

MAGNUM Split Wafer PN 63-100 ANSI 600 carbon steel ball valve



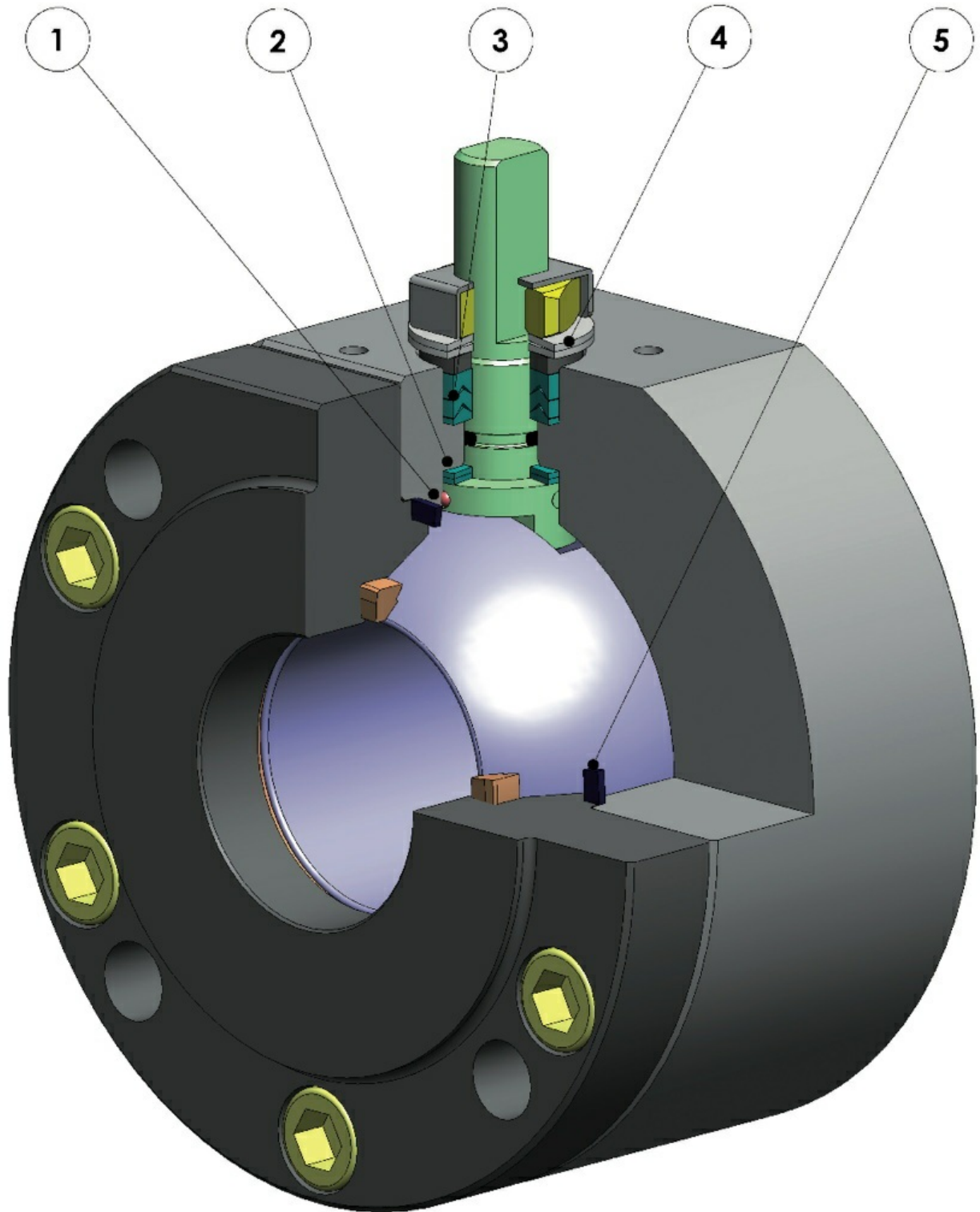
Macro Ball valves

Category **MAGNUM**

Subcategory **MAGNUM Split Wafer**

Family **MAGNUM Split Wafer PN 63-100 ANSI 600**

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

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: 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
- Fluid controlled: petroleum products, self-lubricants (liquids and gases), provided they are compatible with the construction materials. For non self-lubricants (water,...) or other applications, contact the sales department.
- 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.
- Sealing in: PTFE reinforced with glass (PTFE-GF), PTFE reinforced with carbongraphite (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

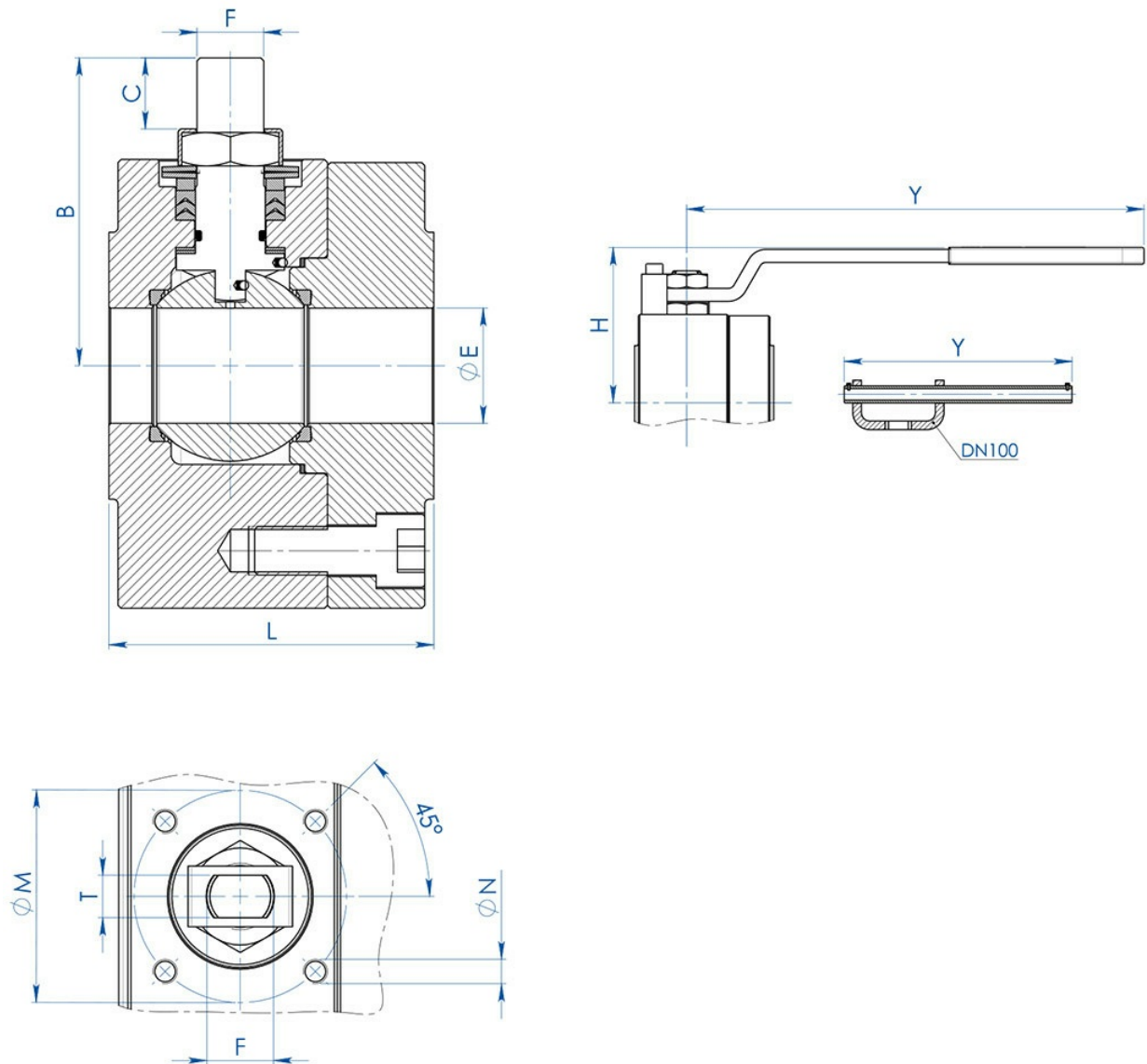
CERTIFICATIONS

- In compliance with European Directive 2014/68/EU PED; Fugitive Emission ISO 15848 (ISO FE BH-C03-SSA 0); TA-LUFT VDI 2440; ISO 10497 Third ed. 2010 / API 607 Sixth ed. 2010
- Safety integrity level up to SIL3 according to the IEC 61508
- In compliance with ATEX 2014/34/EU Directive , ATEX certificate ON REQUEST.

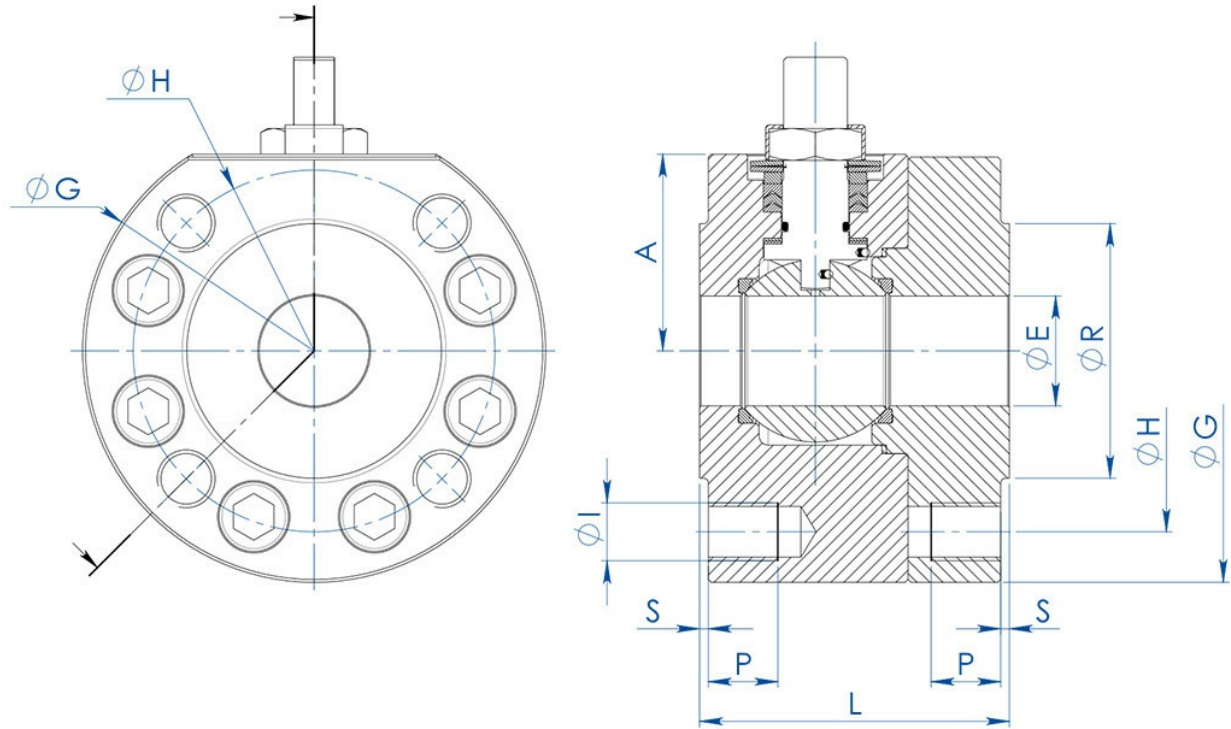
ENGINEERING STANDARD

- 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

dimensions



SIZE		DIMENSIONS										
DN [mm]	[inch]	$\varnothing E$	L	B	C	ATT.ISO	$\varnothing M$	$\varnothing N$	F/T	H	Y	LEVER KIT
DN 15	1/2"	13	68	54,5	95	F04	42	M5	12/8	80	150	KLV58006
DN 20	3/4"	19	72	57,5	95	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

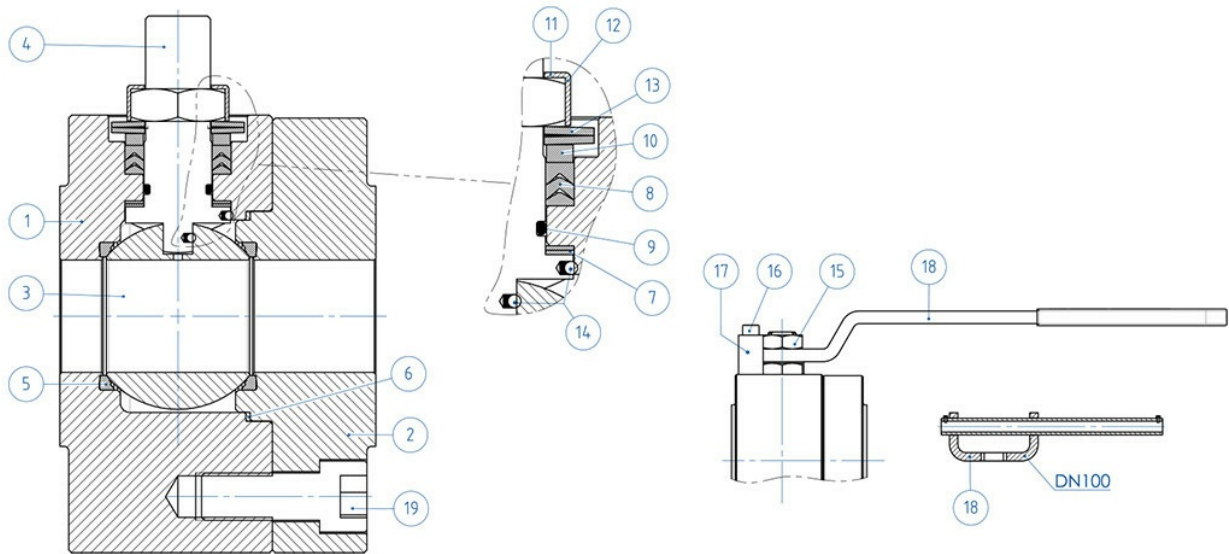

DIMENSIONS -PN-

SIZE		PN	A	G	R	S	H	HOLES N°	I	P	Kg	L	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

DIMENSIONS -ANSI-

SIZE		ANSI	A	G	R	S	H	HOLES N°	I	P	Kg	L	SEALS KIT
DN [mm]	[inch]												
DN 15	1/2"	ANSI 600	40	95	35,1	6,4	66,5	4	1/2"UNC	16	4,1	68	KGBV472040
DN 20	3/4"	ANSI 600	45	115	42,9	6,4	82,6	4	5/8"UNC	20	4,4	72	KGBV472050
DN 25	1"	ANSI 600	50	125	50,8	6,4	88,9	4	5/8"UNC	20	6,3	87	KGBV472060
DN 32	1" 1/4	ANSI 600	55	135	63,5	6,4	98,6	4	5/8"UNC	20	7,6	92	KGBV472070
DN 40	1" 1/2	ANSI 600	68	155	73	6,4	114,3	4	3/4"UNC	24	11,2	107	KGBV472080
DN 50	2"	ANSI 600	79	170	91,9	6,4	127	8	5/8"UNC	20	15,5	115	KGBV472090
DN 65	2" 1/2	ANSI 600	94	208	104,6	6,4	149,4	8	3/4"UNC	25	28,3	140	KGBV472100
DN 80	3"	ANSI 600	101,5	220	127	6,4	168,1	8	3/4"UNC	25	33,8	150	KGBV472110
DN 100	4"	ANSI 600	126	279	157,2	6,4	215,9	8	7/8"UNC	30	68,2	190	KGBV472120

materials



MATERIALS			
SPLIT WAFER PN63-100 ANSI 600 carbon steel			
N°	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	A564 TP.630 (17-4PH)	
5*	Seat	DEVLON (.)	
6*	Body-ring nut gasket	GRAFOIL	
7*	Stem lower sealing	PTFE Modified (.)	
8*	Chevron rings	PTFE Modified (.)	
9*	Stem o-ring	FKM (.)	
10	Packing gland ring	Carbon steel galvanized (x) (l)	
11	Stop nut plate	304 S.S.	
12	Stem nut	Carbon steel galvanized (x) (x)	
13	Springs washer	Carbon steel galvanized (x) (xx)	
14	Antistatic device	316 S.S.	
19	Body-ring nut screw	A2.70 (304 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

(**): for ≤DN32 available only in CF8M

(x): 304 s.s.

(xx): 301 s.s.

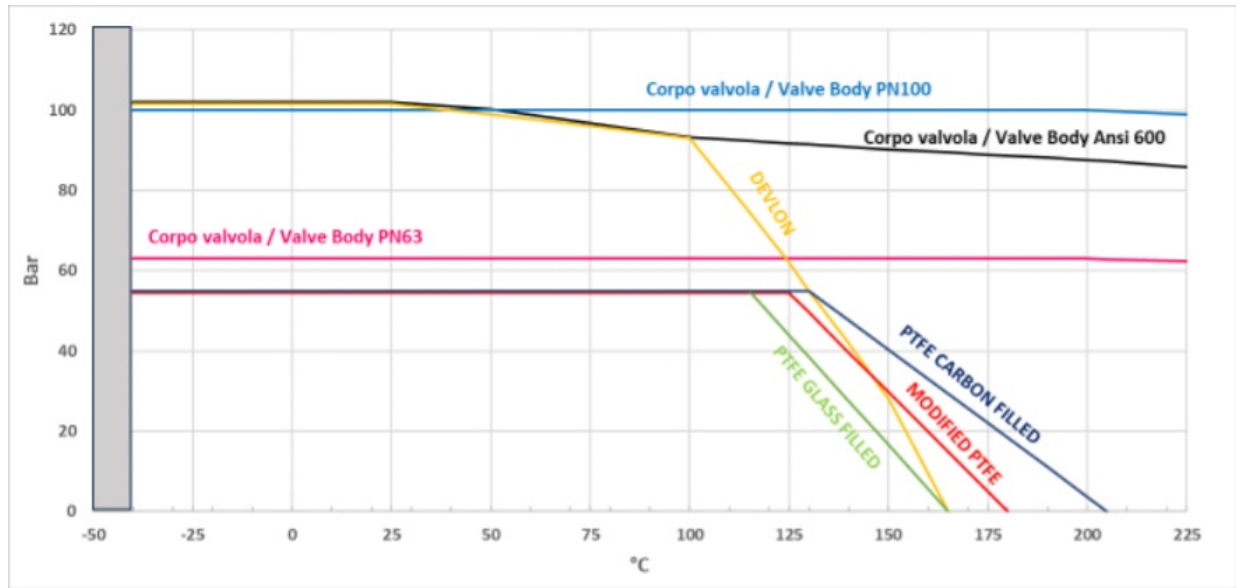
·: for ≤DN32 available only in DEVLON

(l): DN100 available only in 304

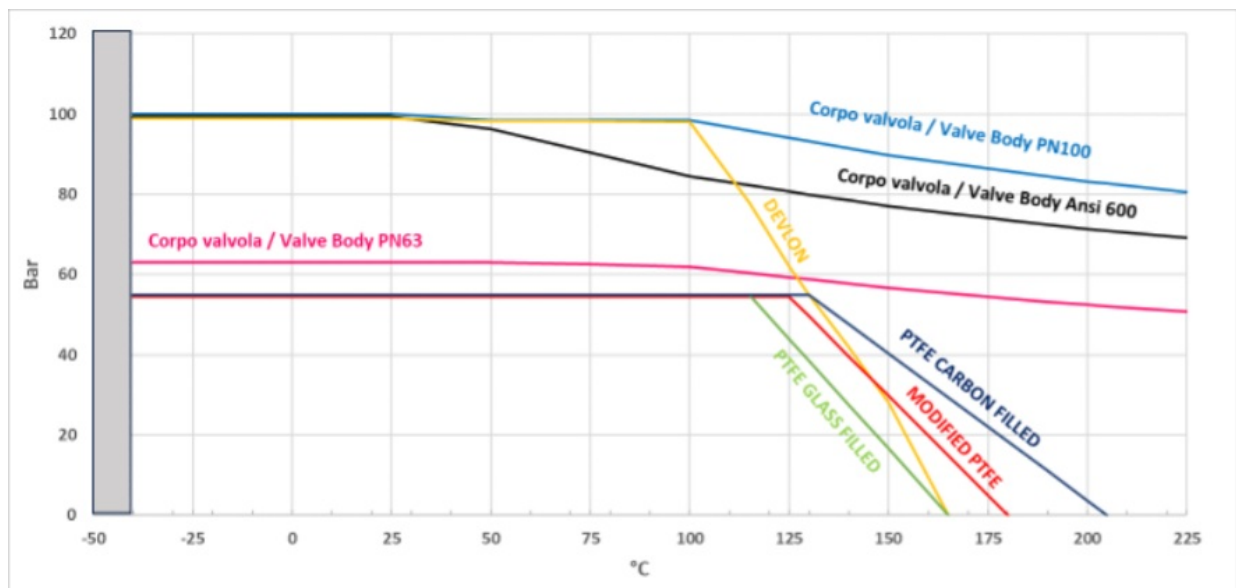
(.): Other materials available on request

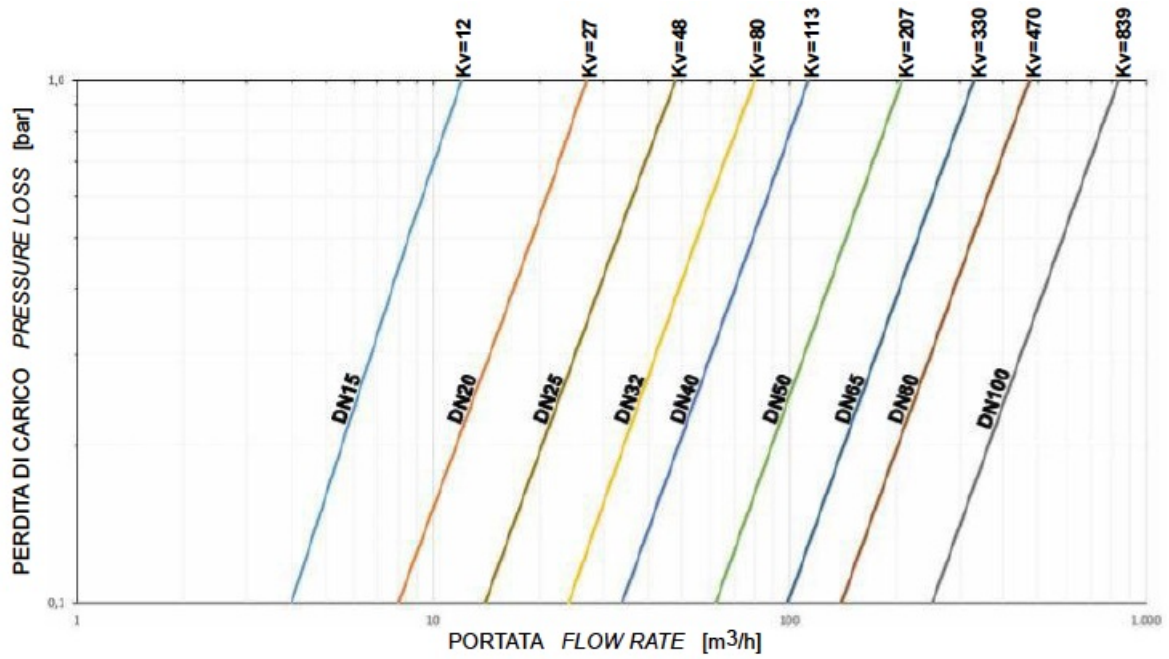
diagrams and breakaway torque

Temperature/pressure diagram for carbon steel valve



Temperature/pressure diagram for stainless steel valve



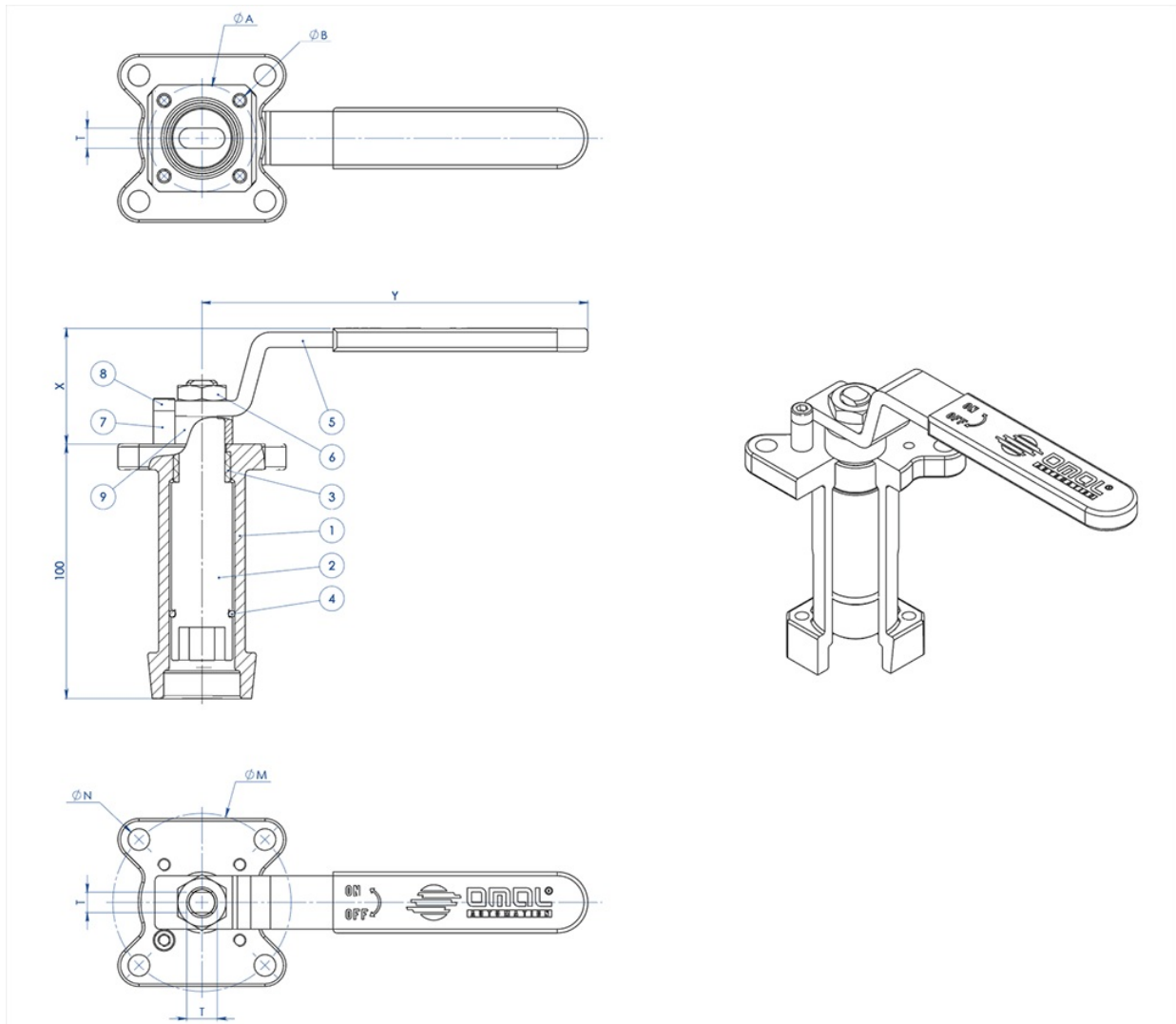
Flow/pressure loss diagram and Kv nominal coefficient


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

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

accessories

CASTING STEM EXTENSION WITH LEVER



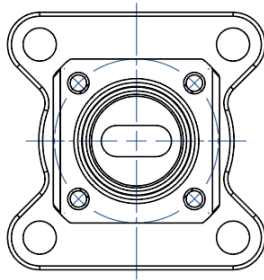
MATERIALS		
PART. N°	DESCRIPTION	MATERIAL
1	Extension	AISI304 S.S.
2	Pin	AISI 430 F
3	Bush	DELRIN
4	O-RING	NBR
5	Lever	Fe 37 galvanized (*)
6	Nut	galvanized carbon steel (*)
7	Holder Lever	galvanized carbon steel (*)
8	Holder screw	A2-70
9	Spacer	PTFE Carbon Filled

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

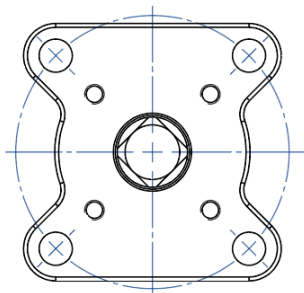
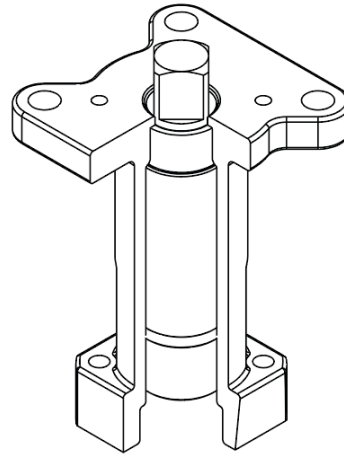
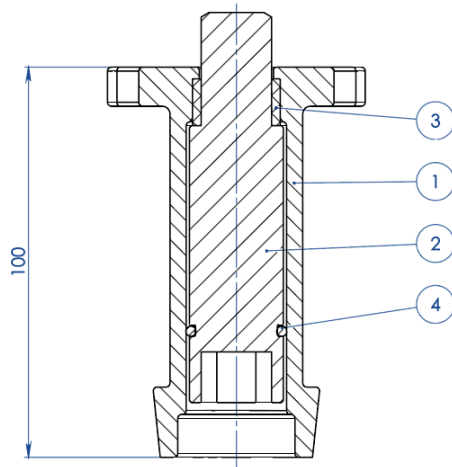
ISO VALVE	DIMENSIONS						
	ØA	ØB	ØM	ØN	F/T	X	Y
F03	36	5,5	36	5,5	10/6	38,5	141,5
F04	42	5,5	42	M5	12/8	45,5	151,5
F05	50	6,5	50	6,5	16/10	48,5	276,5
F07	70	8,5	70	8,5	22/14	57,5	351,5
F10	102	11	102	11	30/18	79,5	451,5

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

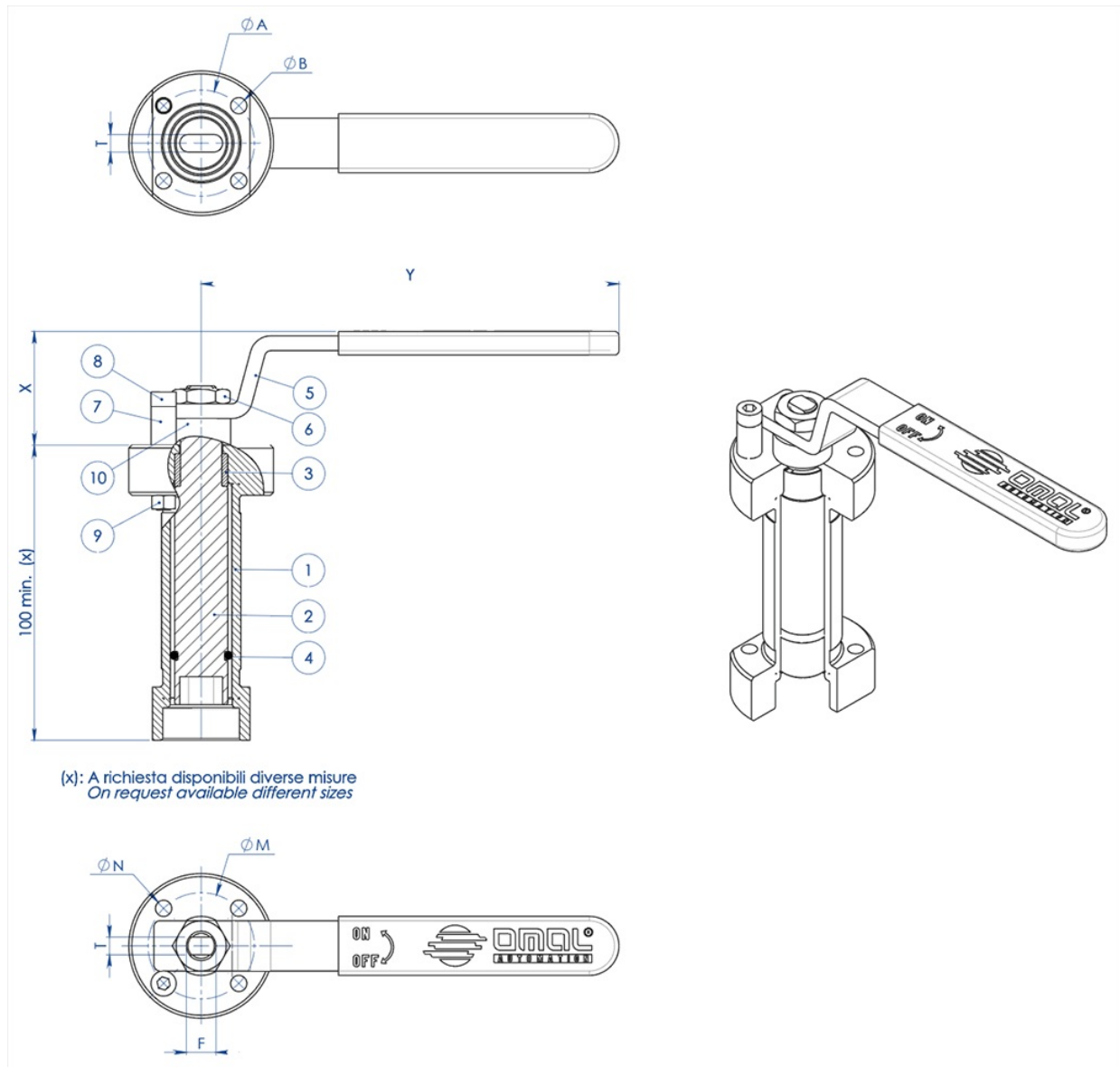


NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

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

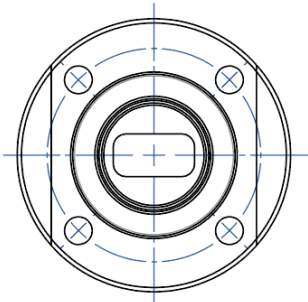
(*): On request available in Aisi 304 s.s.

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

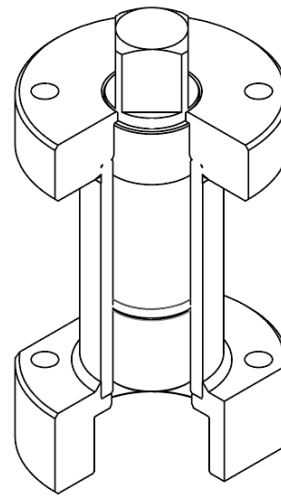
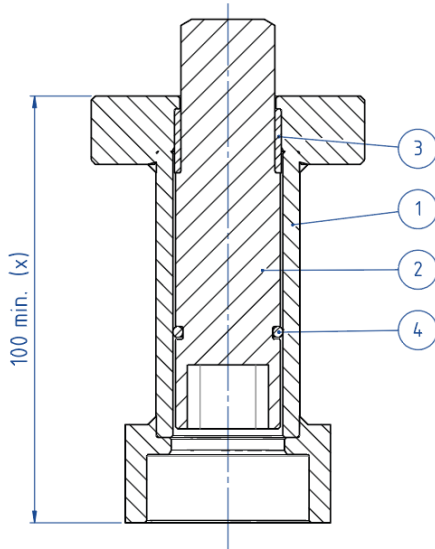
DIMENSIONS							
ISO VALVE	ØA	ØB	ØM	ØN	F/T	X	Y
F03	36	5,5	36	5,5	10/6	38,5	141,5
F04	42	5,5	42	M5	12/8	45,5	151,5
F05	50	6,5	50	6,5	16/10	48,5	276,5
F07	70	9	70	9	22/14	57,5	351,5
F10	102	11	102	11	30/18	79,5	451,5

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

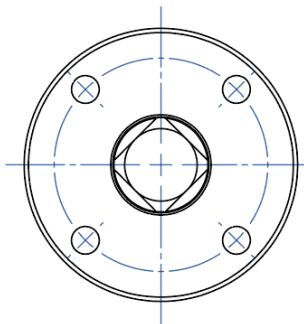
WELDED STEM EXTENSION FOR ACTUATORS



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



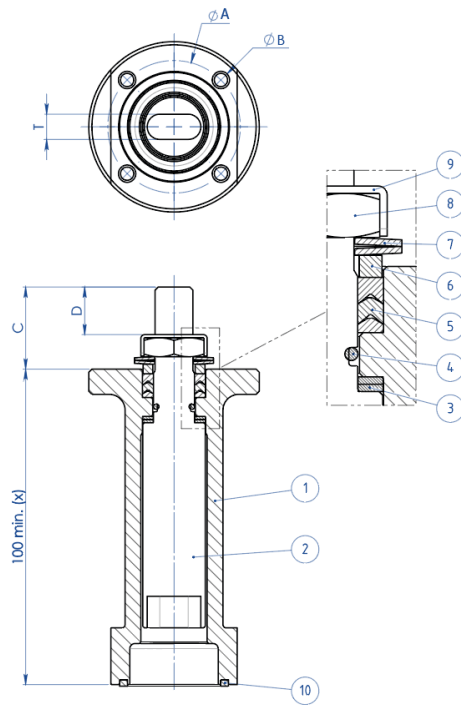
(x): A richiesta disponibili diverse misure
 On request available different sizes



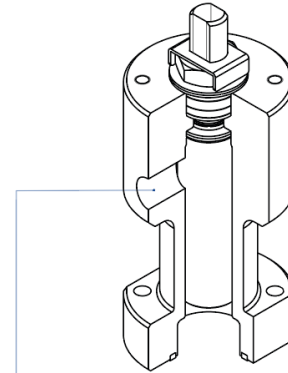
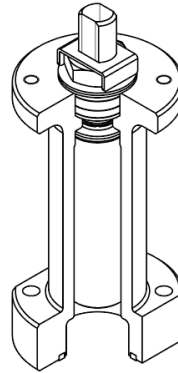
NOTA: Le dimensioni dipendono dalla taglia dell'attuatore
NOTE: Dimensions depending from actuator's size

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

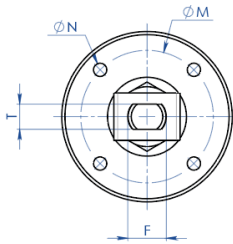
NOTE: Code of the stem extension depending from drive's type and valve's connection; to be requested at the order.

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.600 TI-M4
PED
FIRE SAFE - SPLIT WAFER DN15-100 PN63-100 CL 600 A105
UKCA

Istruzioni

ISTRUZIONI ATEX 8_0486
ISTRUZIONI USO 8_0844-32

Manuali

MANUALE UMAH1000