OPTIONAL ON REQUEST*

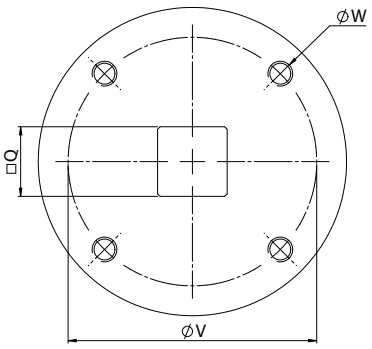
- *Positioner: Current, voltage.*
- *Network: Profibus DP.*
- *Fail safe return: Battery back up, externally powered board.*
- *Smart module: Cycle monitoring, cycle counter, motor current monitoring.*

| SCHEDA TECNICA *DATA SHEET* | EF 25 | EF 45 | EF 120 | EF 250 |
|---|---|---|---|---|
| Coppia nominale *Nominal torque* (Nm) | 10 | 20 | 60 | 100 |
| Coppia di picco *Peak output torque* (Nm) | 25 | 45 | 120 | 250 |
| Carico di lavoro *Duty cycle* | 100% | 50% | 50% | 35% |
| Tempo ciclo alla coppia nominale *Cycle time at nominal torque* | 5 s/90° | 6 s/90° | 15 s/90° | 20 s/90° |
| Tensione di alimentazione *Rated voltage* | 100-230 VAC, 50/60 HZ<br>24VAC/DC, 50/60 HZ | | | |
| Potenza nominale in uscita *Rated output* | 35VA @ 100-230VAC<br>40VA @ 24VAC/DC | 55VA @ 100-230VAC<br>60VA @ 24VAC/DC | 50VA @ 100-230VAC<br>55VA @ 24VAC/DC | 60VA @ 100-230VAC<br>65VA @ 24VAC/DC |
| Assorbimento *Current draw* | 0.35A @ 100VAC<br>0.15A @ 230<br>1.7A @ 24VDC | 0.55A @ 100VAC<br>0.24A @ 230<br>2.5A @ 24VDC | 0.5A @ 100VAC<br>0.22A @ 230<br>2.3A @ 24VDC | 0.55A @ 100VAC<br>0.26A @ 230<br>2.7A @ 24VDC |
| Peso *Weight* (kg) | 2,1 | 2,2 | 3,6 | 5 |
| Angolo di rotazione Actuating angle | Max. 355°, set @ 90° | | | |
| Cicli testati (a 20°C e coppia nominale) *Tested cycles (at 20°C and nominal torque)* | 250 000 | 100 000 | 100 000 | 75 000 |




**EF 25-45**




**EF 120-250**

| DIMENSIONI *DIMENSIONS* | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TIPO** *TYPE* | **ISO** | **A** | **B** | **C** | **D** | **E** | **F** | **H** | **L** | **Q** | **øV** | **øW** |
| **EF 25** | F05 | 122 | 150 | 167 | 108 | 33 | 83 | 189 | 64 | 14 | 50 | M6 |
| **EF 45** | F05 | 122 | 150 | 167 | 108 | 33 | 83 | 189 | 64 | 14 | 50 | M6 |
| **EF 120** | F07 | 122 | 150 | 190 | 108 | 33 | 83 | 212 | 64 | 17 | 70 | M8 |
| **EF 250** | F07 | 122 | 150 | 208 | 108 | 33 | 83 | 230 | 64 | 17 | 70 | M8 |

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UCABN020 - 10/20