

Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it./FilesProdotti/TA-LUFT.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/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

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Warning: filectime(): stat failed for /var/www/vhost/www.omal.it/htdocs/https://www.omal.it./FilesProdotti/FS-063579-458WAFER-MAGNUMA105-DN15-100-CL150-300-PN16-40A105.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/Certificato-PED-DNV.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/80486-ValvoleasferaATEX-IT-EN.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/80844-30-ValvolaasferaMagnumWaferM1-IT-EN-DE-ES-0522.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/UMAH1000-IT-01-21.pdf in /var/www/vhost/www.omal.it/htdocs/prodotto-printable.php on line 65

MAGNUM Wafer PN 16-40 ANSI 150-300 carbon steel ball valve



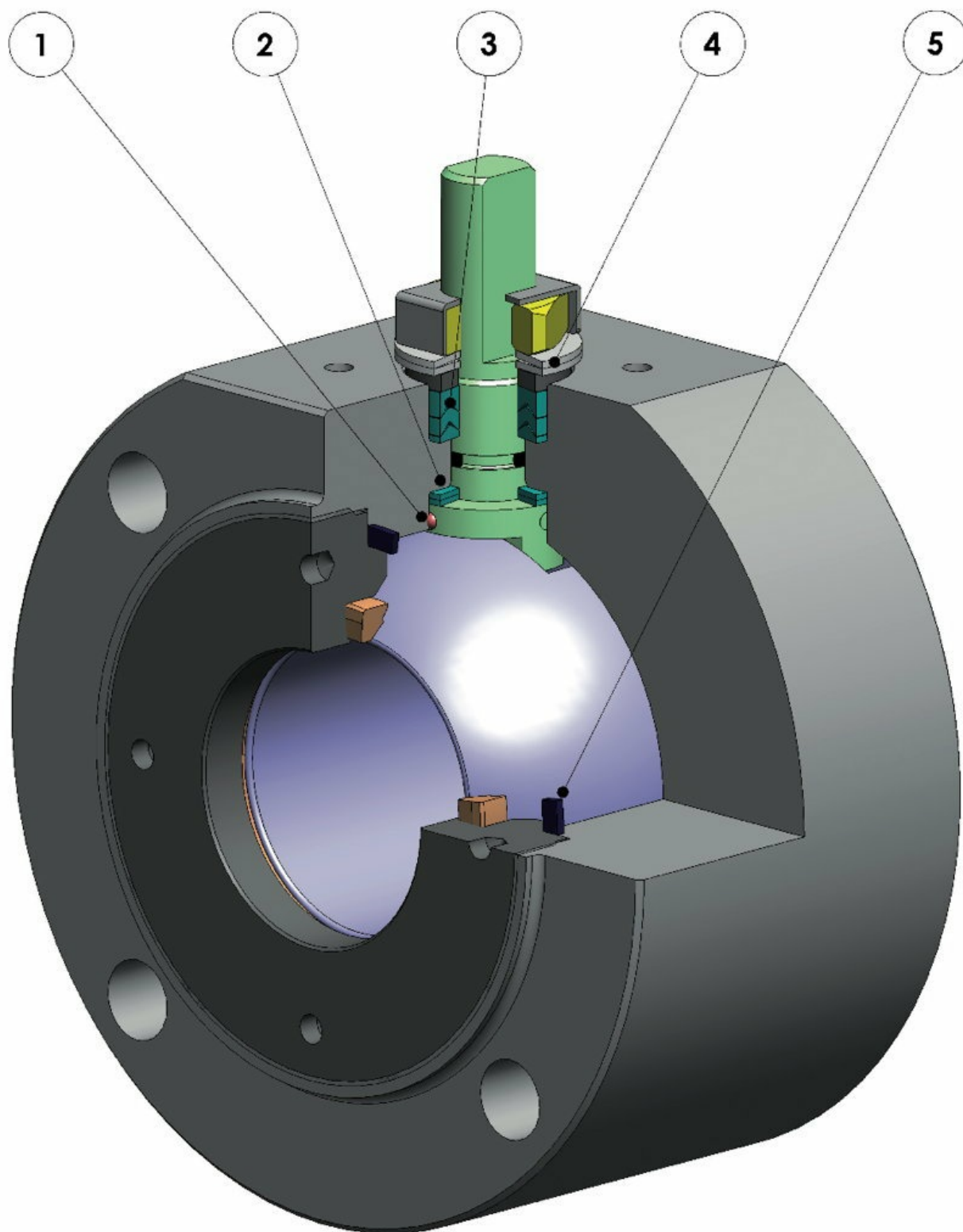
Macro [Ball valves](#)

Category [MAGNUM](#)

Subcategory [MAGNUM Wafer](#)

Family [MAGNUM Wafer PN 16-40 ANSI 150-300](#)

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 on request

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

Longer lifetime of the valve
Less breakaway torque

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

"Fire safe" Certificate

Guarantees the tightness of the valve also in case of fire

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

UP to SIL 3 certified

Guarantee of the high level of functional safety

features

STANDARD FEATURES

- No protruding floating ball, full bore
- Soft-seat seal Modified PTFE
- 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: Modified PTFE 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

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 (PTFE-GF), PTFE reinforced with carbon-graphite (PTFE-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

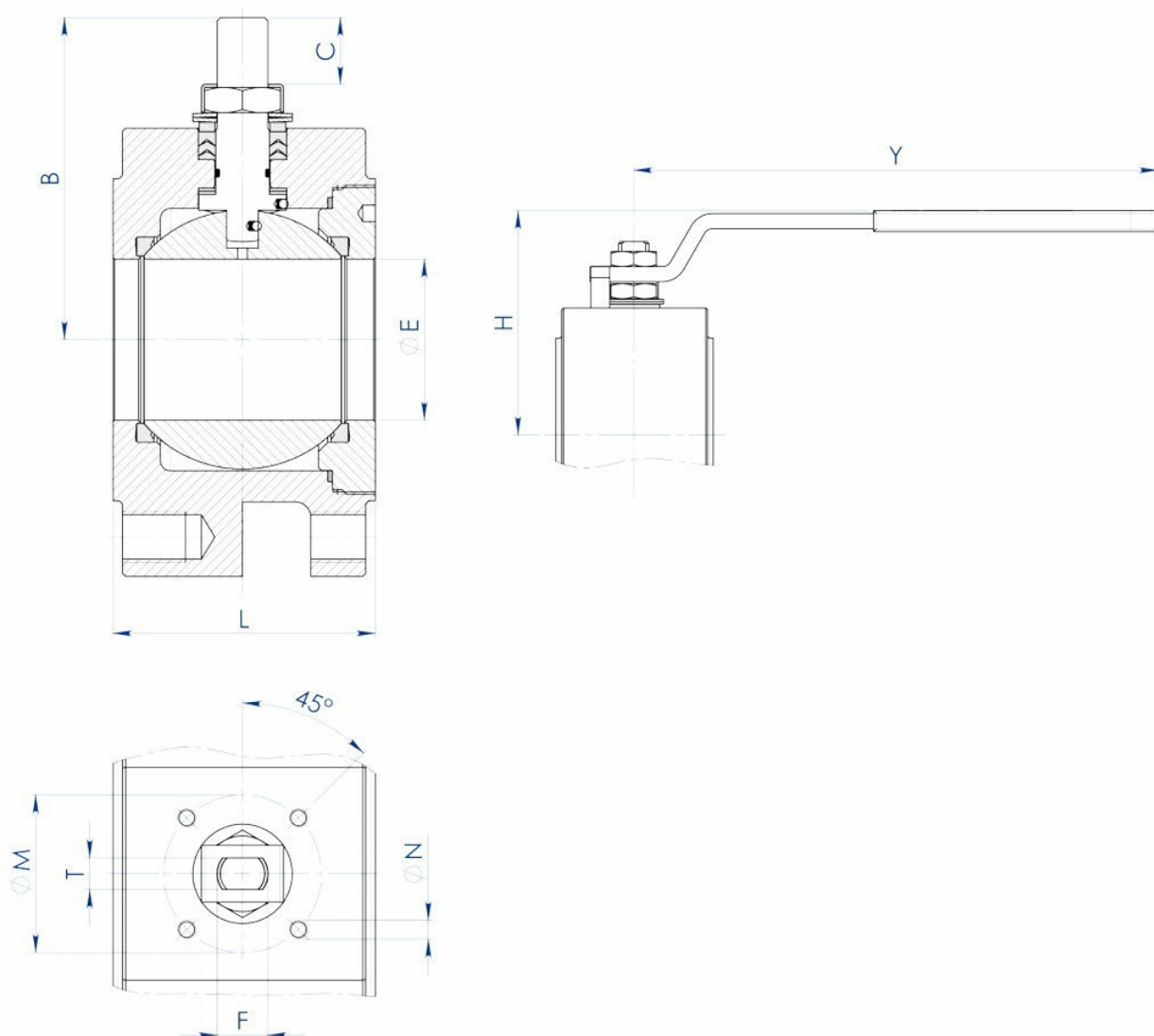
CERTIFICATIONS

- In compliance with European Directive 2014/68/EU PED.
- Fugitive Emission ISO 15848 (ISO FE BH-C03-SSA 0).
- TA-LUFT VDI 2440.
- FIRE SAFE: ISO 10497 Third ed. 2010 / API 607 Sixth ed. 2010.
- Safety integrity level up to SIL 3 according to IEC 61508.
- In compliance with ATEX 2014/34/EU European Directive (ATEX certificate ON REQUEST).

ENGINEERING STANDARDS

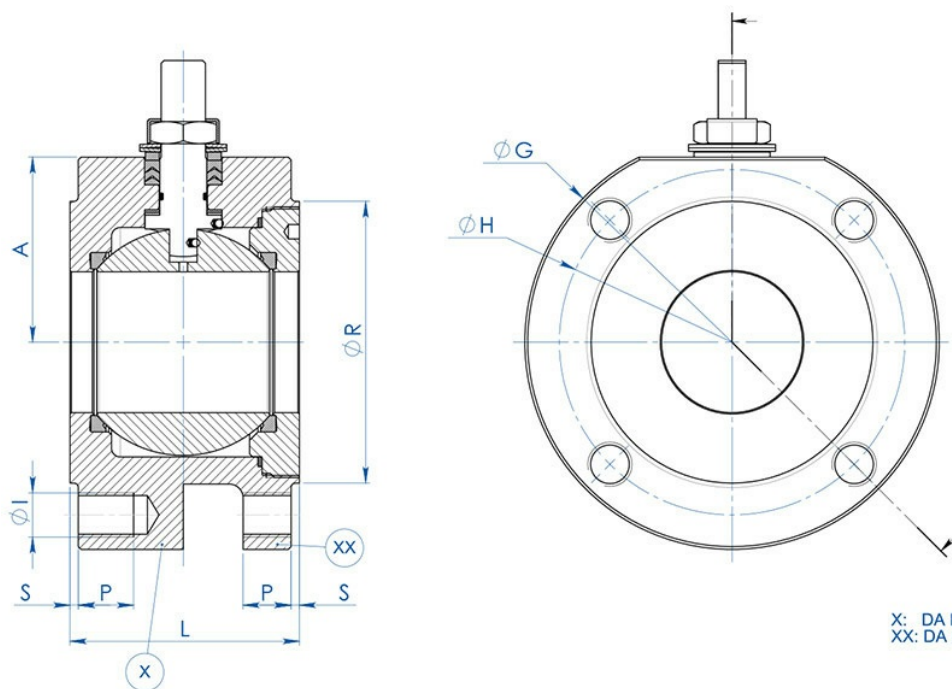
- Body thickness in compliance with: ASME B16.34, ASME VIII div.1, EN 12516.
- Materials and rating in compliance with ASME B16.34 for ANSI valves and EN 12516 for PN valves

dimensions



DIMENSIONS												
SIZE		øE	L	B	C	ATT.ISO	øM	øN	F/T	H	Y	LEVER KIT
DN	[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

All valves have no protruding ball except DN32 (face to face 51 mm).

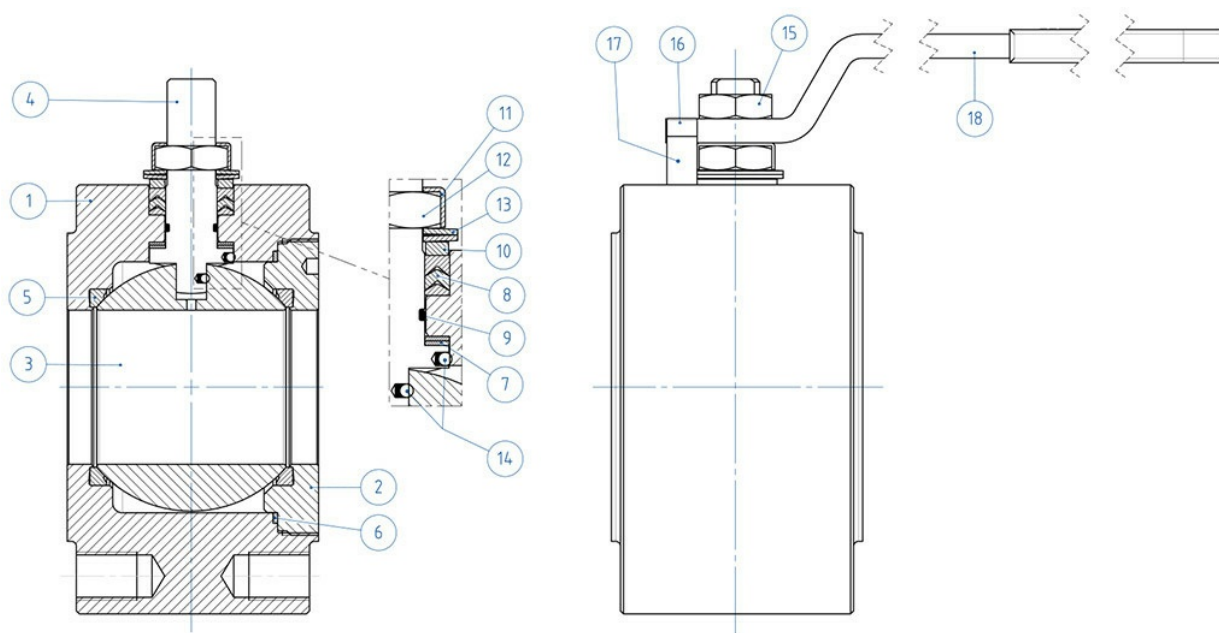


DIMENSIONS -PN-														
SIZE		PN	A	øG	øR	S	øH	HOLES N°	øI	P	L	Kg. (X)	Kg. (XX)	SEALS KIT
DN [mm]	[inch]													
DN 15	1/2"	PN 16-40	32	90	45	1	65	4	M12	14	36	1,4	-	KGBV480040
DN 20	3/4"	PN 16-40	35	100	58	2	75	4	M12	14	39	1,8	-	KGBV480050
DN 25	1"	PN 16-40	42	110	68	2	85	4	M12	16	43	2,5	-	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

DIMENSIONS -ANSI-													
SIZE		ANSI	A	øG	øR	S	øH	HOLES N°	øI	P	L	Kg. (X)	SEALS KIT
DN [mm]	[inch]												
DN 15	1/2"	ANSI 150	32	90	45	1	60,5	4	1/2"UNC	14	36	1,4	KGBV480040
DN 15	1/2"	ANSI 300	34	90	45	1	66,5	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	82,6	4	5/8"UNC	15	39	2,1	KGBV480050
DN 25	1"	ANSI 150	42	110	60	1,6	79,2	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	88,9	4	1/2"UNC	20	54	3,8	KGBV480070
DN 32	1" 1/4	ANSI 300	47	130	72	1,6	98,6	4	5/8"UNC	20	54	4,3	KGBV480070
DN 40	1" 1/2	ANSI 150	58	127	82	1,6	98,6	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	149,4	8	3/4"UNC	25	107	18,6	KGBV480100
DN 80	3"	ANSI 150	90	190	135	1,6	152,4	4	5/8"UNC	20	120	20,4	KGBV480110
DN 80	3"	ANSI 300	96	205	138	1,6	168,1	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	200,2	8	3/4"UNC	25	152	46,4	KGBV480120

*Protruding ball

materials



Nº	Description	A105 Carbon steel	A350 LF2 Carbon steel
1	Body	ASTM A105	ASTM A350 LF2
2	Ring nut		
3	Ball	ASTM A351 CF8(*) (1.4308/Gx5CrNi19-10)	
4	Stem	ASTM A182F6A/A479 Tp.410 (**)	
5*	Seat	Modified PTFE (.)	
6*	Body-Ring nut gasket	Modified PTFE (.)	
7*	Stem lower sealing	Modified PTFE (.)	
8*	Chevron rings	Modified PTFE (.)	
9*	Stem o-ring	FKM (.)	
10	Packing gland ring	Carbon steel galvanized (x)	
11	Stop nut plate	304 S.S.	
12	Stem nut	Carbon steel galvanized (x)	
13	Springs washer	Carbon steel galvanized (xx)	
14	Antistatic device	316 S.S.	
15	Lock nut	Carbon steel galvanized (x)	
16	Holder screw	A2-70 (304 S.S.)	
17	Holder screw	Carbon steel galvanized (x)	
18	Lever	Fe37 Galvanized (x)	
*Components of seals kit			

Available on request:

(*): A351 CF8M

(**): A564 TP.630 (17-4PH)

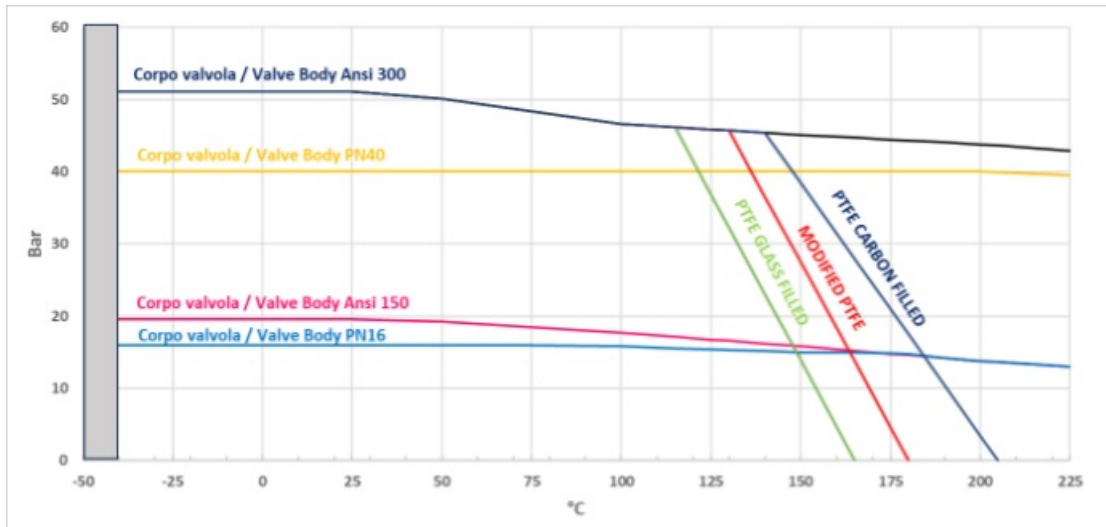
(x): 304 s.s.

(xx): 301 s.s.

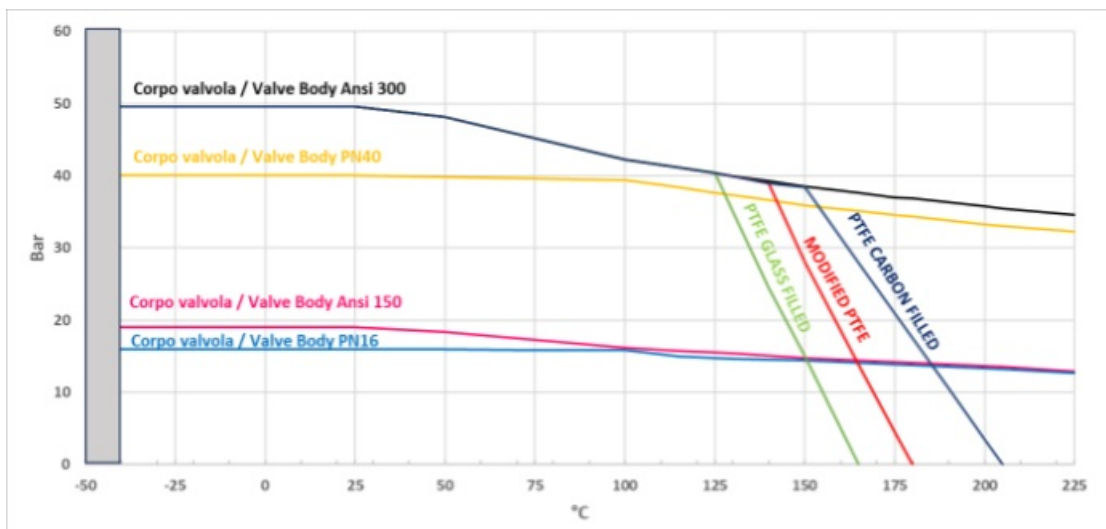
(.): Other materials available on request

diagrams and breakaway torque

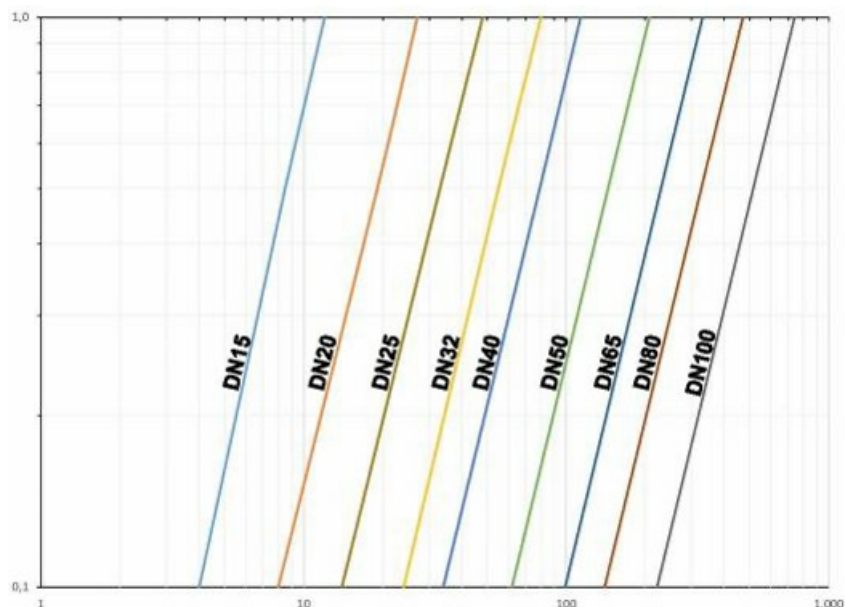
Temperature/pressure diagram for carbon steel valve



Temperature/pressure diagram for stainless steel valve



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.

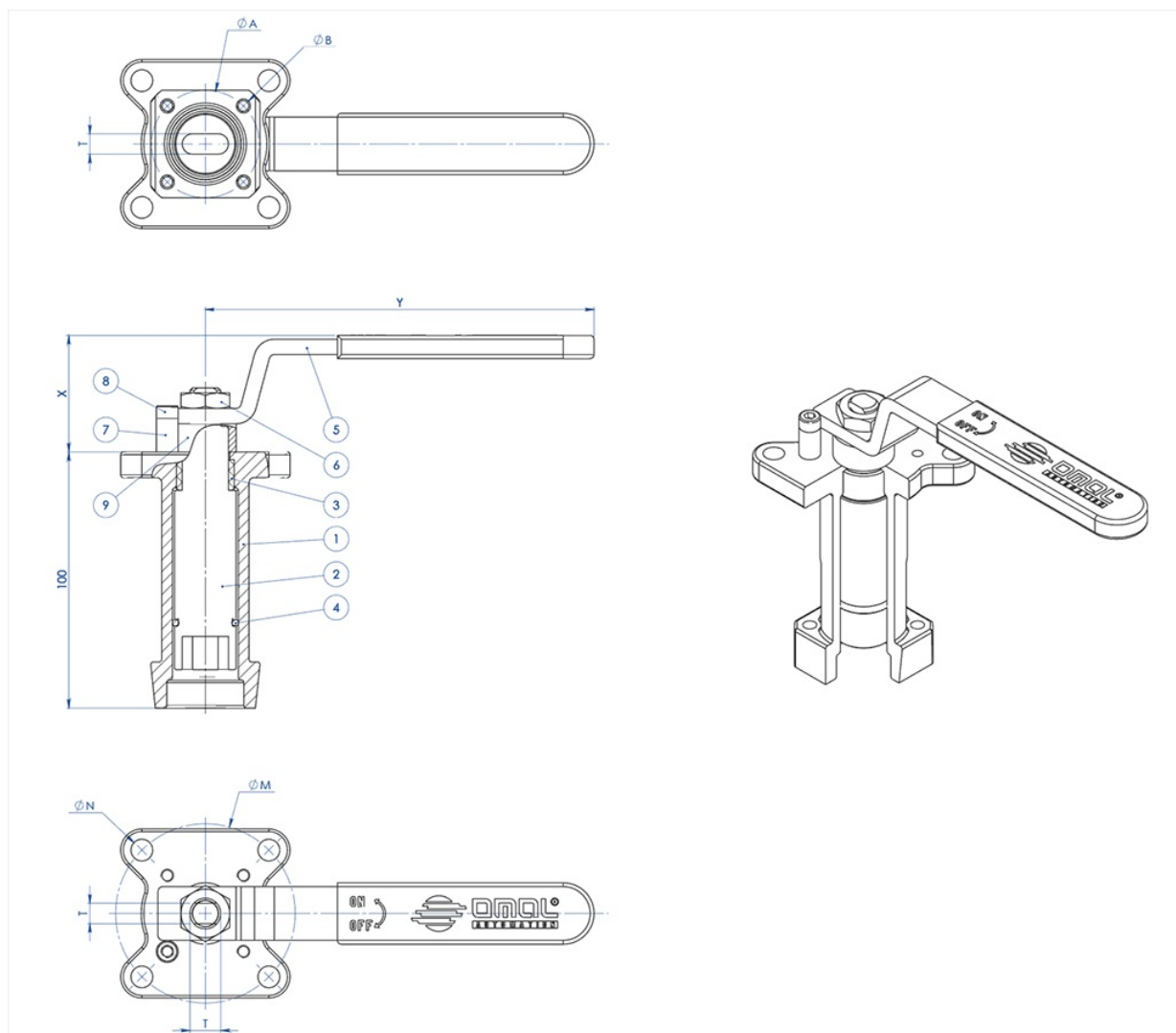
BREAKAWAY TORQUE IN Nm WITH TFM 1600 SEAT AND WATER INTERCEPTED FLUID (*)									
SIZE	DN 15	DN 20	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80	DN 100
0 bar									
PN16 bar	8	13	18	27	37	61	80	120	215
PN25 bar	9,5	15	20	29	40	67	95	130	230
PN40 bar	11	17	21	31	41	75	110	165	280
ANSI 150-20 bar	9	14	19	28	38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

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

The sizing of pneumatic actuators has been done considering a minimum supply pressure of 5,6 barg.

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

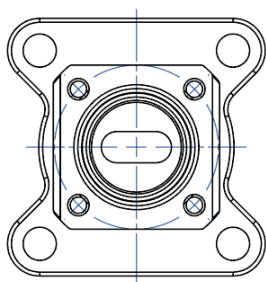
(*): On request available in Aisi 304 s.s.

DIMENSIONS

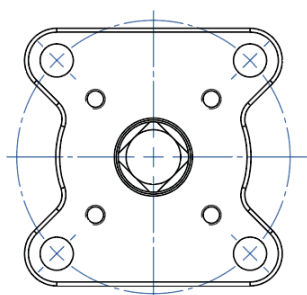
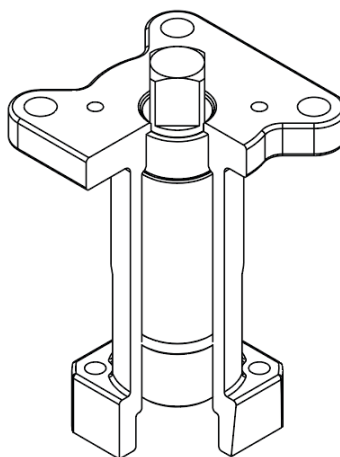
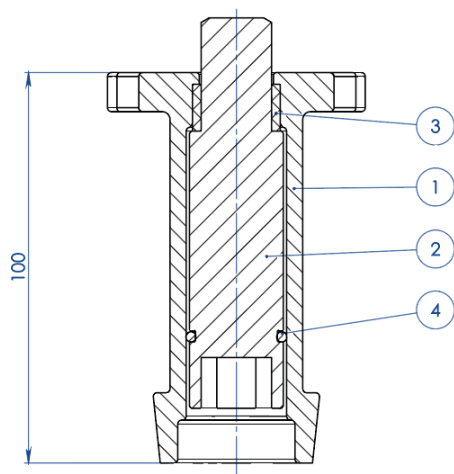
ISO VALVE	ØA	ØB	ØM	ØN	F/T	X	Y
F03	36	5,5	36	5,5	10/6	38,5	141,5
F04	42	5,5	42	M5	12/8	45,5	151,5
F05	50	6,5	50	6,5	16/10	48,5	276,5
F07	70	8,5	70	8,5	22/14	57,5	351,5
F10	102	11	102	11	30/18	79,5	451,5

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

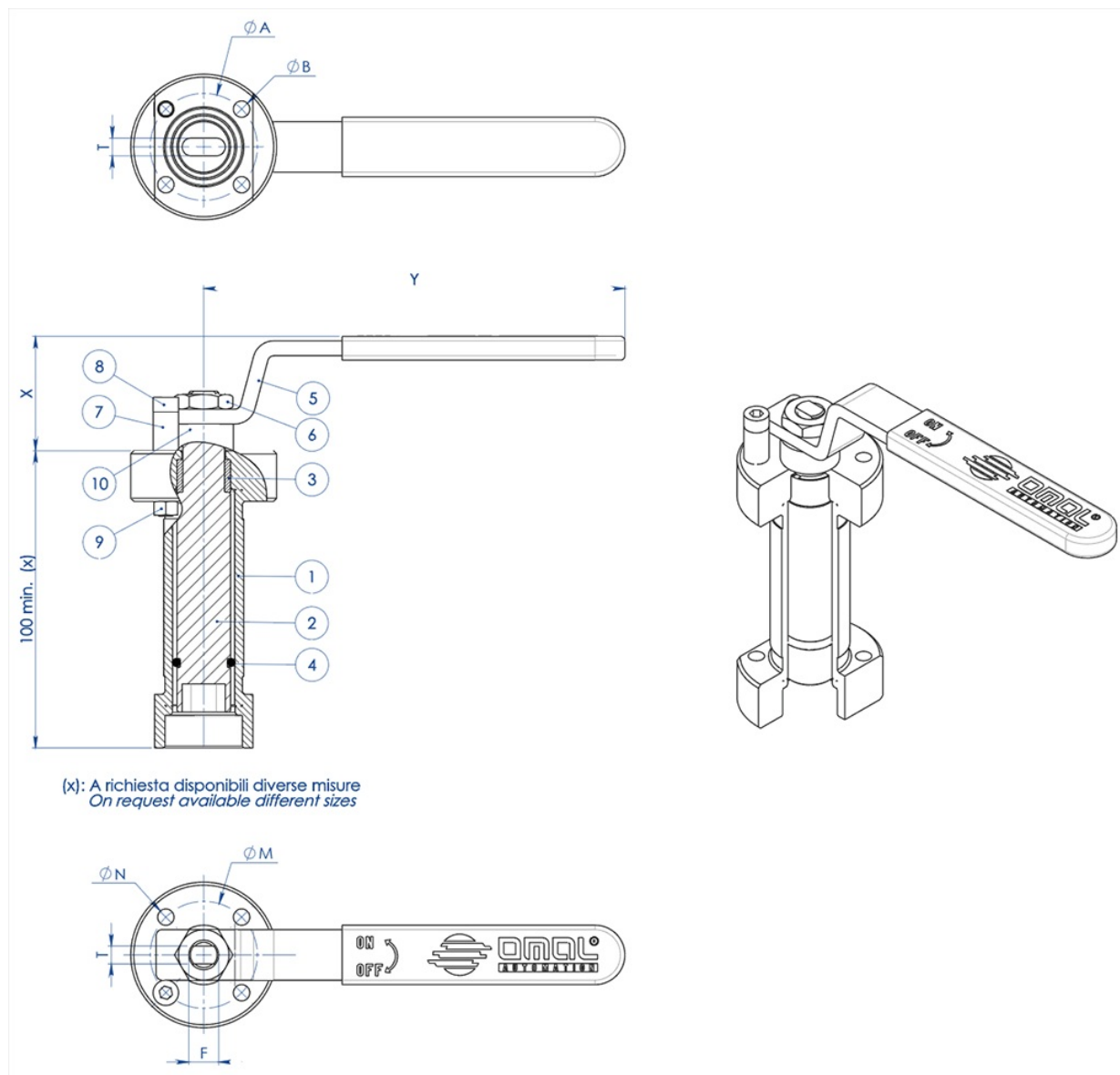


NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

MATERIALS		
PART. N°	DESCRIPTION	MATERIAL
1	Extension	ASTM A351 CF8M
2	Pin	AISI 430 F
3	Bush	DELTRIN
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	DELTRIN
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.

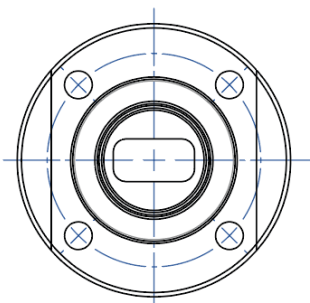
(**): No available on valves with Iso connection F04

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

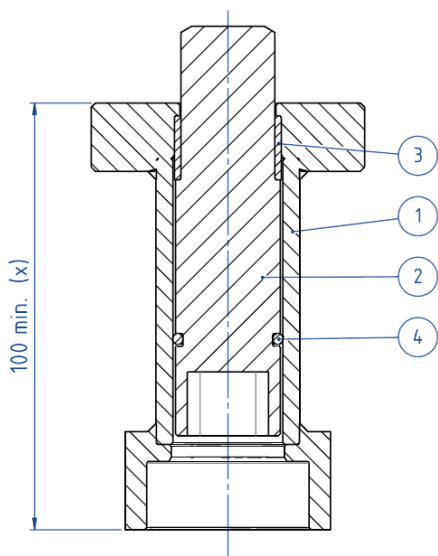
NOTE: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order.

WELDED STEM EXTENSION FOR ACTUATORS

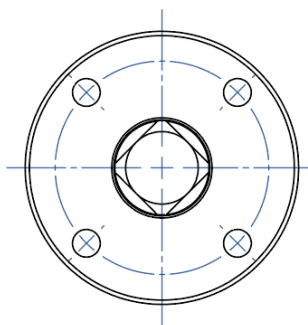
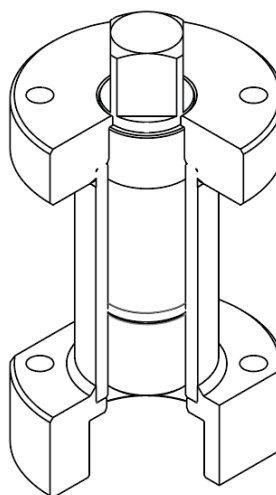




NOTA: Le dimensioni dipendono dalle dimensioni dell'attacco valvola
NOTE: Dimensions depending from valve's connection



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

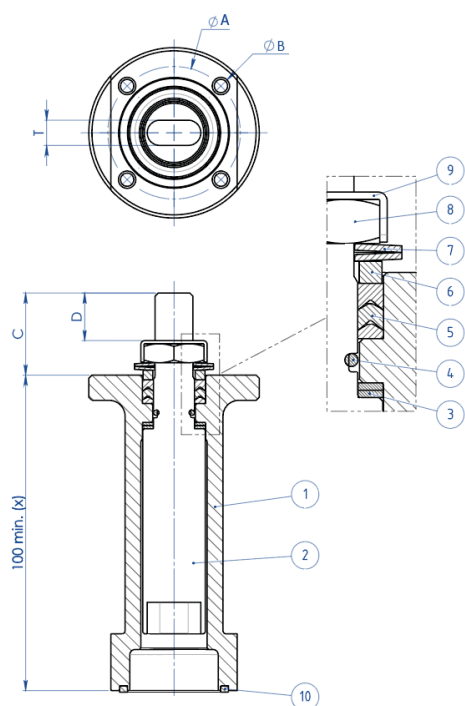


NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

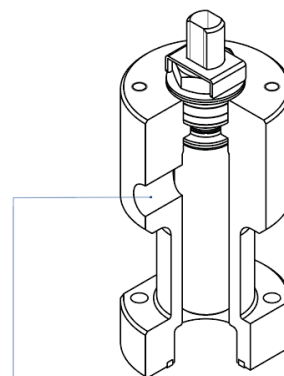
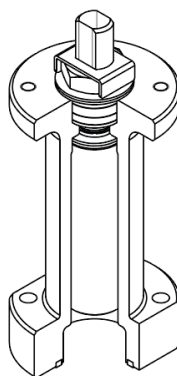
MATERIALS		
PART. N°	DESCRIPTION	MATERIAL
1	Extension	304 S.S.
2	Pin	AISI 430 F
3	Bush	DELRIN
4	O-RING	NBR

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

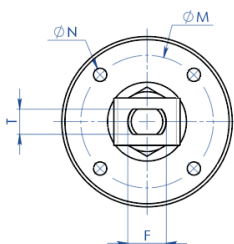
STEM EXTENSION WITH ADDITIONAL SEAL



(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 CL300 T1-T2-T3-M1-M4-M5-M6](#)

[FUGITIVE EMISSION DN100 CL300 T1-T2-T3-M1-M4-M5-M6](#)

[FIRE SAFE - WAFER - MAGNUM A105 -DN15-100-CL150-300-PN16-40 A105](#)

[PED](#)

Istruzioni

[ISTRUZIONI ATEX 8_0486](#)

[ISTRUZIONI USO 8_0844-30](#)

Manuali

[MANUALE UMAH1000](#)