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Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it./FilesProdotti/RICEVUTADEPOSITOF.T.ATEXN.VS-19.pdf in /var/www/vhost/www.omal.it/htdocs/prodotto-printable.php on line 65

Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it./FilesProdotti/Certificate-202053402-OMAL-ValvoleMagnum-Thor-new.pdf in /var/www/vhost/www.omal.it/htdocs/prodotto-printable.php on line 65

Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it./FilesProdotti/FG-063579-645FUGITIVEEMISSIONDN25CL.300TI-T2-T3-M1-M4-M5-M6.pdf in /var/www/vhost/www.omal.it/htdocs/prodotto-printable.php on line 65

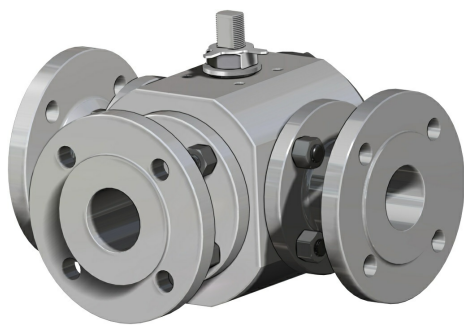
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THOR Split Body 3 ways 4 seals PN 16-40 ANSI 150 stainless steel ball valve



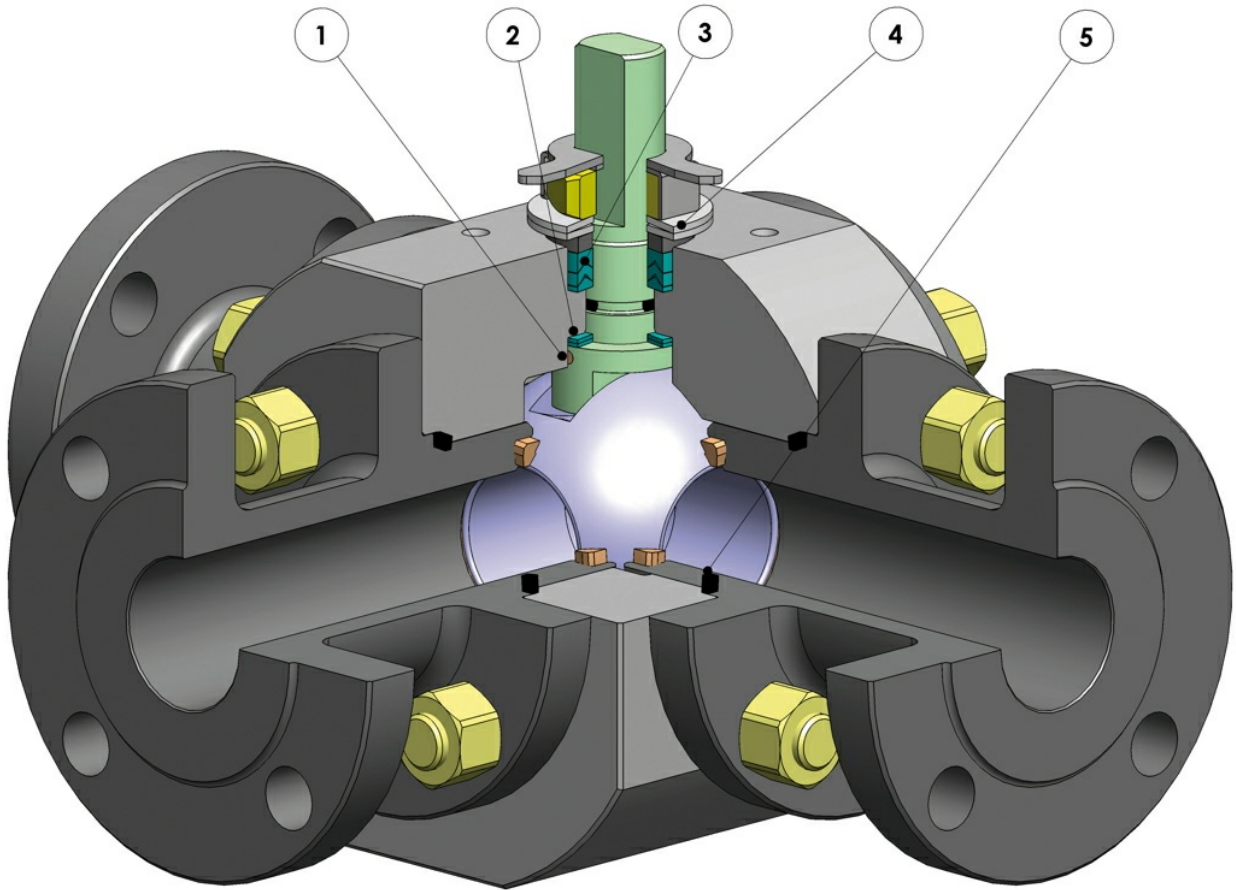
Macro [Ball valves](#)

Category [THOR](#)

Subcategory [THOR Split Body 3 ways 4 seals](#)

Family [THOR Split Body 3 ways 4 seals PN 16-40 ANSI 150](#)

benefits



1. Antistatic device ((electrical continuity between ball, stem and body)

Static electricity is avoided which can cause sparks and fire in an inflammable/explosive environment
Contact safety throughout the entire life of the valve

2. Double antifriction washer

Less Breakaway Torque is granted
Less wear comparing with the execution with the single washer

3. "V" seals pack; 3 seals + o-ring

It ensures a perfect tightness even after a high number of cycles

4. Spring washer on the shaft seal

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.

Allow to maintain energized the "chevron" seals (V), thus avoiding any leakage to the outside, against huge temperature excursions

5. Stretch Graphite seal

Tightness towards outside is granted, independently by the thermal excursions to which the valve is subjected

Greater precision in the alignment of axes due to a unique positioning in the process machining from raw material to finished valve

Less breakaway torque
Longer lifetime of the valve

Easy maintainance directly on site

Reduced maintainance costs

Valve body in carbon steel made with NACE certified material as standard

Greater corrosion resistance
Greater ductility of the material

100% in- house manufacturing process technology

Maximum control and accuracy in all the stages of the manufacturing process
Flexibility in supply quickly special executions requested by customers

ATEX Certificate

Installation is possible in a potential explosive environment

TA LUFT fugitive emission Certificate

High level of safety of the tightness towards the outside is granted

PED Certificate

Full compliance with European Safety Standards for Pressure Equipment

features

STANDARD EXECUTIONS

- Floating ball, full bore
- Soft-seat seal Modified PTFE
- 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: Modified PTFE V-pack
- Additional seal on stem with FKM O-ring
- Anti Blow-out stem
- Actuator connection as per standard ISO 5211

EXECUTIONS ON REQUEST

- For other flanges type please contact our sales department.
- Sealing in: PTFE reinforced with glass (PTFE-GF), PTFE reinforced with carbongraphite (PTFE-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

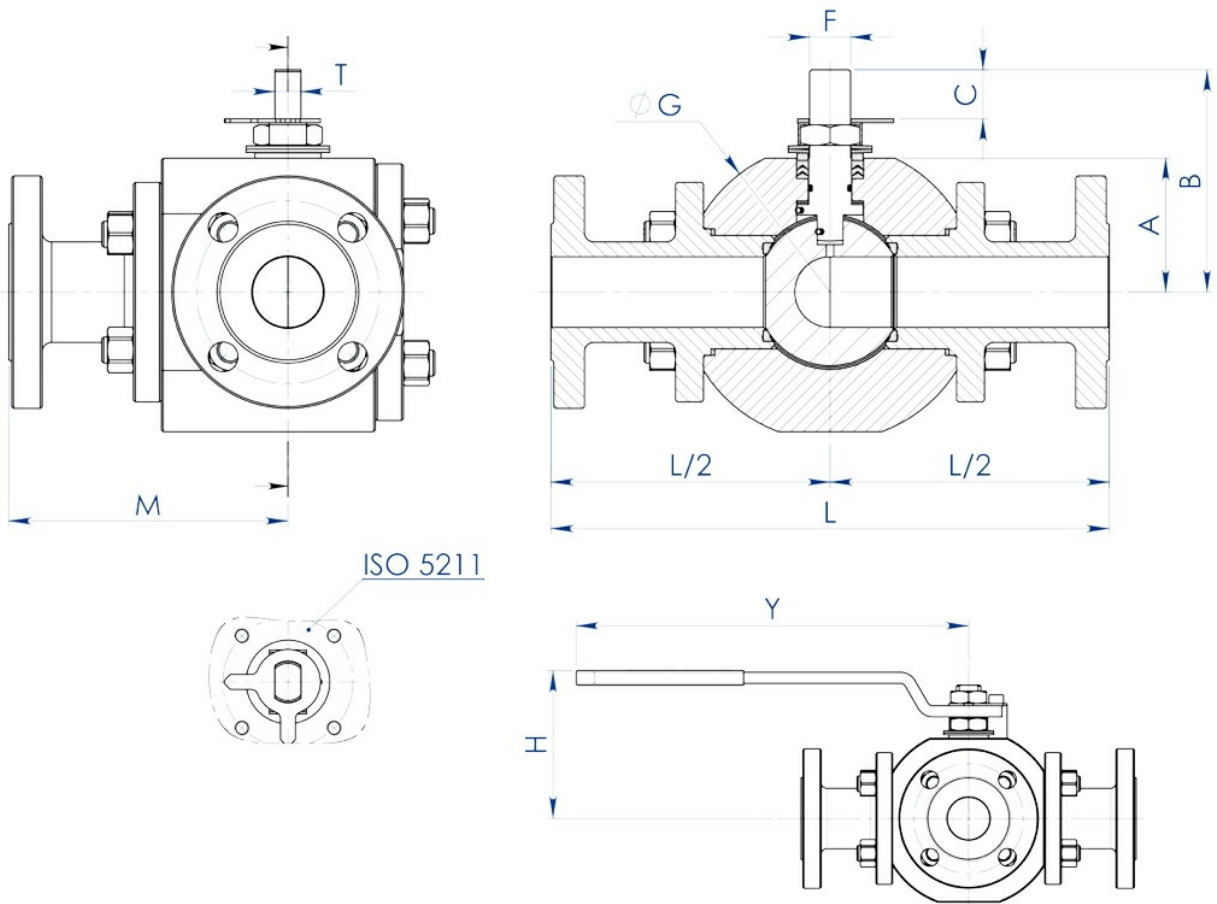
CERTIFICATIONS

- In compliance with European Directive 2014/68/EU PED; Fugitive Emission ISO 15848 (ISO FE BH-C03-SSA 0); Ta-Luft VDI: 2440
- Safety integrity level up to SIL3 according to the IEC 61508
- In compliance with ATEX 2014/34/EU Directive , ATEX certificate ON REQUEST.

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.

dimensions



DIMENSIONS -PN-

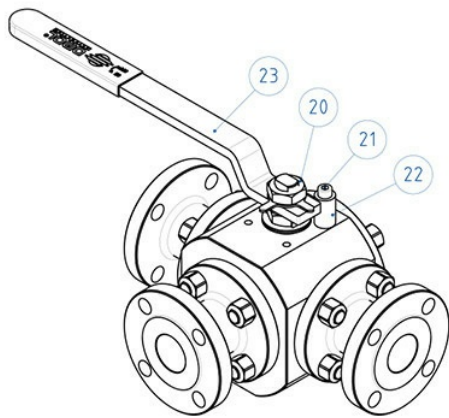
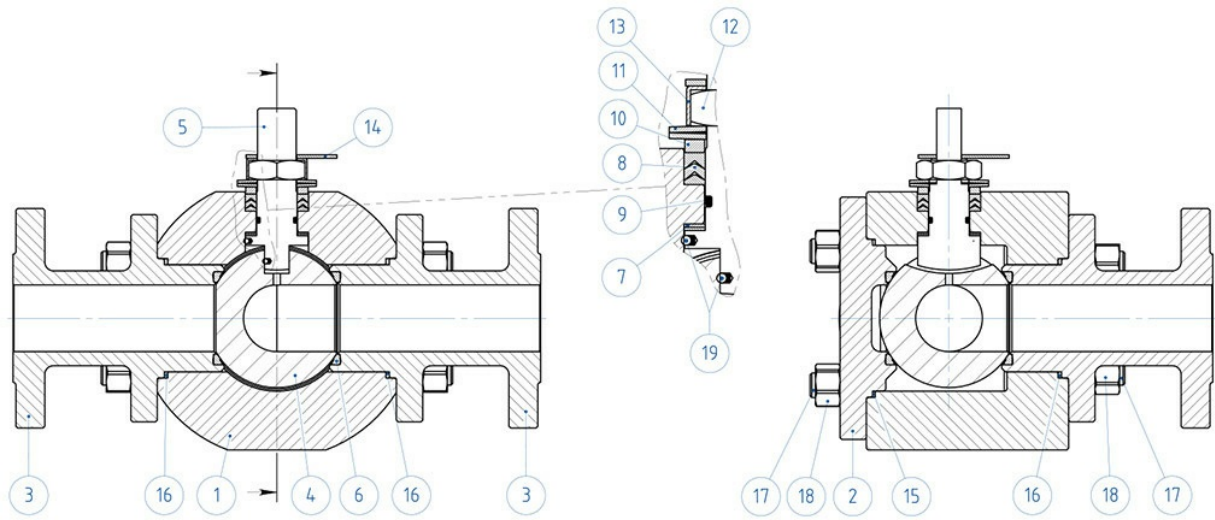
| SIZE | | PN | øE | L | M | A | B | C | ATT. ISO | F/T | øG | øJ | øRS | P | øK | HOLES N° | øI | H | Y | Kg | LEVER KIT | |
|---------|--------|-------|-----|-----|-----|------|-------|------|----------|-------|-----|-----|-----|---|----|----------|----|----|-------|-----|-----------|----------|
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |

DIMENSIONS -ANSI-

| SIZE | | ANSI | øE | L | M | A | B | C | ATT. ISO | F/T | øG | øJ | øR | S | P | øK | HOLES N° | øI | H | Y | Kg | |
|---------|--------|------|-----|-----|-----|------|-------|------|----------|-------|-----|-----|-------|-----|------|-------|----------|----|-------|-----|-------|----------|
| DN [mm] | [inch] | | | | | | | | | | | | | | | | | | | | | |
| DN 15 | 1/2" | 150 | 13 | 170 | 85 | 35 | 55 | 9,2 | F03 | 10/6 | 84 | 90 | 35,1 | 1,6 | 11,6 | 60,5 | 4 | 16 | 74 | 140 | 4,9 | KLV58004 |
| DN 20 | 3/4" | 150 | 19 | 200 | 100 | 45 | 71 | 13 | F04 | 12/8 | 105 | 100 | 42,9 | 1,6 | 13,2 | 69,8 | 4 | 16 | 90,5 | 150 | 9,1 | KLV58006 |
| DN 25 | 1" | 150 | 25 | 230 | 115 | 55,5 | 90,5 | 19,1 | F05 | 16/10 | 128 | 110 | 50,8 | 1,6 | 15,0 | 79,2 | 4 | 16 | 107 | 275 | 15,6 | KLV58008 |
| DN 32 | 1" 1/4 | 150 | 32 | 240 | 120 | 60 | 95 | 19,1 | F05 | 16/10 | 135 | 118 | 63,5 | 1,6 | 16,1 | 88,9 | 4 | 16 | 111,3 | 275 | 16,7 | KLV58008 |
| DN 40 | 1" 1/2 | 150 | 38 | 300 | 150 | 72 | 119,5 | 26,4 | F07 | 22/14 | 160 | 128 | 73 | 1,6 | 18,0 | 98,6 | 4 | 16 | 134,5 | 350 | 25,8 | KLV58010 |
| DN 50 | 2" | 150 | 51 | 320 | 160 | 81 | 128,5 | 26,4 | F07 | 22/14 | 178 | 153 | 91,9 | 1,6 | 20,0 | 120,6 | 4 | 19 | 143,5 | 350 | 37,7 | KLV58010 |
| DN 65 | 2" 1/2 | 150 | 64 | 350 | 175 | 93 | 154 | 33,1 | F10 | 30/18 | 205 | 180 | 104,6 | 1,6 | 23,0 | 139,7 | 4 | 19 | 182,3 | 450 | 59,1 | KLV58012 |
| DN 80 | 3" | 150 | 76 | 370 | 185 | 101 | 162 | 33,1 | F10 | 30/18 | 220 | 190 | 127 | 1,6 | 24,6 | 152,4 | 4 | 19 | 190,3 | 450 | 70,6 | KLV58012 |
| DN 100 | 4" | 150 | 102 | 400 | 200 | 124 | 182 | 33,1 | F10 | 30/18 | 270 | 230 | 157,2 | 1,6 | 24,5 | 190,5 | 8 | 19 | 210,5 | 450 | 105,1 | KLV58012 |

Note: for valves with T port, type dimensions do not change.

materials



MATERIALS
SPLIT BODY PN16-40 ANSI 150

| N° | Description | 316 Stainless steel |
|---------------------------|-----------------------|------------------------------|
| 1 | Body | ASTM A182 F316 / A479TP.316 |
| 2 | Cover | |
| 3 | Connector | |
| 4 | Ball | ASTM A351 CF8M |
| 5 | Stem | A564 TP.630 (17-4PH) |
| 6* | Seat | Modified PTFE |
| 7* | Stem lower sealing | Modified PTFE |
| 8* | Chevron rings | Modified PTFE |
| 9* | Stem O-ring | FKM |
| 10 | Packing gland ring | AISI 304 |
| 11 | Stem springs | Carbon steel galvanized (xx) |
| 12 | Stem nut | Carbon steel galvanized (x) |
| 13 | Stop nut plate | 304 S.S. |
| 14 | Indicator | 304 S.S. |
| 15* | Body-Cover nut gasket | Grafoil |
| 16* | Body-Connector gasket | Grafoil |
| 17 | Stud bolt | ASTM A193-B8 |
| 18 | Nut | ASTM A194-Gr.8 |
| 19 | Antistatic device | 316 S.S. |
| 20 | Lock nut | Carbon steel galvanized (x) |
| 21 | Holder screw | A2-70 (304 S.S.) |
| 22 | Holder screw | Carbon steel galvanized (x) |
| 23 | Lever | Fe37 galvanized (x) |
| * Components of seals kit | | |

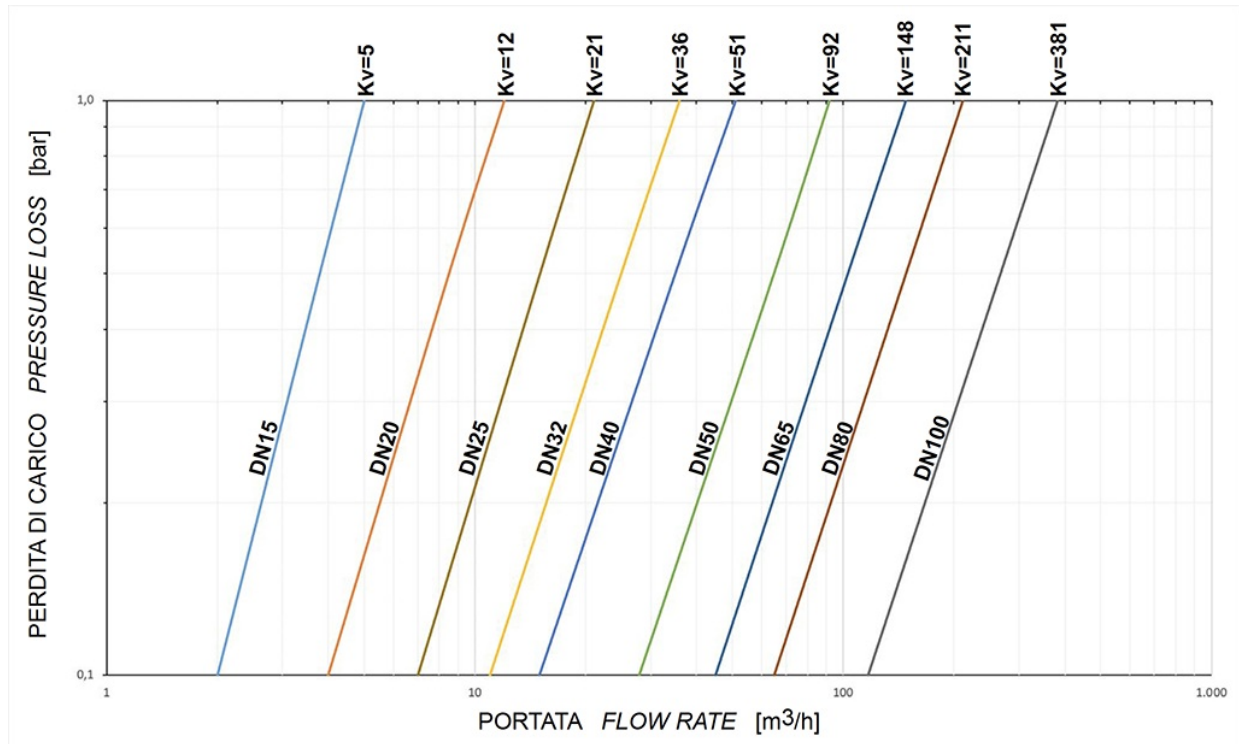
Available on request:

(x): 304 s.s.

(xx): 301 s.s.

diagrams and breakaway torque

Flow/pressure loss diagram and Kv nominal coefficient



Kv is the coefficient, expressed in m³/h (with water at 15°C) causing a pressure loss of 1 bar.

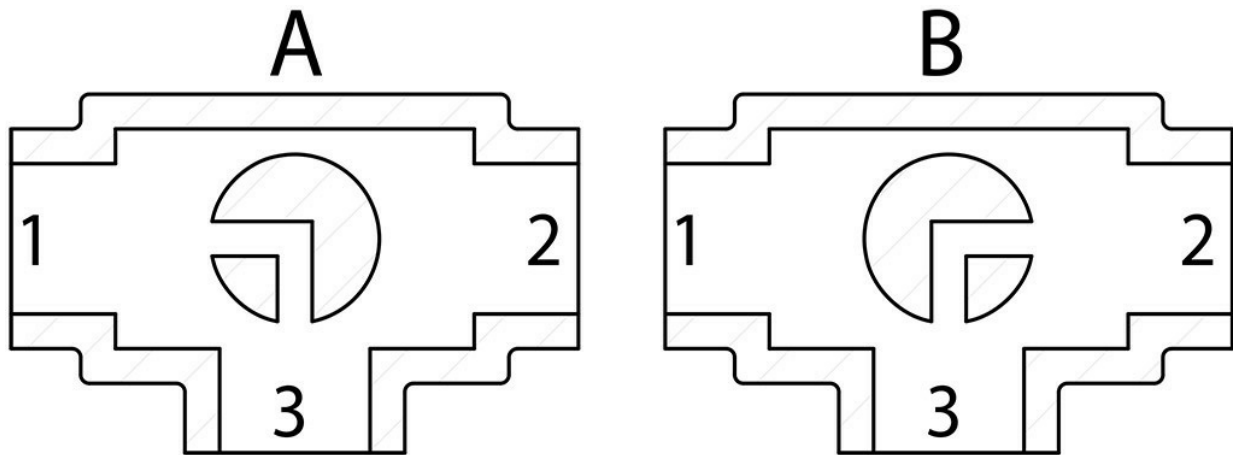
specifications

Plan for "L" port

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.



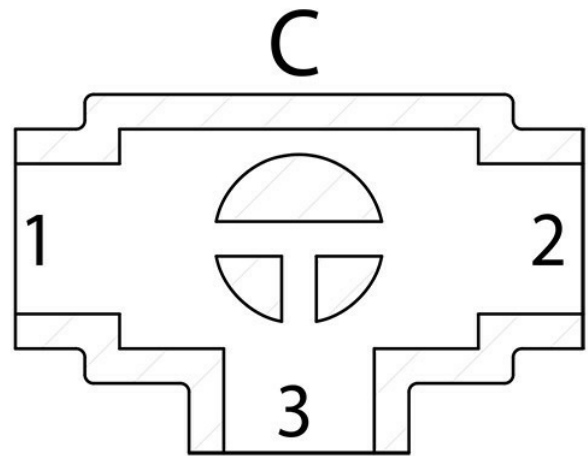
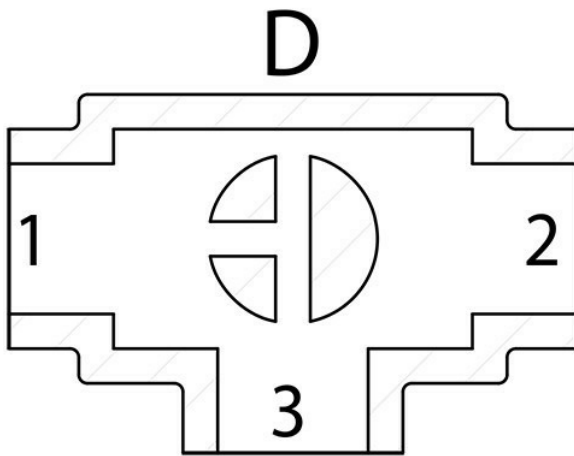
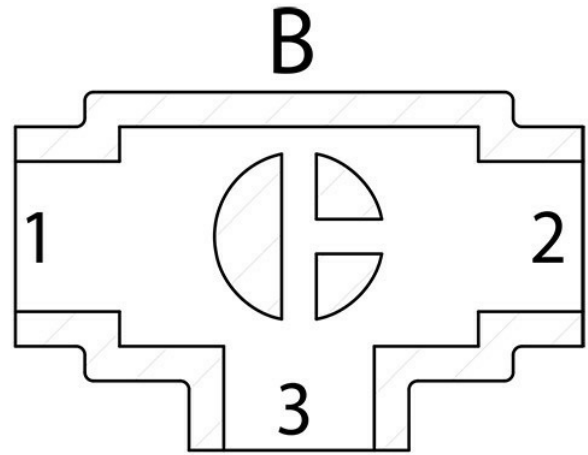
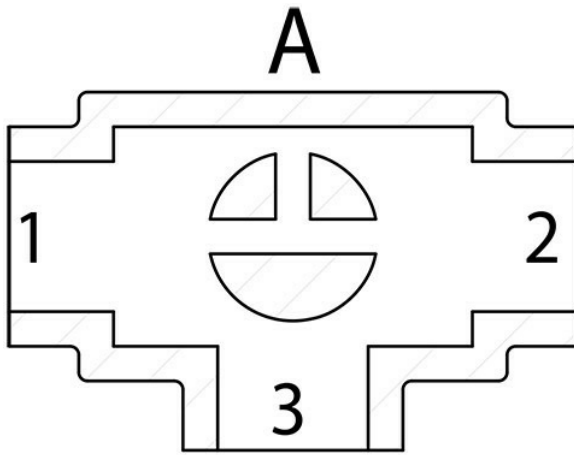
Plan for "T" port

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.:

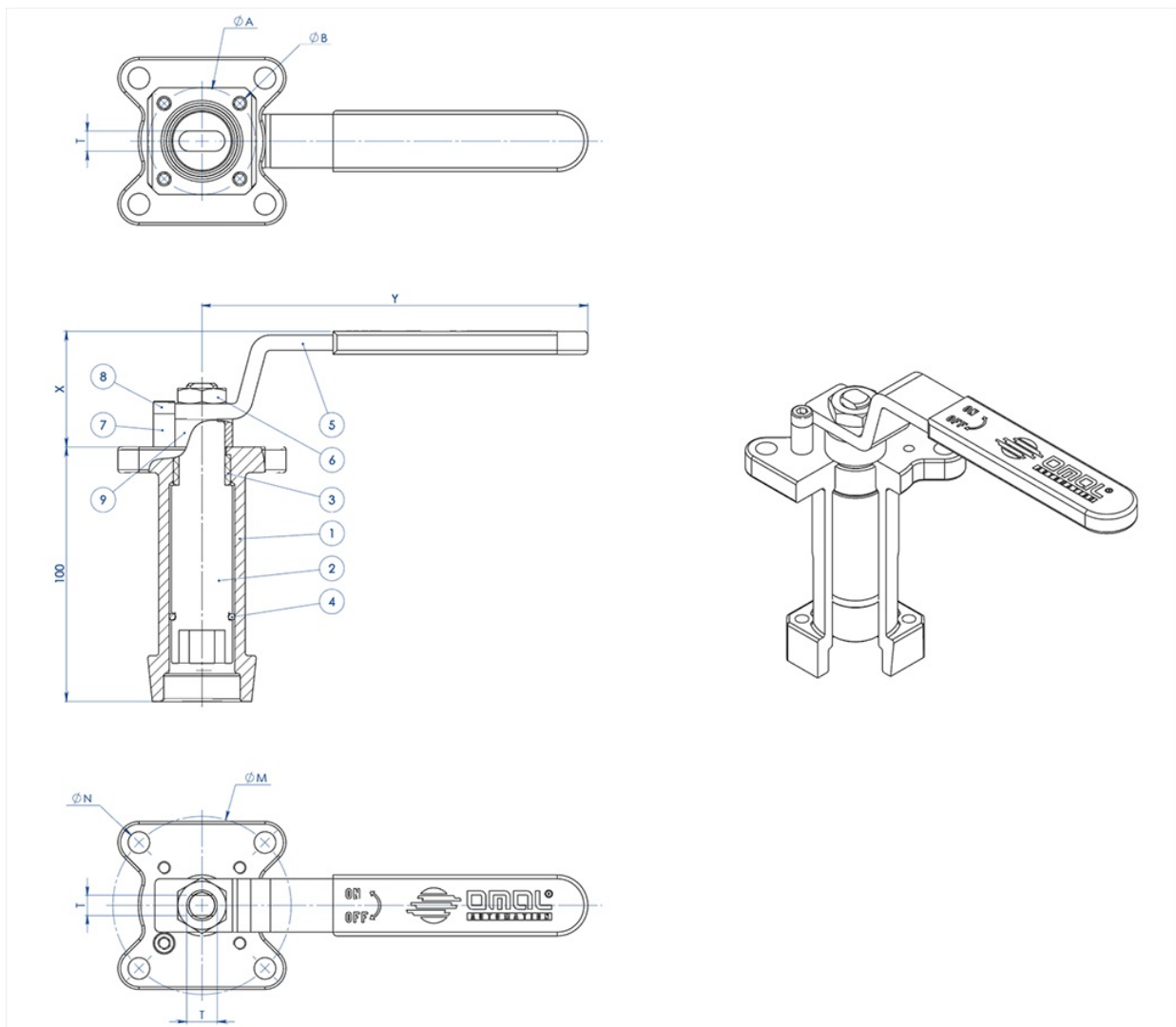
Choose the rest position of the ball with **SR FAIL CLOSE** actuator; whenever supplied with air, actuator turns in an anticlockwise direction.

Choose the rest position of the ball with **SR FAIL OPEN** actuator; whenever supplied with air, actuator turns in a clockwise direction.



accessories

CASTING STEM EXTENSION WITH LEVER



MATERIALS

| PART. N° | DESCRIPTION | MATERIAL |
|----------|--------------|-----------------------------|
| 1 | Extension | AISI304 S.S. |
| 2 | Pin | AISI 430 F |
| 3 | Bush | DELRIN |
| 4 | O-RING | NBR |
| 5 | Lever | Fe 37 galvanized (*) |
| 6 | Nut | galvanized carbon steel (*) |
| 7 | Holder Lever | galvanized carbon steel (*) |
| 8 | Holder screw | A2-70 |
| 9 | Spacer | PTFE Carbon Filled |

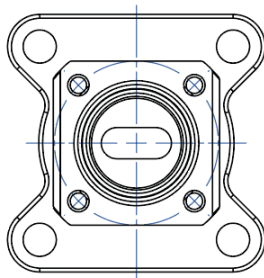
(*): On request available in Aisi 304 s.s.

DIMENSIONS

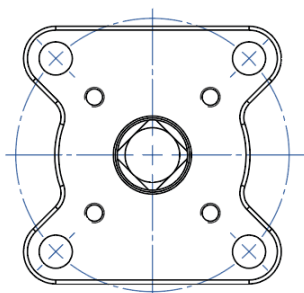
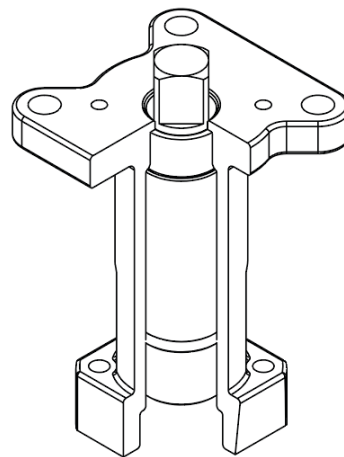
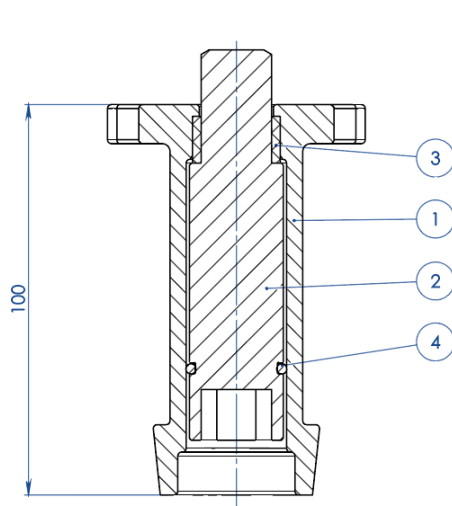
| ISO VALVE | ØA | ØB | ØM | ØN | F/T | X | Y |
|-----------|-----|-----|-----|-----|-------|------|-------|
| F03 | 36 | 5,5 | 36 | 5,5 | 10/6 | 38,5 | 141,5 |
| F04 | 42 | 5,5 | 42 | M5 | 12/8 | 45,5 | 151,5 |
| F05 | 50 | 6,5 | 50 | 6,5 | 16/10 | 48,5 | 276,5 |
| F07 | 70 | 8,5 | 70 | 8,5 | 22/14 | 57,5 | 351,5 |
| F10 | 102 | 11 | 102 | 11 | 30/18 | 79,5 | 451,5 |

NOTE: Code of the spindle extension depending from drive's type and valve's connection; to be requested at the order.

CASTING STEM EXTENSION FOR ACTUATORS



NOTA: Le dimensioni dipendono dalle dimensioni dell'attacco valvola
NOTE: Dimensions depending from valve's connection

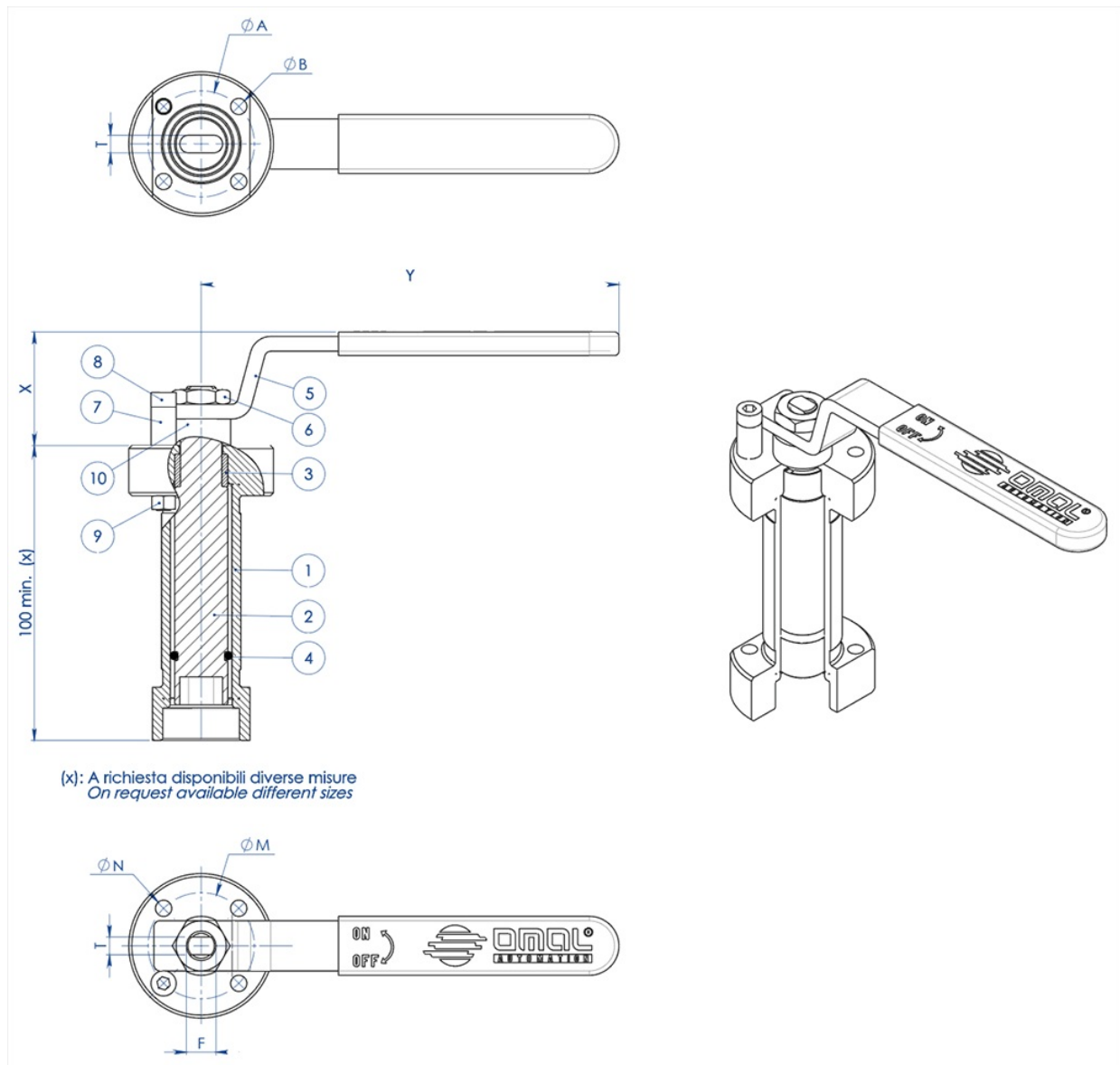


NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

| MATERIALS | | |
|-----------|-------------|----------------|
| PART. N° | DESCRIPTION | MATERIAL |
| 1 | Extension | ASTM A351 CF8M |
| 2 | Pin | AISI 430 F |
| 3 | Bush | DELRIN |
| 4 | O-RING | NBR |

NOTE: Code of the spindle extension depending from drive's type and valve's connection; to be requested at the order

WELDED STEM EXTENSION WITH LEVER



| MATERIALS | | |
|-----------|--------------|-----------------------------|
| PART. N° | DESCRIPTION | MATERIAL |
| 1 | Extension | 304 s.s. |
| 2 | Pin | AISI 430 F |
| 3 | Bush | DELRIN |
| 4 | O-Ring | NBR |
| 5 | Lever | Fe 37 galvanized (*) |
| 6 | Nut | galvanized carbon steel (*) |
| 7 | Holder Lever | galvanized carbon steel (*) |
| 8 | Holder screw | A2-70 |
| 9 | Holder nut | A2-70 (**) |
| 10 | Spacer | PTFE Carbon Filled |

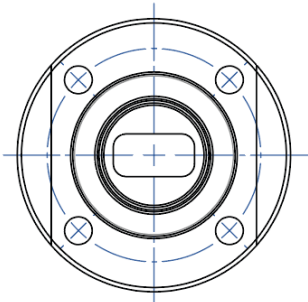
(*): On request available in Aisi 304 s.s.

(**): No available on valves with Iso connection F04

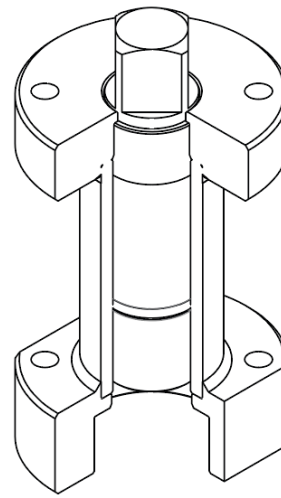
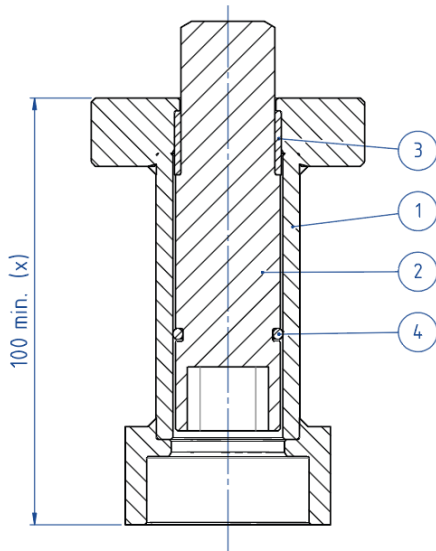
| DIMENSIONS | | | | | | | |
|------------|-----|-----|-----|-----|-------|------|-------|
| ISO VALVE | ØA | ØB | ØM | ØN | F/T | X | Y |
| F03 | 36 | 5,5 | 36 | 5,5 | 10/6 | 38,5 | 141,5 |
| F04 | 42 | 5,5 | 42 | M5 | 12/8 | 45,5 | 151,5 |
| F05 | 50 | 6,5 | 50 | 6,5 | 16/10 | 48,5 | 276,5 |
| F07 | 70 | 9 | 70 | 9 | 22/14 | 57,5 | 351,5 |
| F10 | 102 | 11 | 102 | 11 | 30/18 | 79,5 | 451,5 |

NOTE: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order.

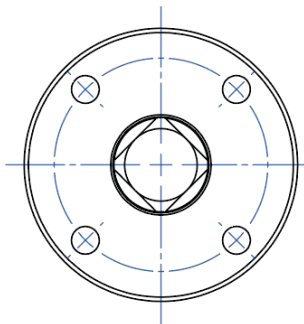
WELDED STEM EXTENSION FOR ACTUATORS



NOTA: Le dimensioni dipendono dalle dimensioni dell'attacco valvola
NOTE: Dimensions depending from valve's connection



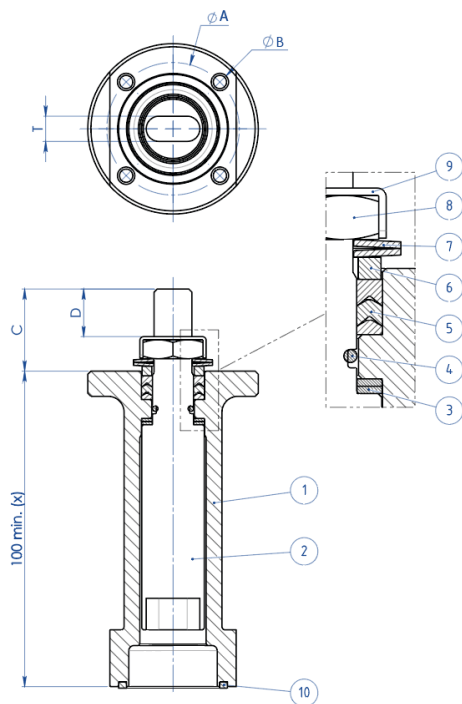
(x): A richiesta disponibili diverse misure
 On request available different sizes



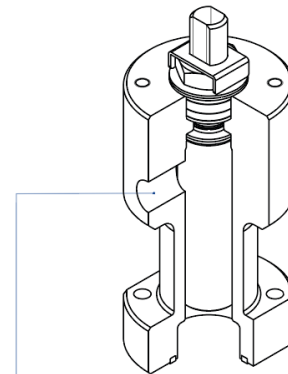
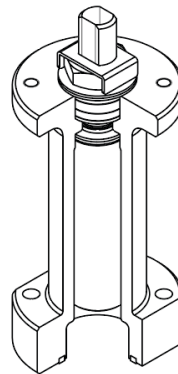
NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

| MATERIALS | | |
|-----------|-------------|------------|
| PART. N° | DESCRIPTION | MATERIAL |
| 1 | Extension | 304 S.S. |
| 2 | Pin | AISI 430 F |
| 3 | Bush | DELRIN |
| 4 | O-RING | NBR |

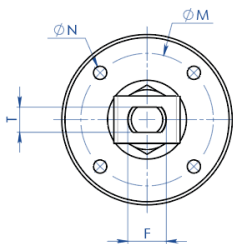
NOTE: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order.

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


MATERIALS

| PART. N° | DESCRIPTION | MATERIAL |
|----------|--------------------|--------------------------|
| 1 | Extension | 304 s.s. |
| 2 | Pin | A564 TP.630 (17-4ph) |
| 3 | Bottom Sealing | TFM1600 |
| 4 | O-Ring | FKM |
| 5 | Chevron Ring | TFM1600 |
| 6 | Packing Gland Ring | 304 s.s. |
| 7 | Spring Washer | 50CrV4 Galvanized |
| 8 | Stem Nut | UNI 3740-1 6S Galvanized |
| 9 | Stop Nut Plate | 304 s.s. |
| 10 | Gasket | GRAFOIL |

| DIMENSIONS | | | | | | | |
|------------|-----|------|-----|-----|-------|------|------|
| ISO VALVE | ØA | ØB | ØM | ØN | F/T | C | D |
| F03 | 36 | 5,5 | 36 | M5 | 10/6 | 20 | 10,2 |
| F04 | 42 | 5,5 | 42 | M5 | 12/8 | 26 | 15,1 |
| F05 | 50 | 6,5 | 50 | M6 | 16/10 | 35 | 21,2 |
| F07 | 70 | 8,5 | 70 | M8 | 22/14 | 47,5 | 28,4 |
| F10 | 102 | 10,5 | 102 | M10 | 30/18 | 61 | 35,2 |

NOTE: Code of the spindle extension depending from drive's type and valve's connection; to be requested at the order.

documents

Certificati

TA LUFT - MAGNUM & THOR
ATEX - Ball Valves
SIL IEC 61508 - MAGNUM & THOR
FUGITIVE EMISSION DN25 CL.300 T1-T2-T3-M1-M4-M5-M6
FUGITIVE EMISSION DN100 CL.300 T1-T2-T3-M1-M4-M5-M6
PED

Manuali

MANUALE UMAH1000

Istruzioni

ISTRUZIONI USO 8_0844-37