



FLOWTEC®

IBV- BALL VALVES

ITALPROTEC
INDUSTRIES

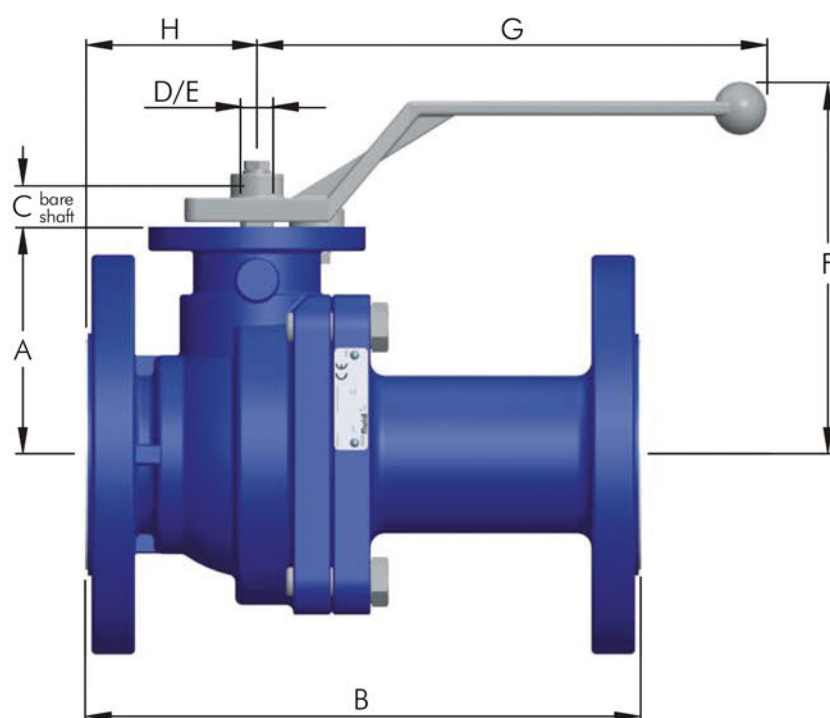
Operating Conditions

- Temperature range from -40°C (-40°F) up to $+200^{\circ}\text{C}$ ($+392^{\circ}\text{F}$) (dep. on body lining resp. ball encapsulation)
- Pressure range from 1 mbar up to 16 bar (232 psi)

Testing / Marking

- Pressure- and tightness testing acc. to EN 12266-1, leakage rate A, and spark testing at 35 kV to assure lining integrity. Marking of valves on body and name plate acc. to EN 19.
- Material- resp. test certificate acc. to EN 10204-3.1

Manual Valve



Dimensions in mm (lbs = kg x 2.2)

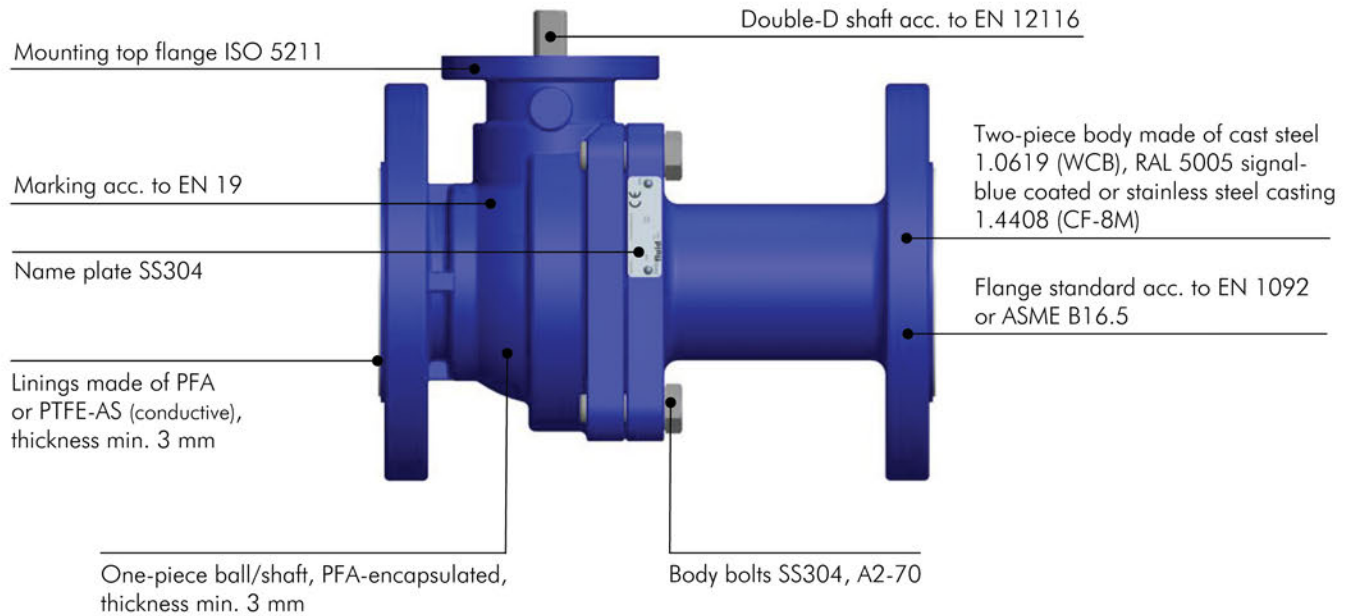
DN Nom. Size	A	B DIN	B ANSI	C shaft end	D dia.	E DD	F	G	H	ISO	kg* bare shaft	kg lever only
15/1/2"	64	130	130	19	14	11	116	161	50	F05	3.8	0.32
20/3/4"	66	150	150	19	14	11	118	161	50	F05	4.5	0.32
25/1"	70	160	127	19	14	11	122	161	50	F05	5.1	0.32
32/1/4"	75	180	180	19	14	11	133	161	60	F05	6.5	0.32
40/1/2"	87	200	165	19	14	11	139	211	64	F07	9.7	0.36
50/2"	94	230	178	19	14	11	142	211	71	F07	11.7	0.36
65/2/2"	106	290	190	23	18	14	158	215	77	F07	17.2	0.41
80/3"	115	310	203	23	18	14	167	251	81	F07	20.7	0.41
100/4"	130	350	229	23	24	17	182	315	92	F10	32.0	0.90
6" red	130	-	267	23	24	17	182	315	112	F10	45.0	0.90

Face to face B acc. to DIN EN 558-1 range 1 resp. ASME B16.10 *weights for DIN valves
6" red. with eff. throughput dia. 100 mm

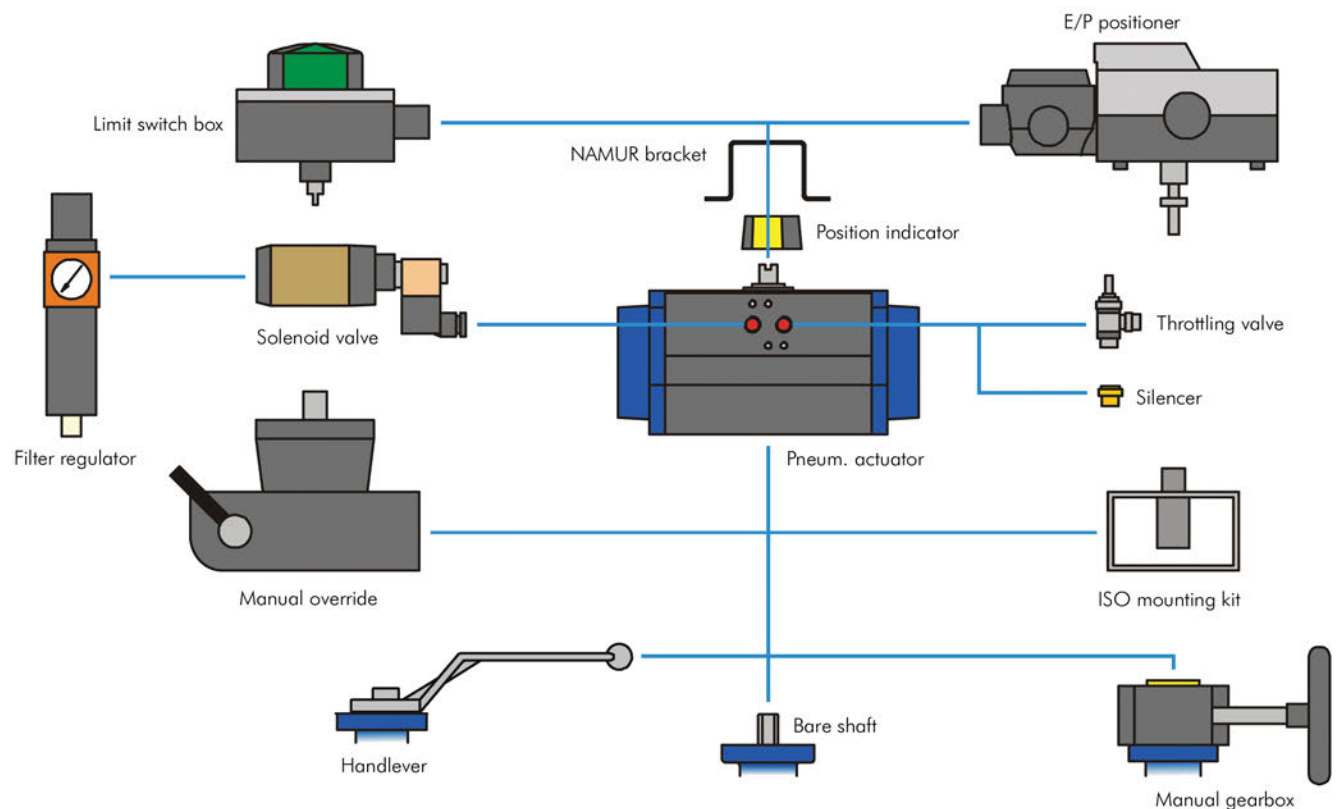
IBV : Construction, Mounting Options

23 Ball Valves, plastomer-lined

Construction of Valve



Mounting Options



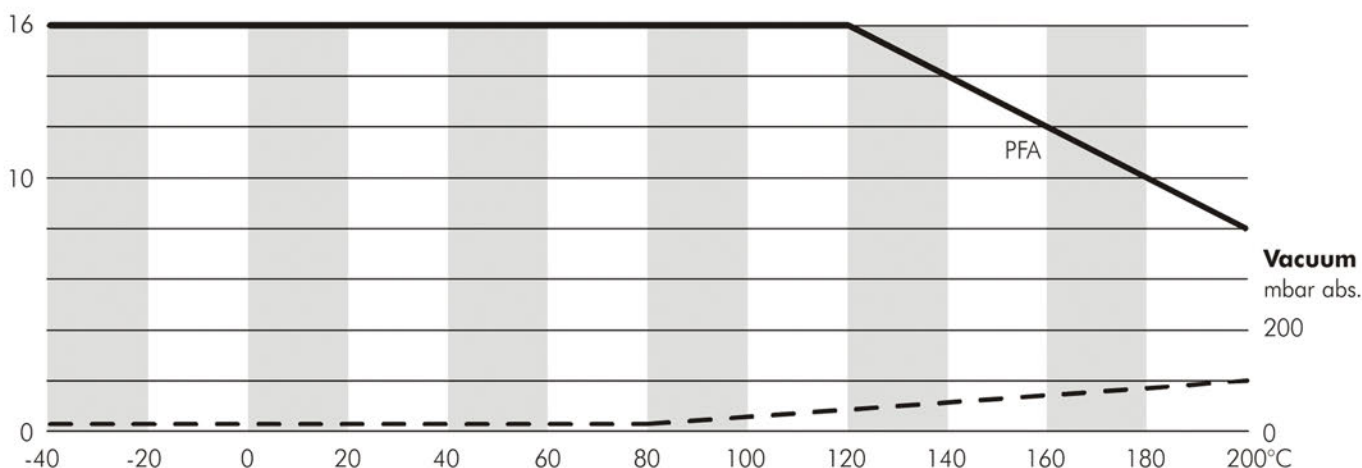
IBV: PT Diagram, Torques, Cv Values

23 Ball Valves, plastomer-lined

Pressure-/Temperature Diagram

PS max.

bar



Torque Values in Nm (in-lbs = Nm x 8.85)

Max. torque values for PFA-encapsulated balls and PFA-lined bodies

Size DN	15/1/2"	20/3/4"	25/1"	32/1 1/4"	40/1 1/2"	50/2"	65/2 1/2"	80/3"	100/4"	6" red.	150/6"
Torque nom.	8	8	12	18	23	30	50	65	95	95	240
max. allow.	145	145	145	145	320	320	320	320	700	700	1'200

- Stated values to be break-away torques without any consideration of safety factors (min. 1.3) for pneum. actuators.

Flow Rate Values Cv usg/min. ($K_v = C_v/1.16$)

Size DN	15/1/2"	20/3/4"	25/1"	32/1 1/4"	40/1 1/2"	50/2"	65/2 1/2"	80/3"	100/4"	6" red.	150/6"
Full Port	18	36	68	139	205	312	610	915	1'405	1'405	3'165

Options

C-Ball

to prevent media residues inside ball cavity, for full drainage



Cs-Ball



V-Port-Ball

for control applications, with various contours



Typical Service Applications

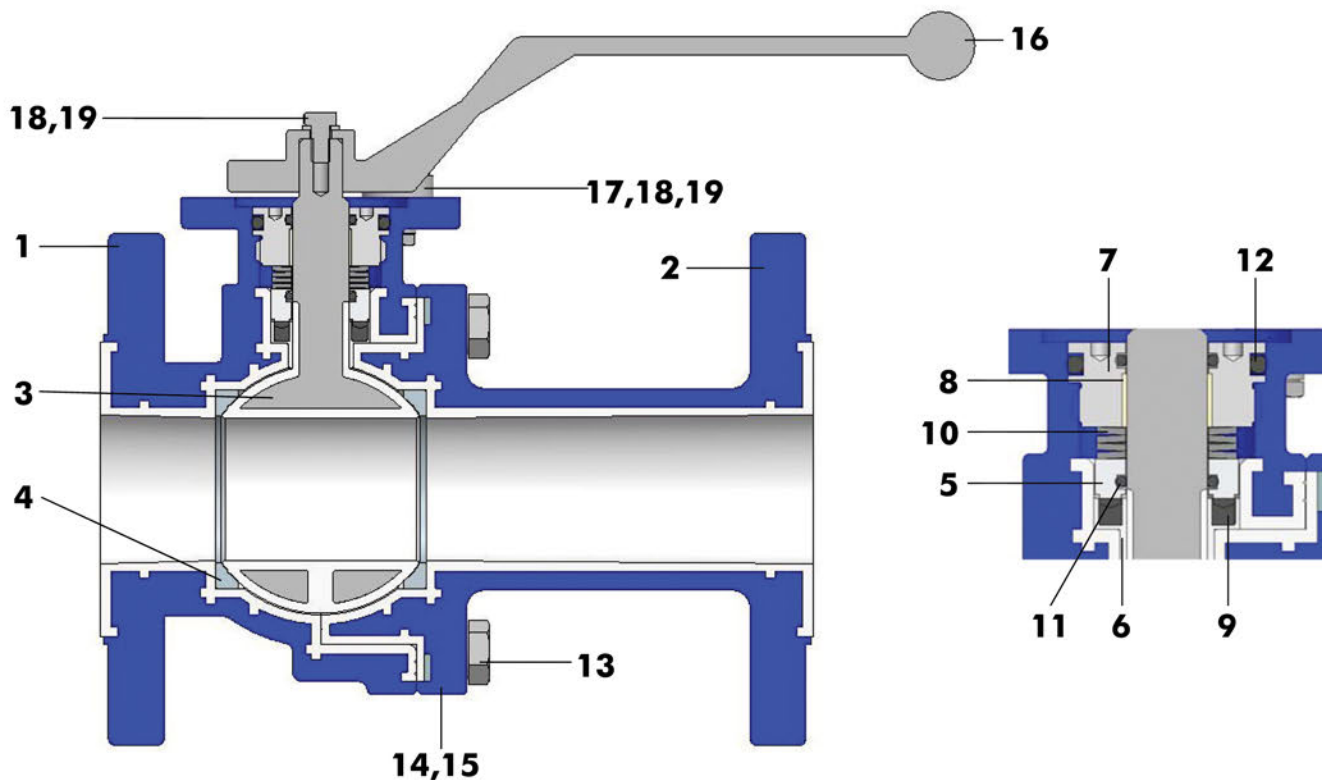
- Chemical CPI
- Petro-Chemical
- Bio-Technical
- Pharmaceutical Industry
- Pulp and Paper
- Food Processing
- Paint and Pigments
- Fertilizers
- Textile Industry
- Mining and Steel
- Water Treatment

Special executions upon request

IBV : Parts List Valve compl., manually

23 Ball Valves, plastomer-lined

Standard Version (Picture showing Valve DN50 PN16 WCB A216, PFA-lined, with Handlever)

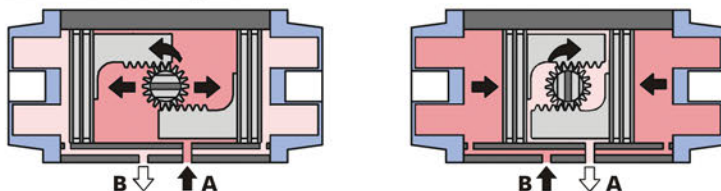


Item	Qty.	Description	Spares Set	Material Description	Matrrial No. DIN 17440/41
1	1	Body Half Left, lined, RAL 5005		WCB/PFA	1.0619
2	1	Body Half Right, lined, RAL 5005		WCB/PFA	1.0619
3	1	Ball/Shaft one-piece, encapsulated		Duplex/PFA	1.4462
4	2	Ball Seat	S	PTFE	
5	1	Pressure Sleeve	E	SS316L	1.4404
6	1	Sealing Sleeve	E	PTFE	
7	1	Threaded Bushing	E	SS316L	1.4404
8	1	Bearing	E	C.Steel/PTFE	
9	1	Elastomer Insert	E	VMQ	
10	4	Belleville Spring	E	Spring Steel	1.8159
11	2	O-Ring	E	FPM	
12	1	O-Ring	E	FPM	
13	4	Hex. Head Cap Screw		A2-70	1.4310
14	1	Name Plate 42 x 14 CE		A2	1.4301
15	2	Hammer Screw 2.49 x 4.76		A2	1.4310
16	1	Handlever		SS304	1.4308
17	1	Stop		SS316L	1.4404
18	2	Hex. Head Cap Screw		A2-70	1.4310
19	2	Lock Washer		SS304	1.4310

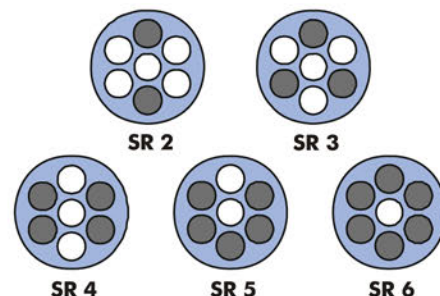
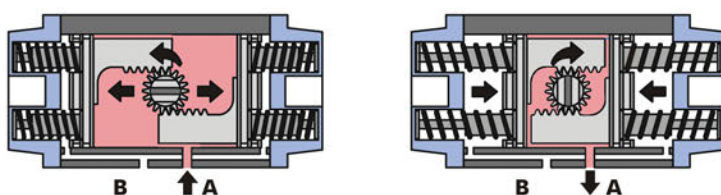
Spare Sets: E = Repair Kit S = Ball Seat

Mode of Operation

DA: double-acting



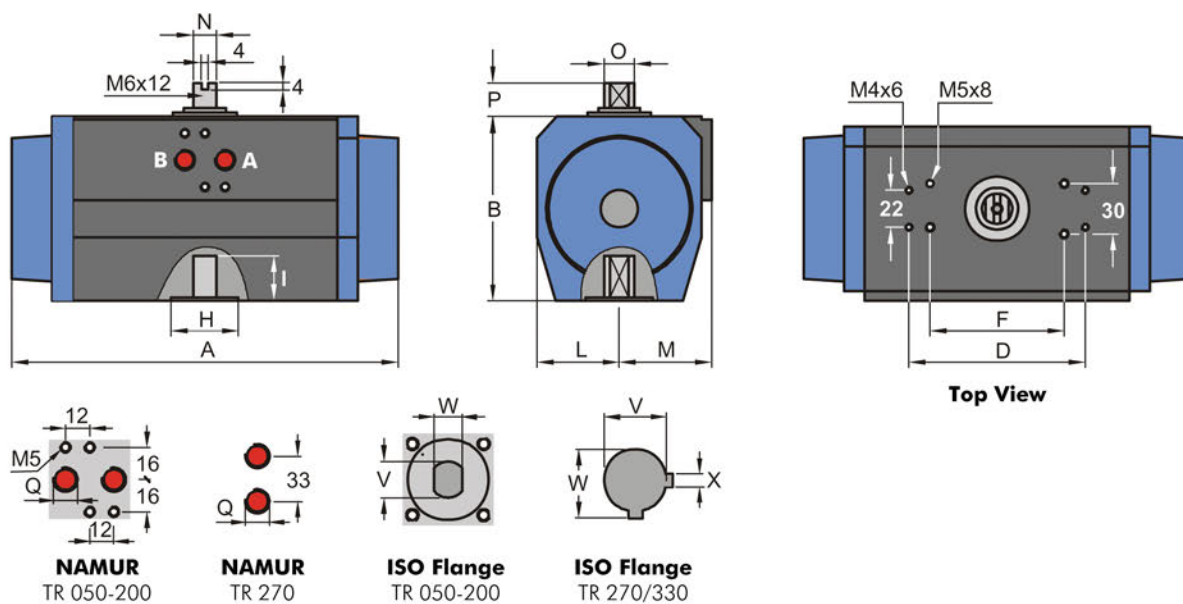
SR: single-acting



Arrangement of Spring Cartridges

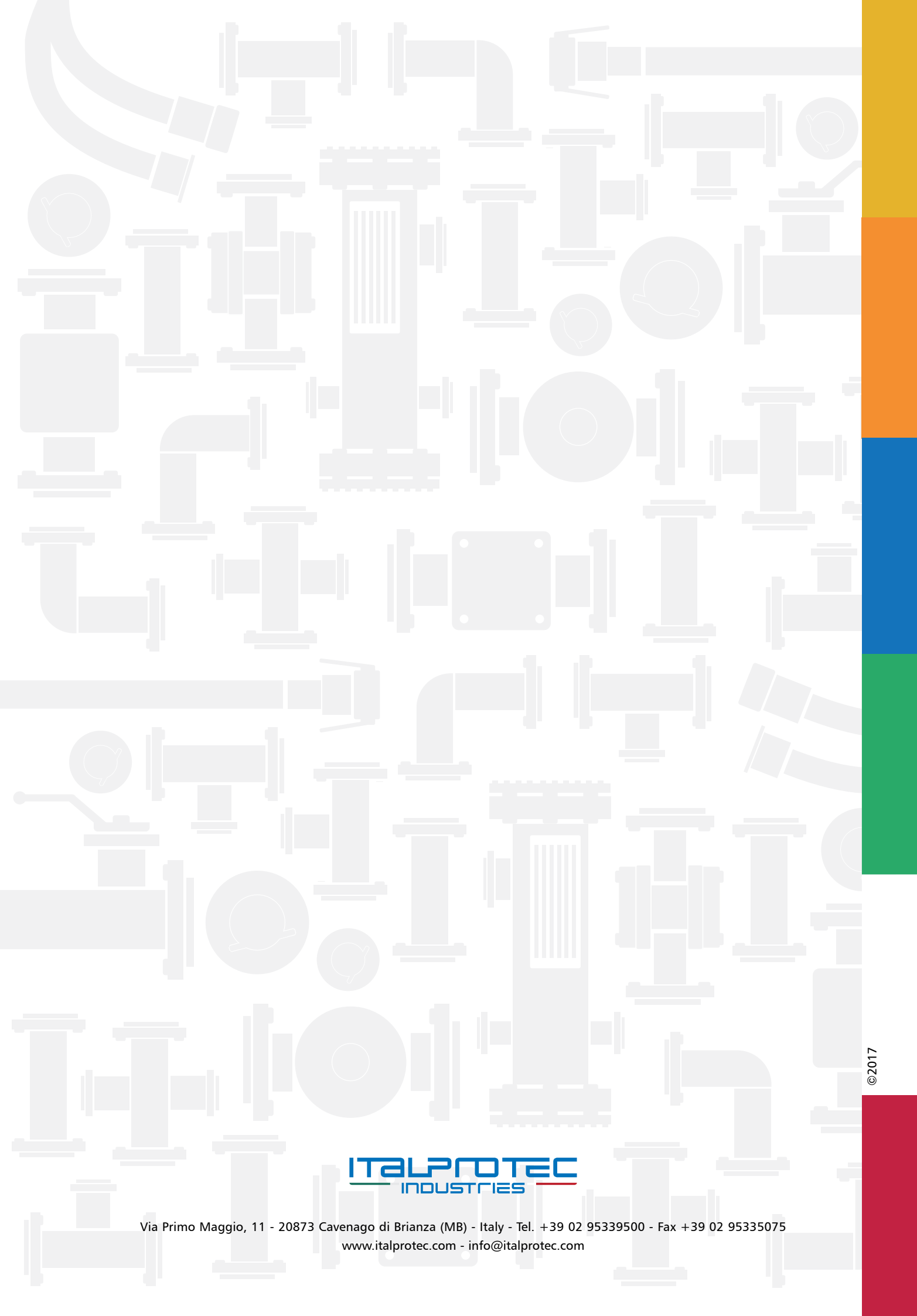
- Do **not** open actuator under pressure!
- Spring cartridges release automatically during removal of covers!

Dimensions in mm



Type TR	A	B	D	F	H	I	L	M	N	O	ISO	P	Q	V	W	X
050	138	67	-	80	25	13	33.5	41.5	8	12	F03/05	20	1/8"	14.2	11	-
063	152	83	-	80	25	16	38	48	8	12	F03/05	20	1/4"	14.2	11	-
075	205	100	105	80	35	20.5	42.5	51.5	14	18	F05/07	20	1/4"	18.2	14	-
085	228	110	105	80	40	23.5	49	55	14	18	F05/07	20	1/4"	18.2	14	-
100	274	125	105	80	55	28.5	55	65	14	18	F05-10	20	1/4"	24.2	17	-
115	308	142	139	130	55	28.5	64	68	27	36	F07/10	30	1/4"	24.2	17	-
125	362	155	139	130	55	41	69.5	71.5	27	36	F07/10	30	1/4"	30.2	22	-
160	462	196	139	130	75	51	88	88	27	36	F10/12	50	1/4"	40.2	27	-
200	575	240	139	130	85	51	110	110	32	42	F10/12	50	1/4"	40.2	27	-
270	685	332	-	130	104	62	166	166	55	80	F14	50	1/2"	50	53.8	14
330	850	414	-	130	130	84	190	210	55	80	F16	50	1/2"	60	64.4	18

other sizes and options upon request



Via Primo Maggio, 11 - 20873 Cavenago di Brianza (MB) - Italy - Tel. +39 02 95339500 - Fax +39 02 95335075
www.italprotec.com - info@italprotec.com