

THE CHOICE OF THE VALVE IS DETERMINATED BY THE KIND OF APPLICATION

OUR PRODUCTS



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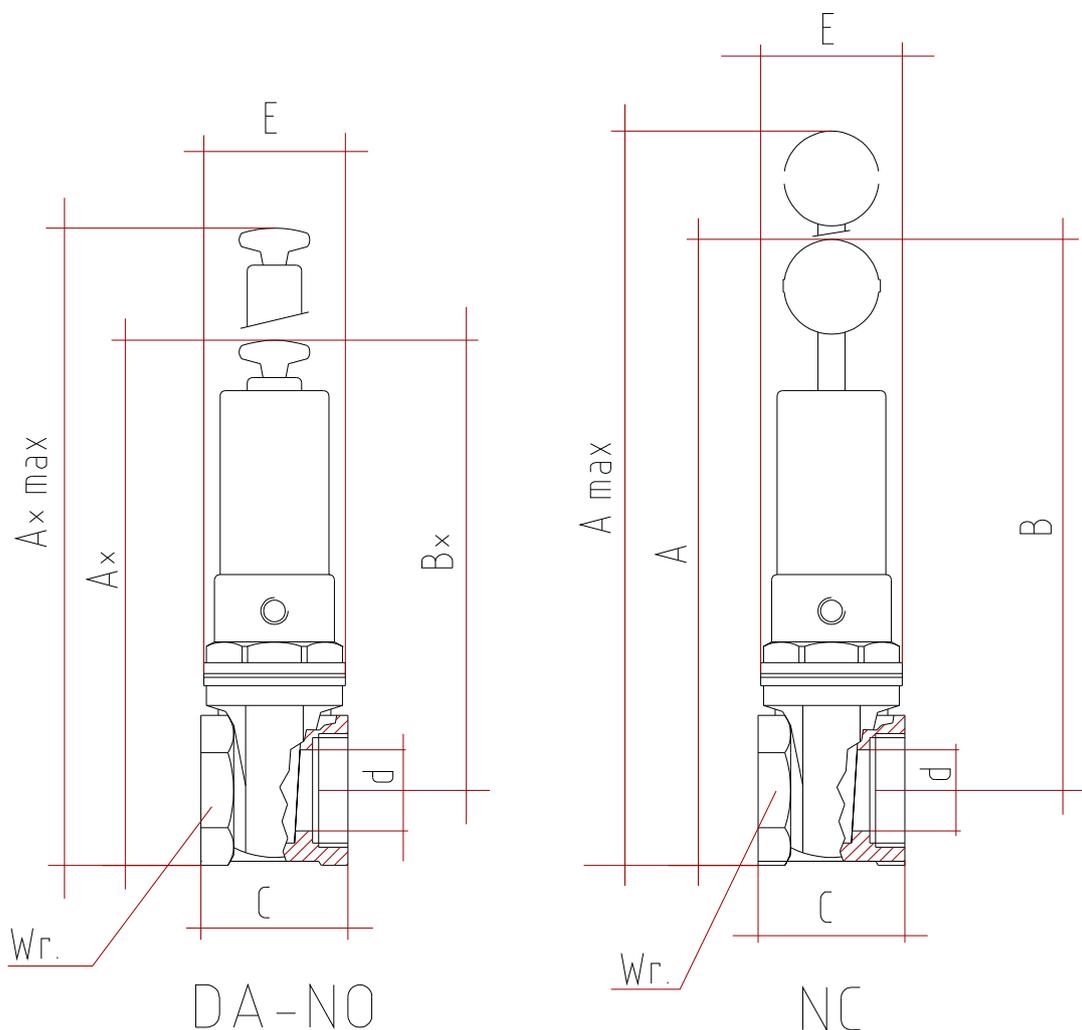


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Art. "A"



OVERALL DIMENSIONS

The dimensions with asterisk refer to DA and NO version

DN	G	A	A*	A max.	A*max	B	B*	C	d	E	Wrench	KV	Weight
mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	m3/h	gr
20	3/4"	177	163	191	177	158	138	48	19	40	34	36	540
25	1"	189	177	204	191	166	148	54	24	45	40	66	660
32	1"1/4	239	213	265	239	211	184	60	35	52	50	126	1200
40	1"1/2	243	228	268	253	211	197	64	37	57	56	180	1250
50	2"	294	280	335	316	255	241	72	47	70	69	234	1950
65	2"1/2	329	311	371	353	282	264	80	59	84	85	360	2550
80	3"	393	361	448	416	337	306	85	70	99	101	603	3850
100	4"		417		503		347	97	94	124	127	1200	6600

Art. "B" - SHUTTER GLOBE VALVE



DESCRIPTION

Valve with shutter closing.
Standard seals in NBR, in FPM or in EPDM.
On request: shutter closing with PTFE.
Perfect airtight.
Connections with inner GAS ISO 228 thread female-female.
On request: NPT connections.
Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature:
Seal in NBR/NBR : from -20°C to +100°C
Seal in FPM/FPM : from -15°C to +100°C
Seal in EPDM/EPDM: from -40°C to +100°C
Seal in PTFE/FPM: from -20°C to +100°C
Seal in PTFE/EPDM: from -40°C to +100°C

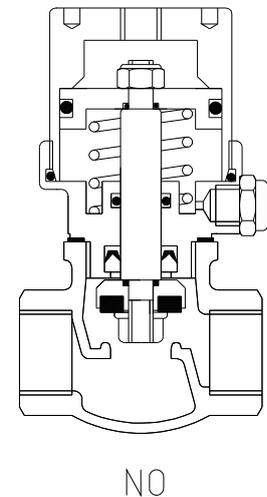
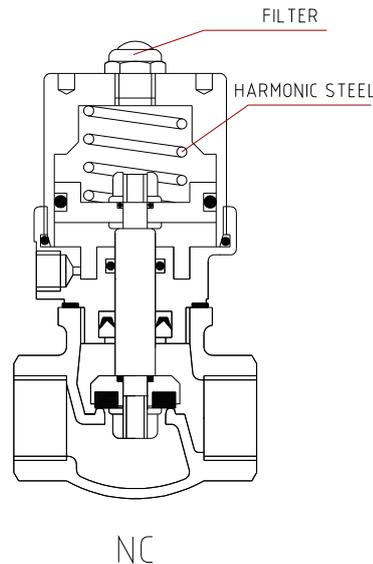
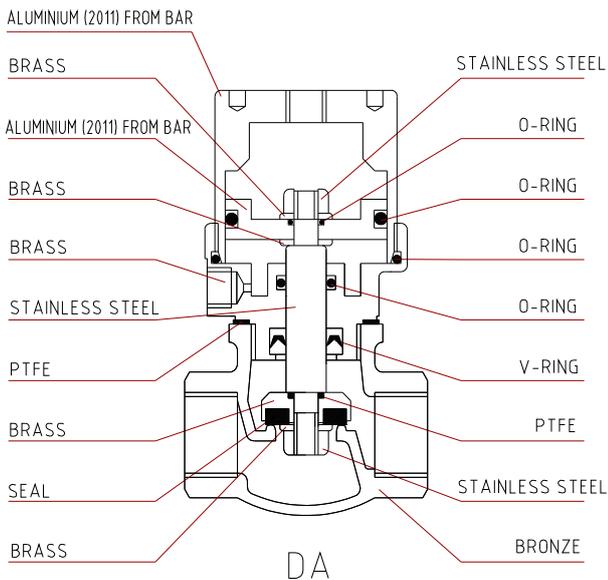
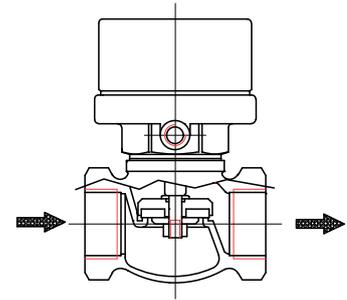
ACTUATOR PILOT PRESSURE: Max. 8 bar.

VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
SANC: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
SANO: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the shutter).
With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



Art. "B"

DIFFERENTIAL PRESSURE CHART

NC : NBR-FPM-EPDM

NC : PTFE

DA/NO : NBR-FPM-EPDM

DA/NO : PTFE

G	DeltaP bar
1/2"	8
3/4"	7
1"	7
1"1/4	5.5
1"1/2	8
2"	5

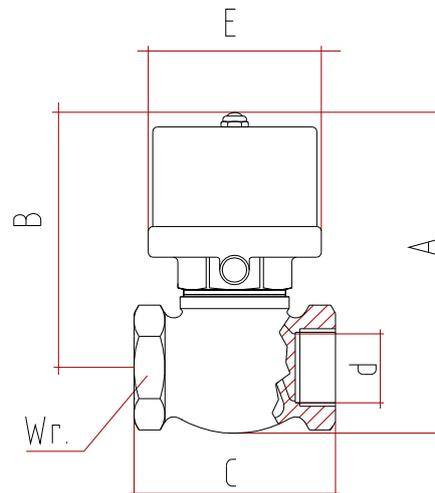
G	DeltaP bar
1/2"	8
3/4"	5
1"	6
1"1/4	4.5
1"1/2	6
2"	3.5

G	PILOT PRESS.	DeltaP bar
1/2"	4	15
1/2"	5	19
3/4"	4	10
3/4"	5	13
1"	4	18
1"	5	23
1"1/4	4	11
1"1/4	5	14
1"1/2	4	11
1"1/2	5	13
2"	4	7
2"	5	9

G	PILOT PRESS.	DeltaP bar
1/2"	4	15
1/2"	5	19
3/4"	4	8
3/4"	5	11
1"	4	15
1"	5	20
1"1/4	4	9
1"1/4	5	12
1"1/2	4	10
1"1/2	5	12
2"	4	6
2"	5	8

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/2"	3/4"	1"	1"1/4	1"1/2	2"
Bar	4.5	4.5	3.5	3.5	4	4



OVERALL DIMENSIONS

DN	G	A	B	C	d	E	Wrench	Kv	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
15	1/2"	106	86	60	17	50	27	3.4	590
20	3/4"	110	85	74	24	50	35	7.9	700
25	1"	128	98	85	30	76	46	11	1400
32	1"1/4	138	106	95	39	76	52	18	1650
40	1"1/2	166	130	110	45	89	60	28	2600
50	2"	184	139	120	55	89	72	44	3400

Art. "BHP" - SHUTTER GLOBE VALVE FOR HIGH PRESSURE



DESCRIPTION

Valve with flat shutter closing.
 Seal : PTFE/NBR and PTFE/FPM.
 The closing is carried out through the piston stem, at whose end the seal is directly applied.
 Perfect airtight .
 Reduced overall dimensions.
 The very simple construction allows high operating frequencies, high differential pressures (see chart).

Connections with inner GAS ISO 228 thread female-female.
 Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature: from -20°C to +100°C

PILOT PRESSURE: Max. 8 bar.

VERSIONS AND SIZES

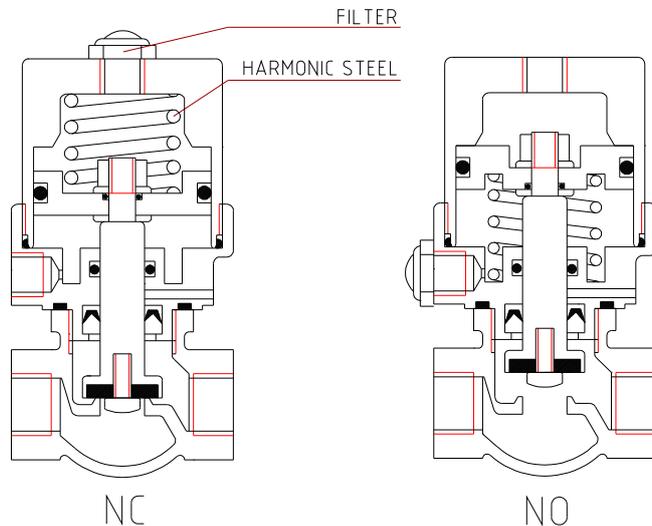
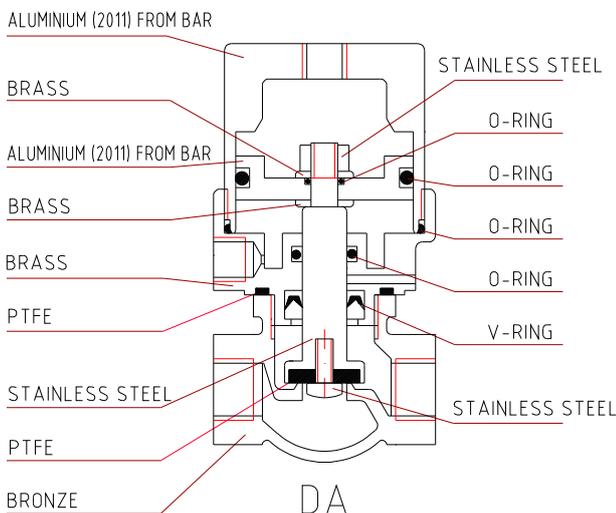
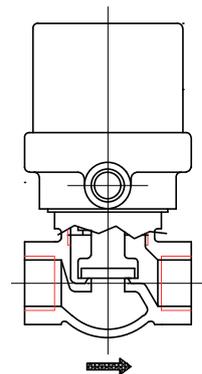
DA: 1/4" - 3/8"

SANC: 1/4" - 3/8"

SANO: 1/4" - 3/8"

ANODIZING TREATMENT ON OUTSIDE DETAILS MADE IN ALUMINIUM

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
 With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



Art. "BHP"

DIFFERENTIAL PRESSURE CHART

NC VERSION

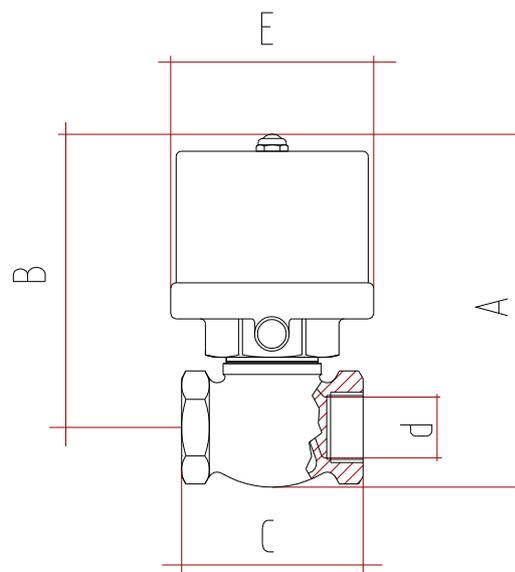
G	DeltaP bar
1/4"	21
3/8"	21

DA-NO VERSION

G	PILOT PRESS.	DeltaP bar
1/4"	2	15
"	3	25
"	4	32
3/8"	2	15
"	3	25
"	4	32

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/4"	3/8"
Bar	5	5



OVERALL DIMENSION

DN	G	A	B	C	d	E	Weight gr
6	1/4"	101	83	50	10	50	560
10	3/8"	101	83	50	10	50	560

Art. "C" - SHUTTLE VALVE WITH RIGHT-ANGLE CONNECTION



DESCRIPTION

Valve with flat shutter closing.

SEAL: NBR or FPM.

The direction of the fluid through the valve makes a deviation of 90° allowing the solution of many problems of plants. Perfect airtight.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature:

Seal in NBR: from -20°C to +100°C

Seal in FPM: from -15°C to +100°C

ACTUATOR PILOT PRESSURE: Max. 8 bar.

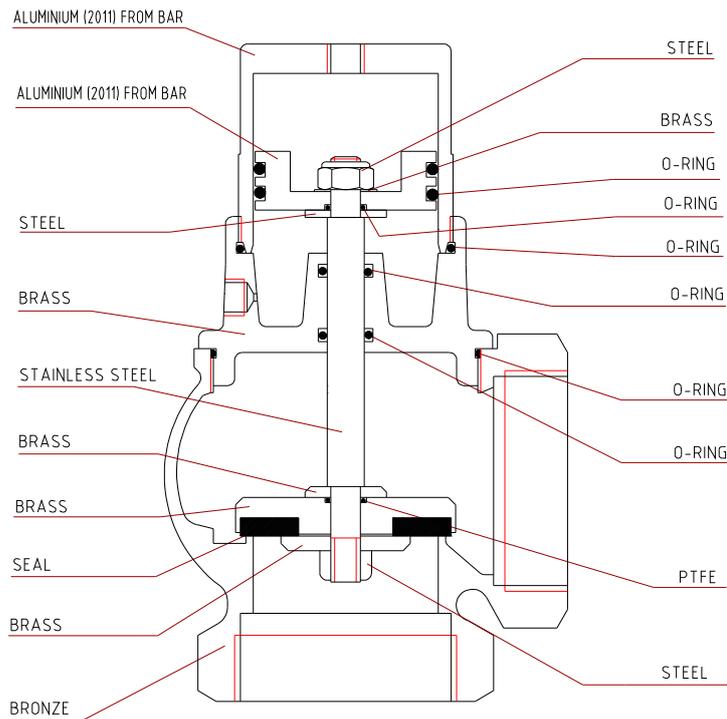
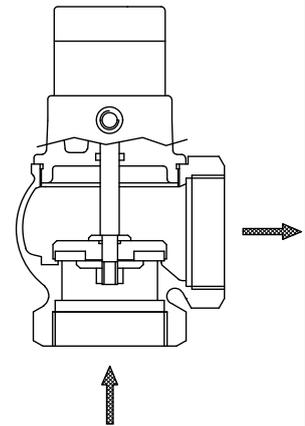
VERSIONS AND SIZES

DA: 1" 1/4 - 2" - 3"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).

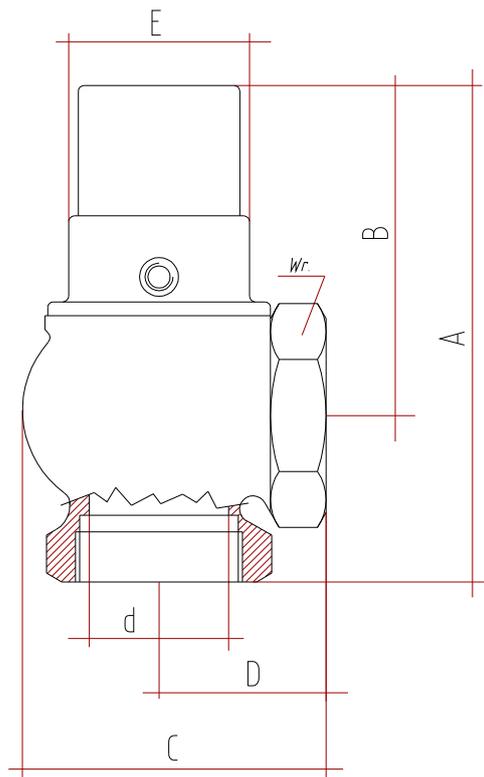
With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



Art. "C"

DIFFERENTIAL PRESSURE CHART

G	PILOT PRESS.	DeltaP bar
1"1/4	4	7
"	5	9
"	6	10.5
2"	4	4
"	5	5
"	6	6
3"	4	2.5
"	5	3
"	6	3.5



OVERALL DIMENSIONS

DN	G	A	B	C	D	E	d	Wrench	Kv	Weight
mm.		mm.	m ³ /h	gr.						
32	1"1/4	155	105	82	50	65	32	50	30	1700
50	2"	178	118	107	60	65	50	70	55	2650
80	3"	254	168	155	86	79	78	100	135	5200

Art. "T" - SHUTTER VALVE WITH RIGHT-ANGLE CONNECTION FOR LOW PRESSURE



DESCRIPTION

Valve with flat shutter closing.
SEAL: NBR or FPM.
Perfect airtight even with high operating frequencies.
Pneumatic actuator with reciprocating piston movement.
Connections with inner GAS ISO 228 thread female-female.
On request with NPT connections.
Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature:
Seal in NBR: from -20°C to +100°C
Seal in FPM: from -15°C to +100°C

ACTUATOR PILOT PRESSURE. Max 8 bar.

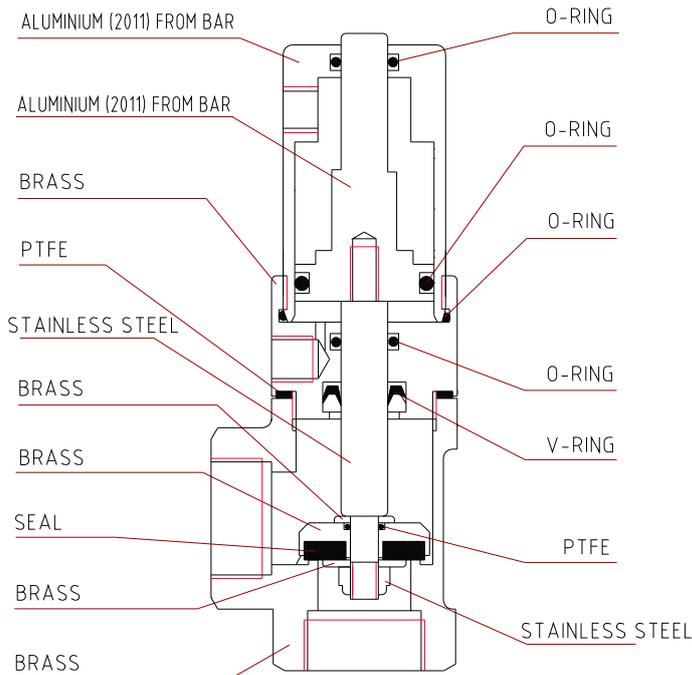
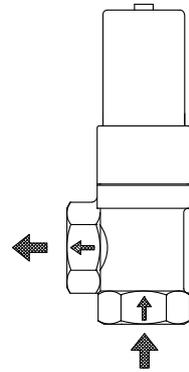
VERSIONS AND SIZES

DA: 3/4" - 1" - 1 1/4"
SANC: 3/4" - 1" - 1 1/4"

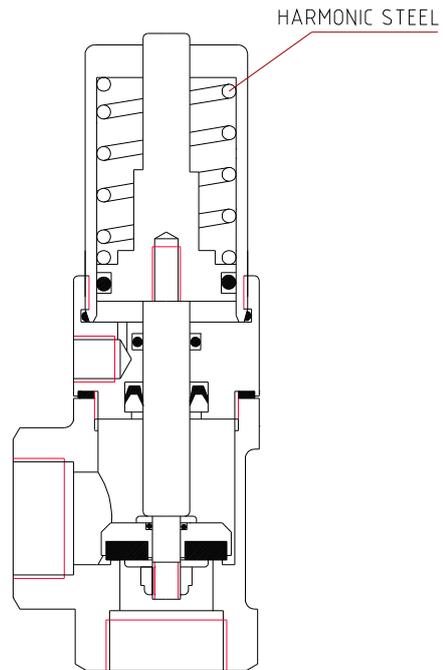
ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



DA

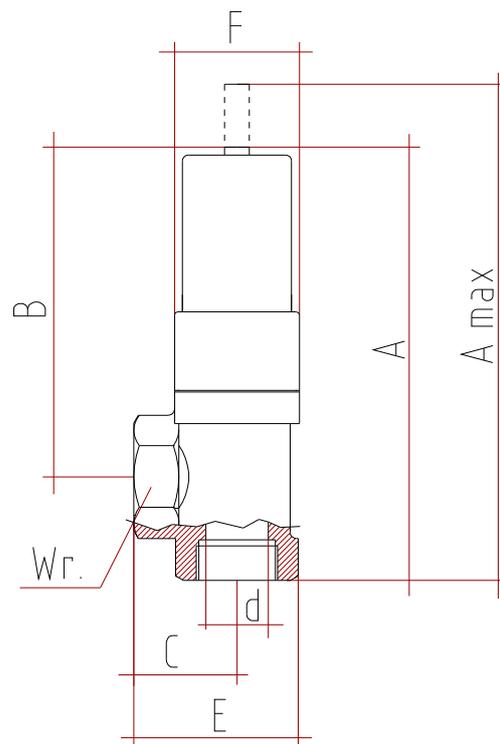


NC

Art. "T"

DIFFERENTIAL PRESSURE CHART				
NC VERSION		DA VERSION		
G	DeltaP bar	G	PILOT PRESS.	DeltaP bar
3/4"	3	3/4"	3	3.5
1"	3	3/4"	4	4.5
1"1/4	3	3/4"	5	6
		1"	3	3.5
		1"	4	4.5
		1"	5	5.5
		1"1/4	3	3
		1"1/4	4	4
		1"1/4	5	5

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION			
G	3/4"	1"	1"1/4
Bar	6	5.5	5.5



OVERALL DIMENSIONS

DN	G	A	A max	B	C	d	E	F	Wrench	Kv	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
20	3/4"	142	162	105	37	20	57	40	34	8	600
25	1"	153	173	110	43	24	66	40	40	11	750
32	1"1/4	182	210	135	47	30	76	53	50	18	1050

Art. "B3" - THREE WAY SHUTTER VALVE



DESCRIPTION

Three-way valve for distributing fluids with double actuator.
 SEAL: PTFE or FPM.
 Three-way and 2-position function (3/2).
 The seal onto the stem is made by a PTFE lipping gasket energized with stainless steel spring.
 Perfect airtight.
 Pneumatic actuator with reciprocating piston movement.
 It is equipped with a POSITIONING RING NUT, which, turning the cylinder by 360°, allows the desired positioning of the air side connection.
 Connections with inner GAS ISO 228 thread female-female.
 Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature: -20°C +180°C

PILOT PRESSURE: Max. 8 bar.

VERSIONS AND SIZES

SA: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"

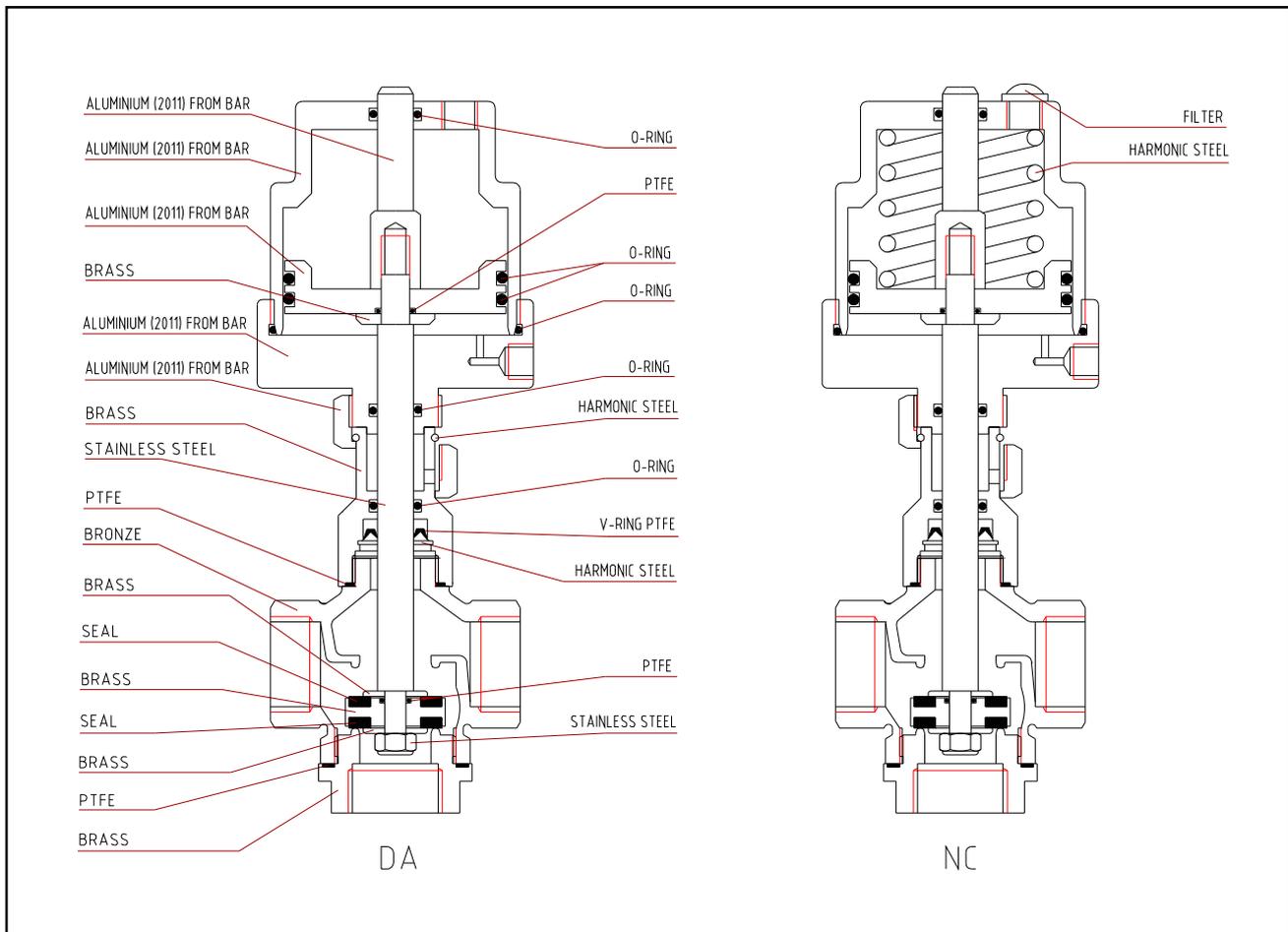
DA: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

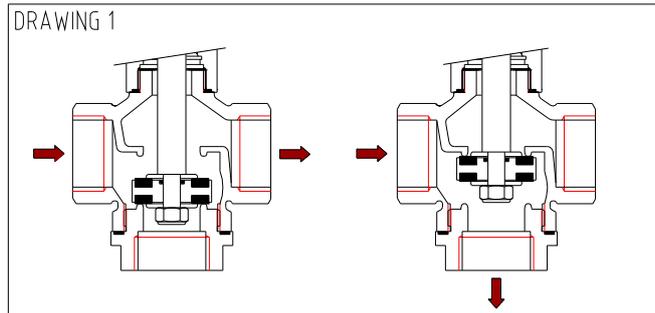
MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
BAR	4	4	4	4	4	4

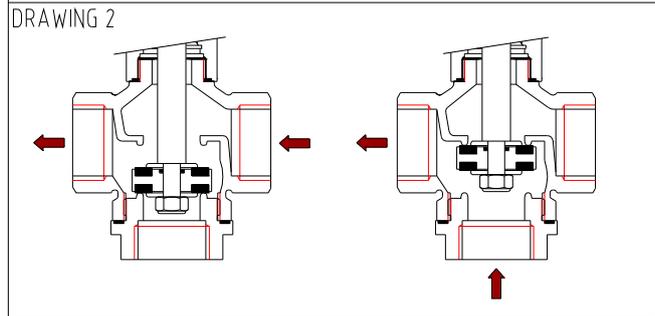


Art. "B3"

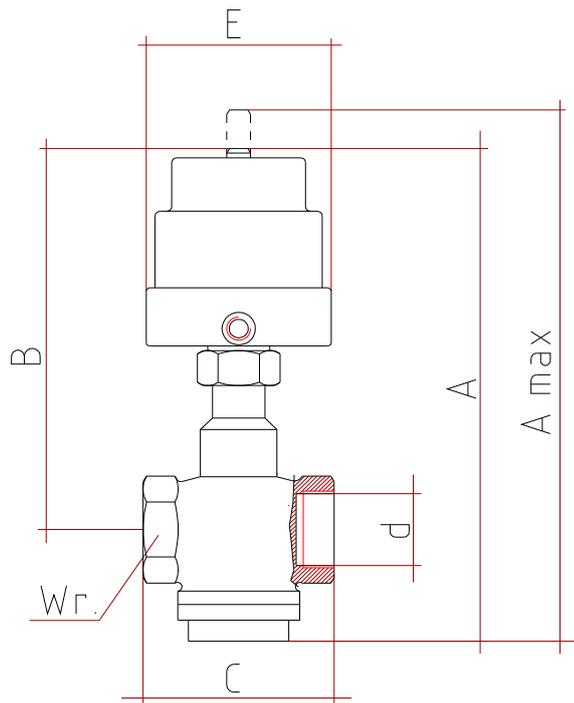
DEVIATION: the fluid must cross the valve in the direction of the arrow printed on the body, as shown in drawing 1.



BLENDING: the fluid must cross the valve in the opposite direction of the arrow printed on the body, as shown in drawing 2.



OVERALL DIMENSIONS



DN	G	A	A max	B	C	d	E	Wrench	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	mm.	gr.
15	1/2"	196	203	157	60	15	78	27	1150
20	3/4"	201	209	159	70	20	78	32	1280
25	1"	208	218	160	80	25	78	41	1450
32	1"1/4	231	242	176	96	32	99	50	2650
40	1"1/2	244	260	185	103	40	99	56	2820
50	2"	259	280	192	130	50	99	70	3700

Art. "C3" - THREE WAY SHUTTER VALVE FOR VACUUM-VACUUM BREAKER



DESCRIZIONE

Intercepting valve purposely conceived to suddenly break the vacuum in the system (i.e. release of suction cups).

Pneumatic actuator with reciprocating piston movement.

Flat shutter closing with double seal in NBR.

Three-way and 2-position function (3/2).

Perfect airtight.

SECTORS OF USE

It is generally used for vacuum (wrapping machines, material handling by suction caps).

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature: from -20°C to +100°C

ACTUATOR PILOT PRESSURE: Max 8 bar.

VERSIONS AND SIZES

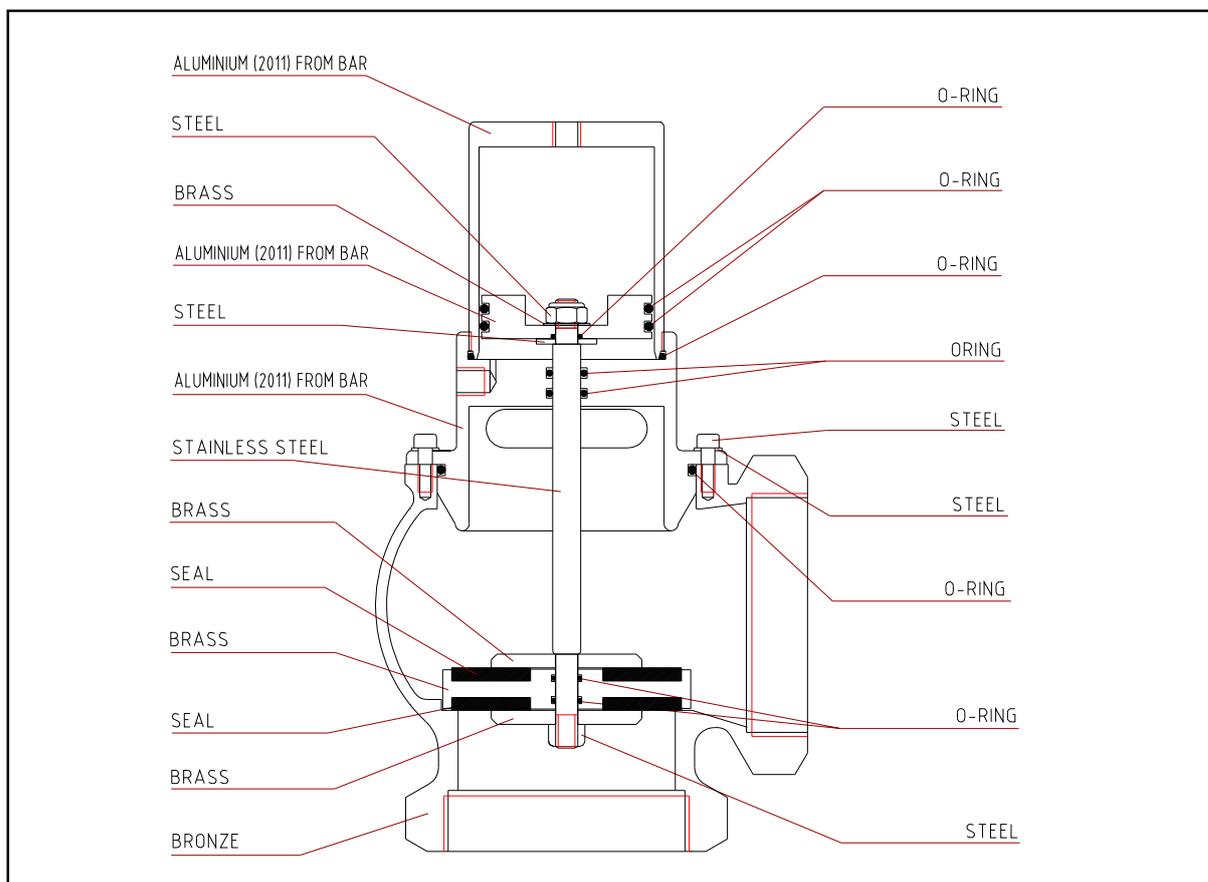
DA: 1/2" - 1"1/4 - 2" - 3"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

SLOTTED HOLE OPENING FOR VACUUM OUTLET

G	1/2"	1"1/4	2"	3"
Cm ²	1,13	8,6	12,6	19,5



Art. "C3"

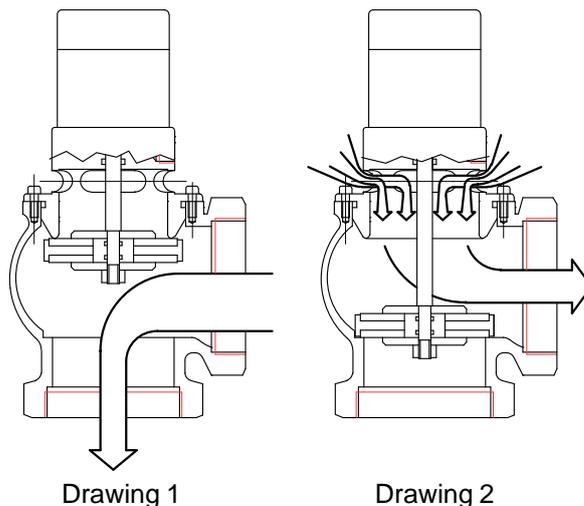
OPERATION

When the valve is open (drawing 1) the vacuum can be created and kept inside the unit, the arrow indicates the passage from the unit to the suction pump.

When the valve is closed (drawing 2), vacuum can be exhausted through the holes of the central body, the arrows indicate the air passage from outside towards the unit.

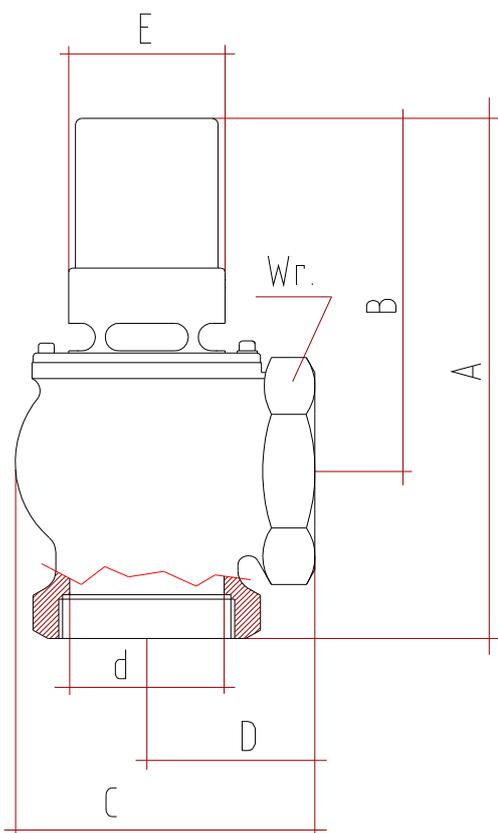
ASSEMBLY

The direction of vacuum flow must be as shown in drawing 1, i.e. OPPOSITE to the arrow printed into the valve body.



Drawing 1

Drawing 2



OVERALL DIMENSIONS

DN	G	A	B	C	D	E	d	Wrench	Weight
mm.		mm.	gr.						
15	1/2"	121	89	52	32	50	15	27	500
32	1"1/4	173	124	82	49	65	32	50	1350
50	2"	195	134	110	61	65	50	70	2350
80	3"	264	179	155	85	79	78	100	4920

Art. "D" - SHUTTLE ANGLE VALVE



DESCRIPTION

Valve with flat shutter closing.
 Seal: NBR - FPM - EPDM - PTFE (PTFE+FPM).
 Perfect airtight.
 Pneumatic actuator with reciprocating piston movement.
 POSITIONING RING NUT, which, turning the cylinder by 360°, allows the desired positioning of air side connection.

Connections with inner GAS ISO 228 thread female-female.

On request with NPT connections.

Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature:
 Seal in NBR: from -20°C to +100°C
 Seal in FPM: from -15°C to +150°C
 Seal in EPDM: from -40°C to +100°C

ACTUATOR PILOT PRESSURE: Max 8 bar

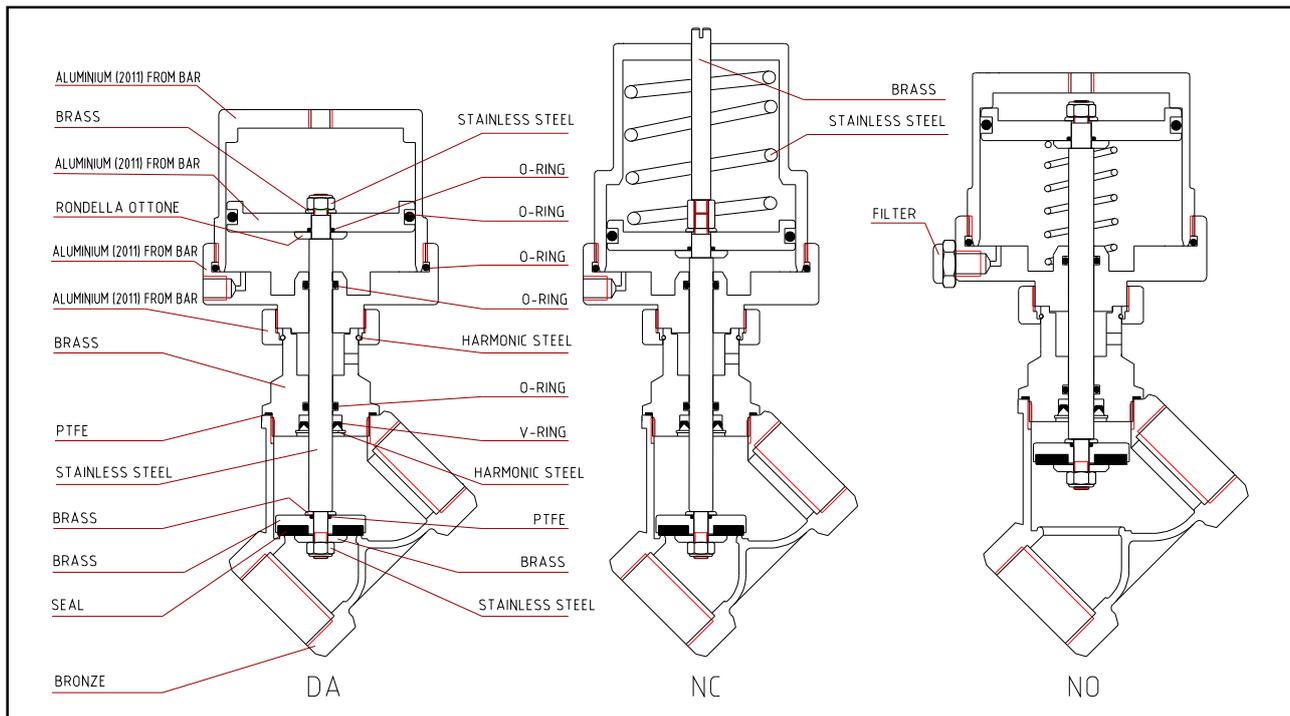
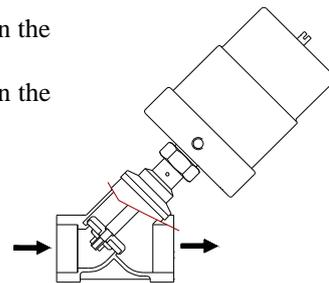
VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" - 3"
 SANC: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2" - 2 1/2" - 3"
 SANO: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
 MADE IN ALUMINIUM**

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
 With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION								
G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
BAR	4	4	5	5	5	5	5	5



SUBJECT TO MODIFICATIONS WITHOUT NOTICE
 Please refer yourselves to the section of the INSTRUCTIONS,
 that are integral part of our Catalogue.

Art. "D"

DIFFERENTIAL PRESSURE CHARTE

NC : NBR-FPM-EPDM

NC : PTFE

DA/NO : NBR-FPM-EPDM

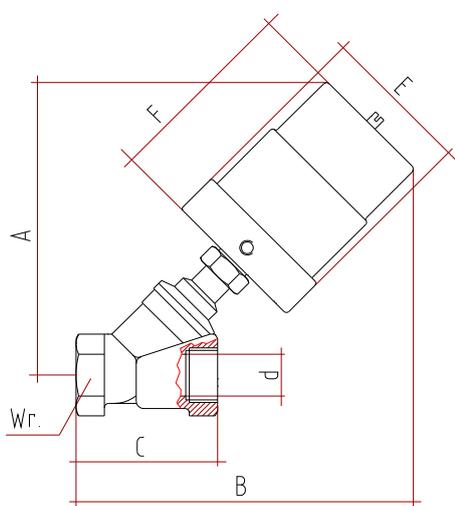
DA/NO : PTFE

G	DeltaP bar
1/2"	24
3/4"	20
1"	18
1"1/4	18
1"1/2	15
2"	9
2"1/2	4
3"	3

G	DeltaP bar
1/2"	22
3/4"	20
1"	16
1"1/4	15
1"1/2	13
2"	7
2"1/2	3
3"	2

G	PILOT PRESS.	DeltaP bar
1/2"	3	14
1/2"	4	20
3/4"	3	13
3/4"	4	19
1"	3	10
1"	4	18
1"1/4	3	15
1"1/4	4	20
1"1/2	3	12
1"1/2	4	15
2"	3	8
2"	4	10
2"1/2	4	6
2"1/2	5	8
3"	4	4
3"	5	6

G	PILOT PRESS.	DeltaP bar
1/2"	3	12
1/2"	4	18
3/4"	3	11
3/4"	4	16
1"	3	8
1"	4	15
1"1/4	3	12
1"1/4	4	18
1"1/2	3	10
1"1/2	4	13
2"	3	7
2"	4	9
2"1/2	4	5
2"1/2	5	7
3"	4	3
3"	5	5



OVERALL DIMENSIONS DA/NO VERSIONS

DN	G	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		mm.	m3/h	g.						
15	1/2"	126	145	61	15	65	76	27	4.5	850
20	3/4"	132	152	70	20	65	76	33	11	900
25	1"	134	157	81	25	65	76	38	13	1000
32	1"1/4	167	195	95	32	100	83	49	30	1650
40	1"1/2	174	202	110	40	100	83	56	42	2100
50	2"	186	222	130	50	100	83	69	66	2950
65	2"1/2	220	230	149	65	100	86	86	82	5200
80	3"	228	248	174	80	100	86	110	98	6150

OVERALL DIMENSIONS NC VERSION

DN	G	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		mm.	m3/h	g.						
15	1/2"	134	153	61	15	77	86	27	4.5	1180
20	3/4"	140	160	70	20	77	86	33	11	1200
25	1"	142	165	81	25	77	86	38	13	1400
32	1"1/4	183	211	95	32	100	111	49	30	2400
40	1"1/2	191	219	110	40	100	111	56	42	2820
50	2"	203	239	130	50	100	111	69	66	3680
65	2"1/2	239	244	149	65	100	114	86	82	5500
80	3"	247	263	174	80	100	114	110	98	6350

Art. "DV" - SHUTTER ANGLE VALVE FOR STEAM AND HIGH TEMPERATURE



DESCRIPTION

Angle valve at 45° with flat shutter closing .
 SEAL: PTFE.
 Seal in PTFE **energized** with stainless steel spring on the stem.
 Special gaskets for high temperature on the pneumatic side.
 Perfect airtight. Long life even with high operating frequencies.
 Pneumatic actuator with reciprocating piston movement.
 It is equipped with a **NUT** which, turning the cylinder by 360°, allows the desired positioning of air side connection.
 Connections with inner GAS ISO 228 thread female-female.
 On request with NPT connections.
 Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Operating temperature: from -20°C to +200°C
ACTUATOR PILOT PRESSURE. Max 8 bar.

For steam please refer to the Differential pressure and Saturated Steam Charts.

VERSIONS AND SIZES

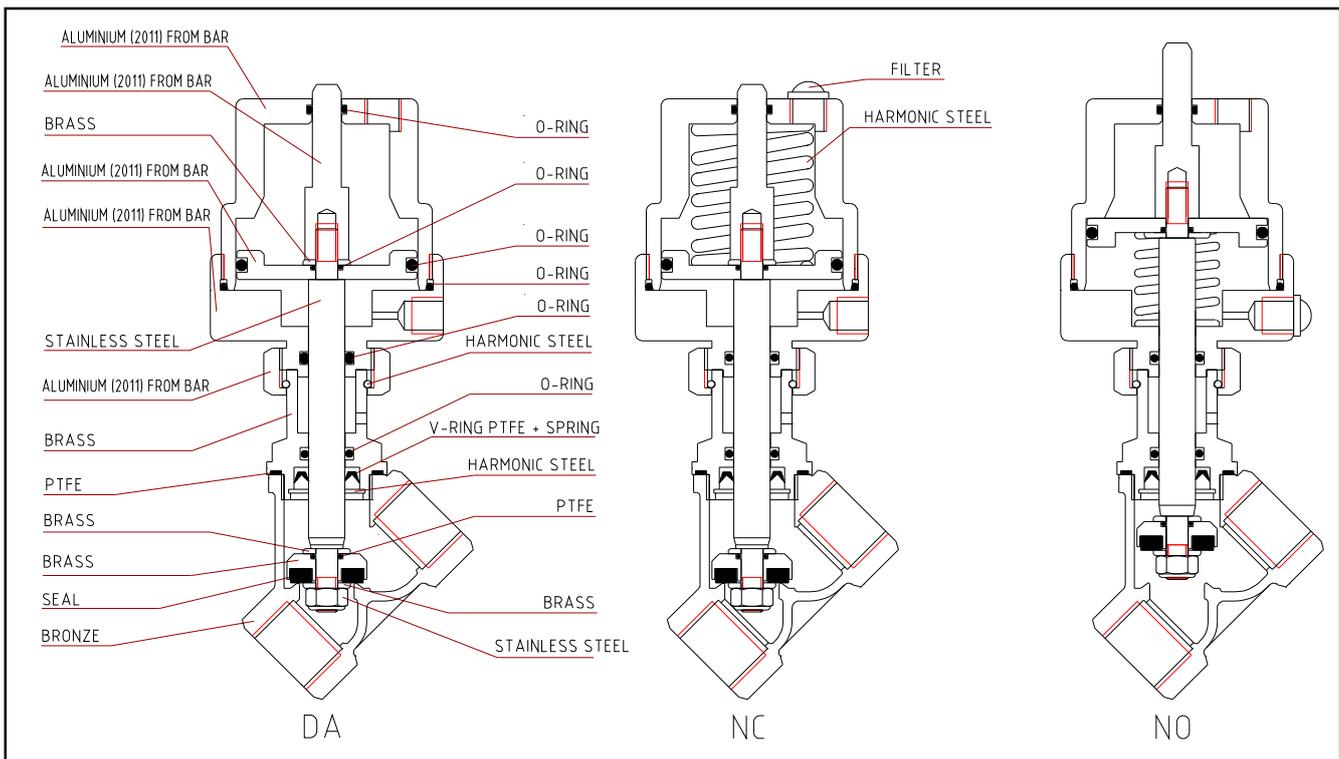
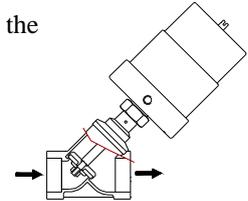
DA: 1/2" - 3/4" - 1"
 SANC: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3"
 SANO: 1/2" - 3/4" - 1"

ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
 With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"
BAR	4	4	5	5	5	5	5	5



Art. "DV"

SATURATED STEAM CHART

MANOMETER PRESSURE bar	TEMP. C°
0	100
1	120
2	134
3	144
4	152
5	159
6	165
7	170
8	175
9	180
10	184
11	188
12	192
13	195
14	198
15	201
16	204
17	207
18	210
19	212
20	215

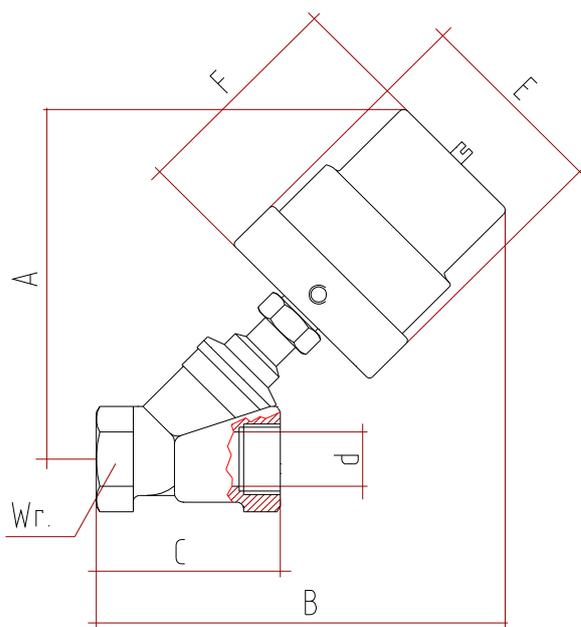
DIFFERENTIAL PRESSURE CHART

NC VERSION

G	DeltaP bar
1/2"	20
3/4"	12
1"	13
1"1/4	20
1"1/2	15
2"	9
2"1/2	4
3"	3

DA/NO VERSIONS

G	PRESS. PILOTA	DeltaP bar
1/2"	4	18
1/2"	5	23
3/4"	4	16
3/4"	5	22
1"	4	15
1"	5	20



OVERALL DIMENSIONS

DN	G	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		mm.	m3/h	gr.						
15	1/2"	118	136	61	15	64	67	27	4.5	780
20	3/4"	124	144	70	20	64	67	33	11	920
25	1"	131	154	81	25	78	73	38	13	1180
32	1"1/4	183	210	95	32	100	111	49	30	2460
40	1"1/2	191	219	110	40	100	111	56	42	2900
50	2"	203	239	130	50	100	111	69	66	3760
65	2"1/2	238	243	149	65	119	115	86	82	5680
80	3"	245	262	174	80	119	115	110	98	7000

Art. "Y" - SHUTTER ANGLE VALVE FOR LOW PRESSURE

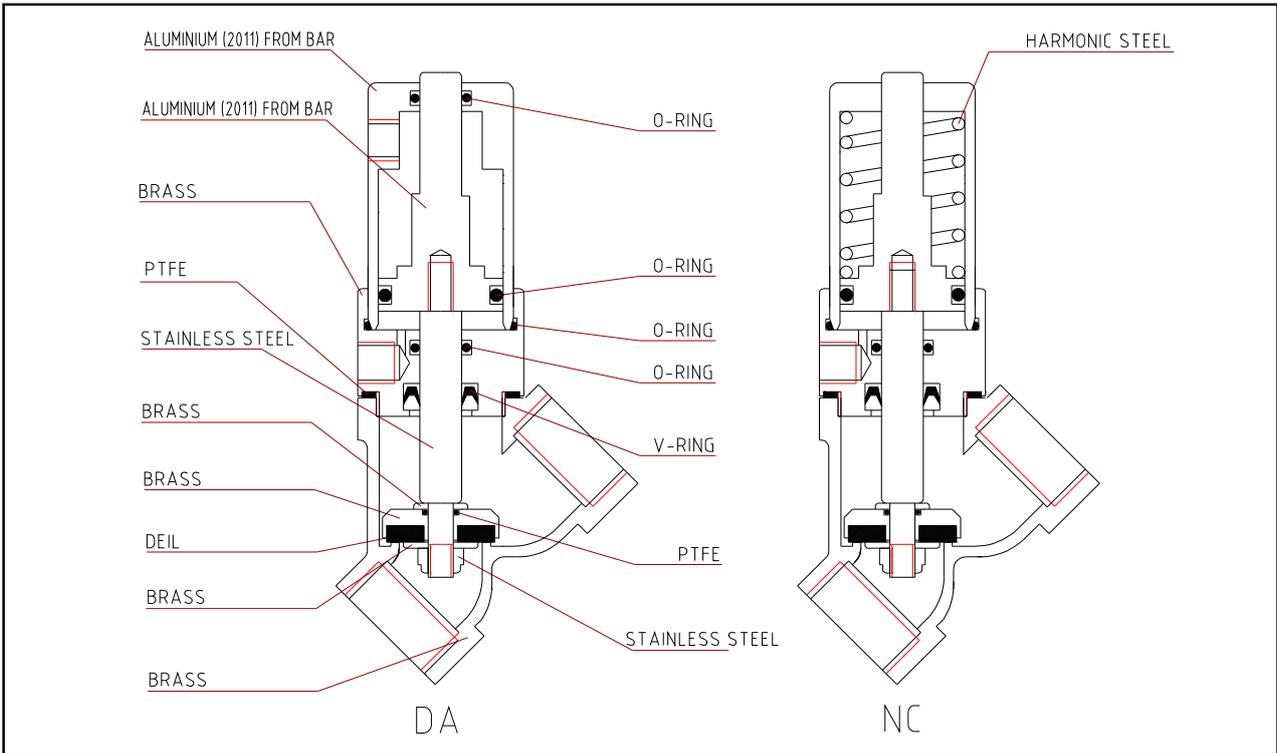
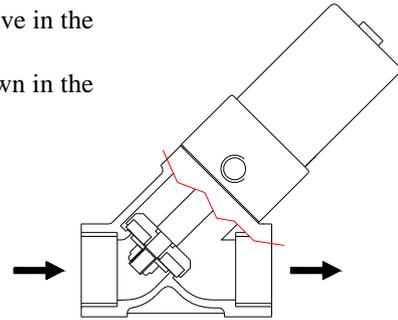


DESCRIPTION
 Valve with flat shutter closing.
 SEAL: NBR - FPM - EPDM.
 Perfect airtight even with high operating frequencies.
 Actuator with reciprocating piston movement.
 Connections with inner GAS ISO 228 thread female-female.
 On request with NPT connections.
 Control air 1/8" GAS connections.
ALLOWABLE TEMPERATURES
 Operating temperature:
 Seal in NBR: from -30°C to +100°C
 Seal in FPM: from -15°C to +100°C
 Seal in EPDM: from -40°C to +100°C
ACTUATOR PILOT PRESSURE: Max 8 bar.
VERSIONS AND SIZES
 DA: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"
 SANC: 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"
ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
 With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.

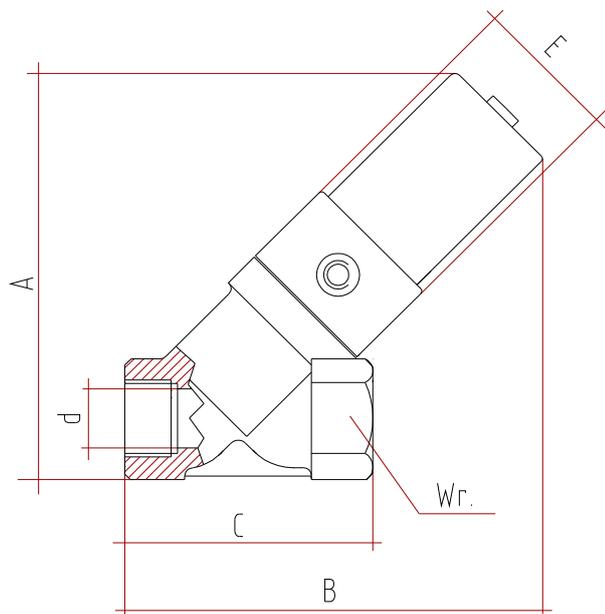
MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Bar	6	6	5.5	5.5	5.5	5.5



Art. "Y"

DIFFERENTIAL PRESSURE CHART				
NC		DA		
G	DeltaP bar	G	PILOT PRESS.	DeltaP bar
1/2"	4	1/2"	4	9.5
3/4"	3	1/2"	5	12
1"	3	3/4"	4	4.5
1"1/4	3	3/4"	5	6
1"1/2	3	1"	4	4.5
2"	1.5	1"	5	5.5
		1"1/4	4	4
		1"1/4	5	5
		1"1/2	4	4
		1"1/2	5	5
		2"	4	2
		2"	5	2.5



OVERALL DIMENSIONS

DN	G	A	B	C	d	E	Wrench	Kv	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
15	1/2"	93	107	59	16	40	27	4.5	500
20	3/4"	99	118	70	22	40	33	11	650
25	1"	102	121	74	27	40	38	13	680
32	1"1/4	127	156	95	32	52	49	30	1200
40	1"1/2	157	185	108	40	58	56	42	1800
50	2"	171	205	129	50	70	69	66	2400

Art. "PET"- SHUTTER ANGLE VALVE IN STAINLESS STEEL AISI 316 FOR HIGH PRESSURE



DESCRIPTION

Valve with flat shutter closing.
The closing is carried out through the piston stem, at whose end the virgin PTFE seal is directly applied, therefore the stem becomes also closing shutter.
The body valve is made in stainless steel AISI 316.
Pneumatic actuator with reciprocating piston movement,
Its very simple construction and the components employed guarantee a long life, high differential pressure even with the high operating frequencies.
Perfect airtight.
It is manufactured only in DOUBLE ACTING version.

The spring inside has only the purpose to cushion the opening when high pressure is intercepted.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/4" GAS connection.

ALLOWABLE TEMPERATURES
Operating temperature: from -20°C to +100°C

PILOT PRESSURE: Max 8 bar.

VERSIONS AND SIZES

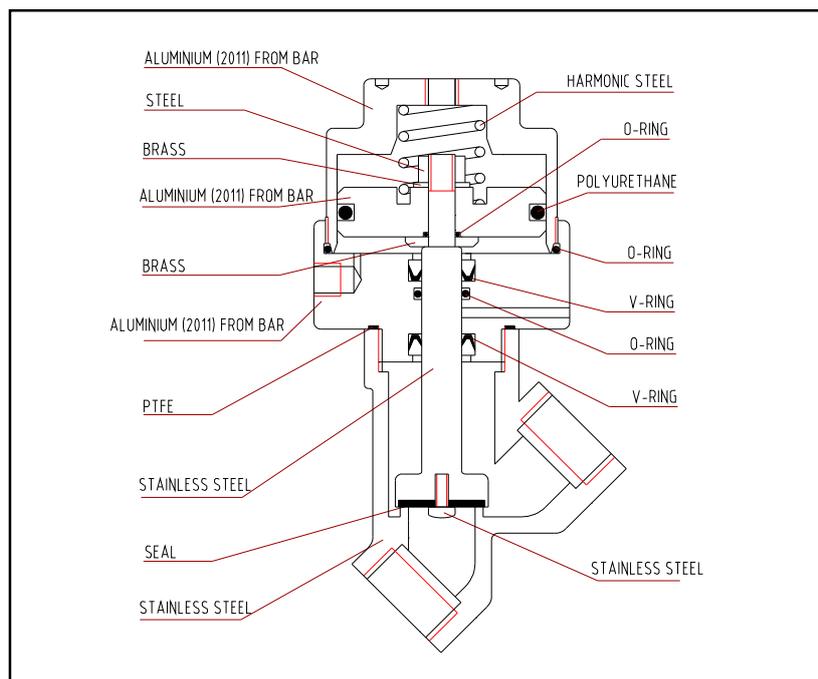
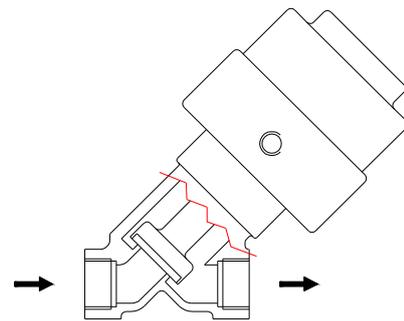
DA: 1/2" - 3/4"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

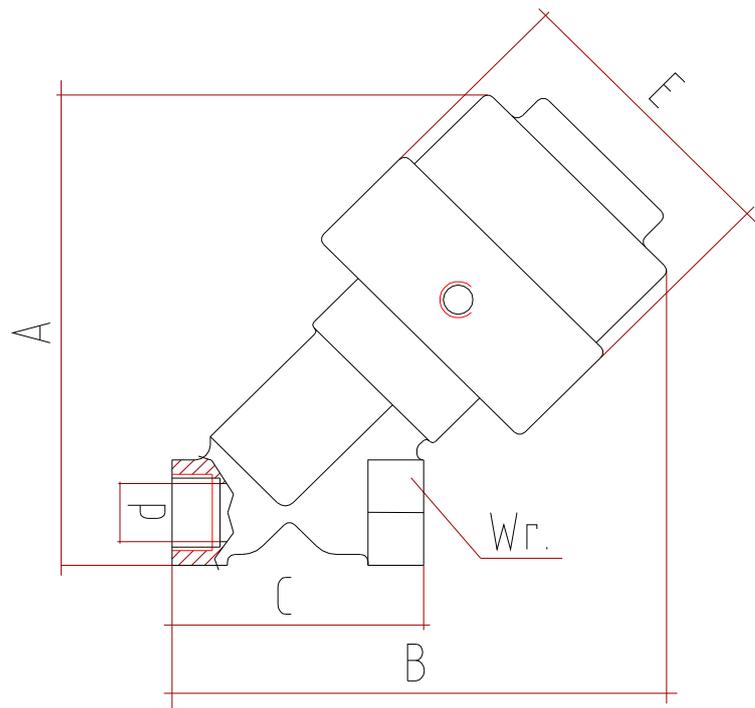
It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).

With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



Art. "PET"

DIFFERENTIAL PRESSURE CHART		
PILOT PRESS.	DeltaP bar	DeltaP bar
bar	1/2"	3/4"
2	27	
2.5	32	
3	36	21
3.5	42	24
4		28
5		35
6		42



OVERALL DIMENSIONS

DN	G	A	B	C	d	E	Wrench	Weight
		mm.	mm.	mm.	mm.	mm.	mm.	gr.
15	1/2"	129	136	68	15	77	29	1100
20	3/4"	136	139	79	20	77	38	1300

Art. "AX" - SHUTTER ANGLE VALVE IN STAINLESS STEEL FOR STEAM AND HIGH TEMPERATURE



DESCRIPTION

Angle valve at 45° with flat shutter closing.
SEAL SYSTEM: PTFE.
 Seal **AUTOENERGIZED** (PTFE+SPRING) on the stem.
 Special gaskets for high temperature on the pneumatic side.
The valve body and all parts into contact with fluid are in AISI 316 stainless steel.
 Perfect airtight. Long life also with high operating frequencies.
 Pneumatic actuator with reciprocating piston movement.
 It is equipped with a NUT which, turning the cylinder by 360°, allows the desired positioning of air side connection.
 Connections with inner GAS ISO 228 thread female-female.
 Control air 1/8" GAS connection.

ALLOWABLE TEMPERATURES

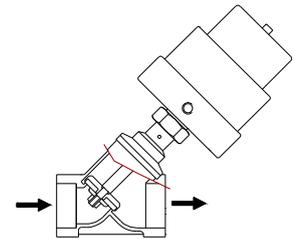
Operating temperature: from -20°C to + 200°C.
For steam please refer to the Differential Pressure and Saturated Steam Charts.
ACTUATOR PILOT PRESSURE: Max 8 bar.

VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
 SANC: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
 SANO: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

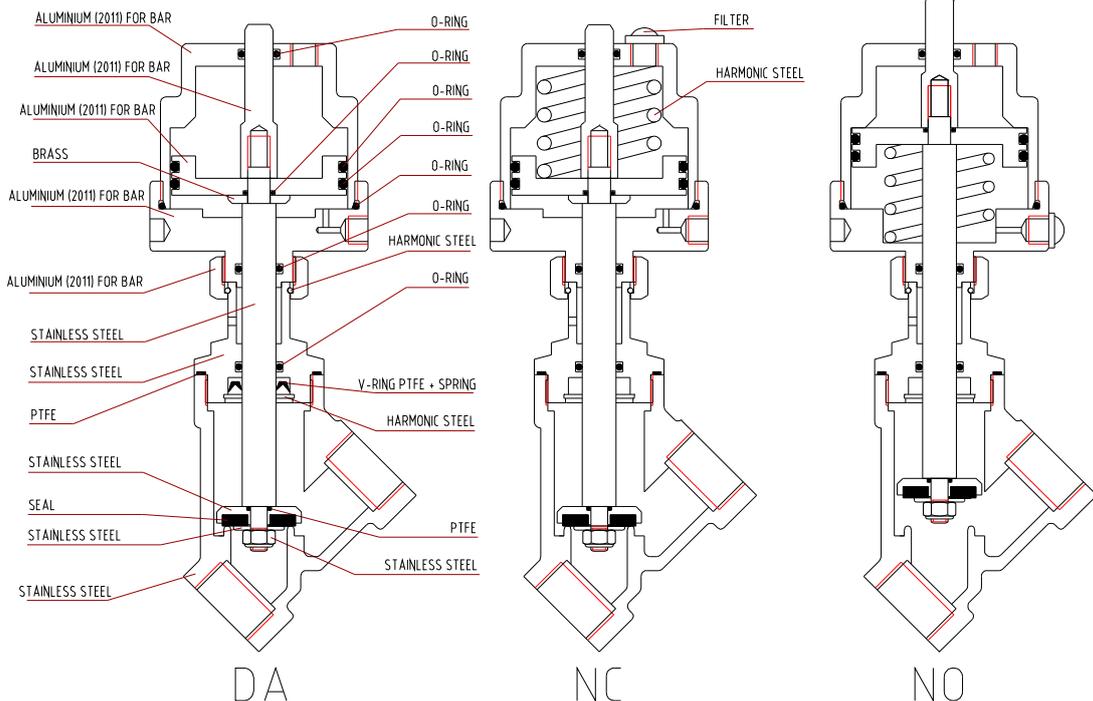
**ANODIZING TREATMENT ON OUTSIDE DETAILS
 MADE IN ALUMINIUM.**

It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator).
 With these conditions the tightness is guaranteed up to the pressures shown in the Differential Pressure Chart.



MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/2"	3/4"	1"	1"1/4	1"1/2"	2"
BAR	4,5	4,5	4,5	5	5	5



Art. "AX"

SATURATED STEAM CHARTE

MANOMETER PRESSURE bar	TEMP. C°
0	100
1	120
2	134
3	144
4	152
5	159
6	165
7	170
8	175
9	180
10	184
11	188
12	192
13	195
14	198
15	201
16	204
17	207
18	210
19	212
20	215

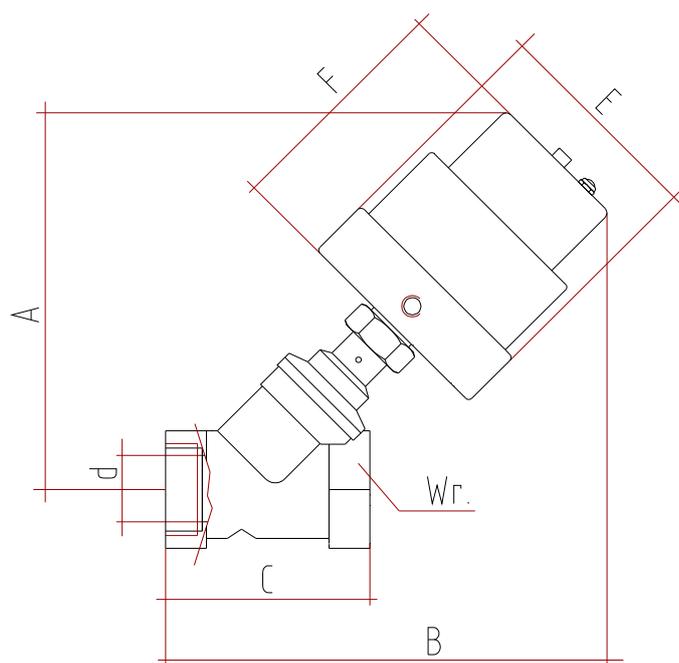
DIFFERENTIAL PRESSURE CHART

NC VERSION

G	DeltaP bar
1/2"	21
3/4"	15
1"	13
1"1/4	20
1"1/2	15
2"	9

DA/NO VERSION

G	PRESS. PILOTA bar	DeltaP bar
1/2"	4	18
1/2"	5	23
3/4"	4	16
3/4"	5	22
1"	4	15
1"	5	20
1"1/4	4	16
1"1/4	5	20
1"1/2	4	12
1"1/2	5	15
2"	4	9
2"	5	11



OVERALL DIMENSIONS

DN mm.	G	A mm.	B mm.	C mm.	d mm.	E mm.	F mm.	Wrench mm.	Kv m ³ /h	Weight gr.
15	1/2"	150	166	68	15	77	74	29	4.5	1380
20	3/4"	153	172	80	20	77	74	38	11	1560
25	1"	153	172	95	25	77	74	42	13	1720
32	1"1/4	197	224	110	32	100	113	52	30	3200
40	1"1/2	200	231	120	40	100	113	60	42	3800
50	2"	202	235	140	50	100	113	72	66	4400

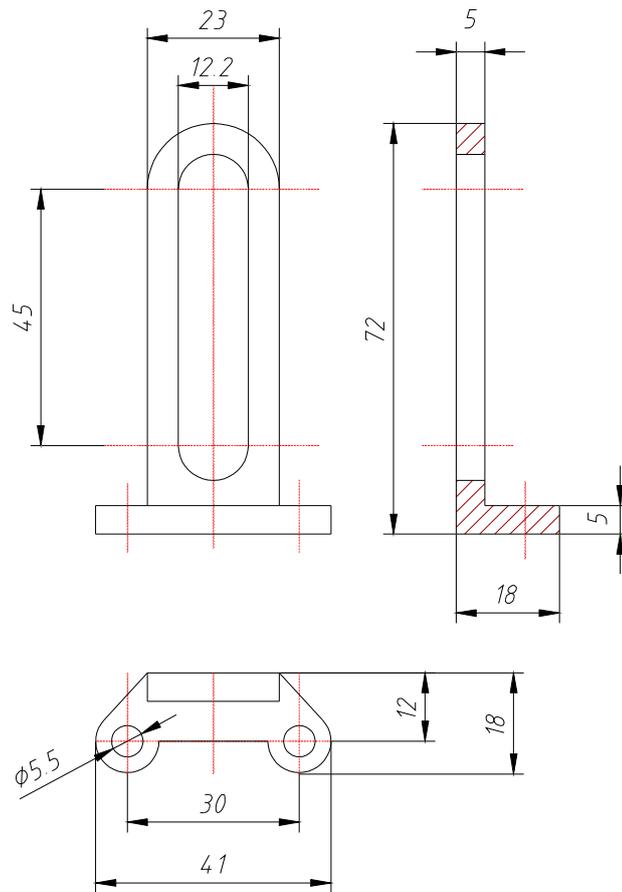
**PROXIMITY AND ELECTROMECHANICAL SWITCH
FOR SHUTTER AND ANGLE VALVES**

The shutter and angle valves, only in the SANC version (normally closed), can be equipped with electromechanical and proximity switches using the special kit. The gate valves of the series “A” are excluded.



It is **NOT** possible to assembly switches in valves already installed because the actuators are not arranged in advance.

MOUNTING BRACKET KIT FOR SWITCHES



INFO

OUR BALL AND BUTTERFLY VALVES ARE EQUIPPED WITH OUR ROTARY ACTUATORS.

ROTARY ACTUATORS

The **VALVAUT** rotary actuator, studied to allow 90° rotations and therefore to operate the opening and the closing of the ball and butterfly valves.

The main feature of this patented actuator, unique of its kind, is that of consisting of two independent sections:

- **pneumatic reciprocating unit (upper part)** made from the cylinder-piston unit which is built in two different versions: double acting (DA) and single acting (SA).
- **rotary unit (lower part)** made from the guide-helicoids unit directly connected to the valve.

Movement is transformed from reciprocating into rotary by means of a helicoids-cross kinematics motion, which allows to have high torques, also with very reduced overall dimensions.

This original manufacture solution allows:

- to have the actuator equipped with a **POSITIONING RING NUT**, that, turning the upper part (pneumatic unit) by 360°, allows the desired positioning of air side connection (not foreseen in the actuator type 1155).
- to have a high heat loss.
- to pass quickly from the version D.A. to the version S.A. only replacing the pneumatic unit.

Moreover, the **VALVAUT** rotary actuator can be equipped with optional accessories to make valves more versatile: proximity switches, lever for manual working, slotted hole protection ring.

The coupling valve-actuator, already prearranged at the factory, assures always an exact and accurate intervention. Adequate materials and special treatments guarantee a long life of the product.

All the outside details in aluminium, are anodized.

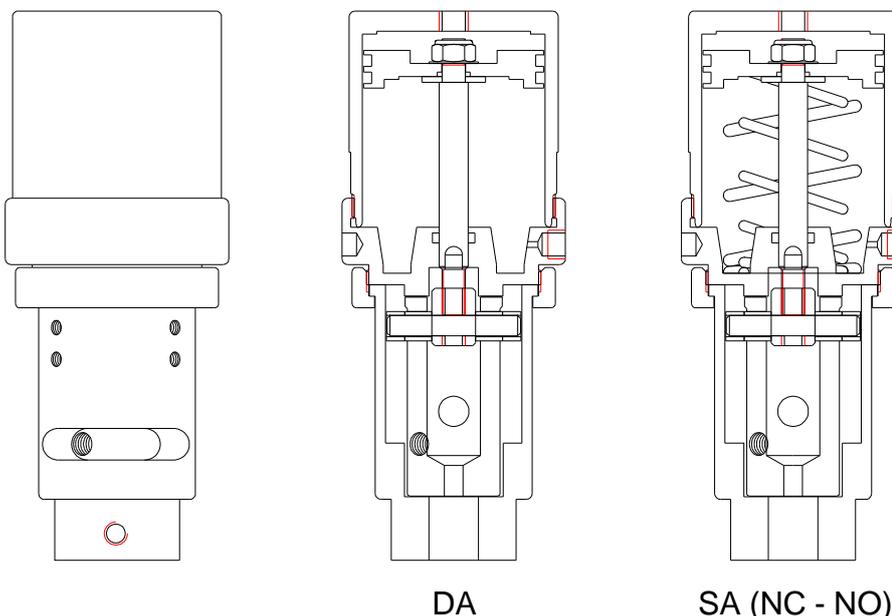
The **VALVAUT** rotary actuator has some specific and original features:

- 1 - HIGH TORQUES.
- 2 - GREAT VERSATILITY OF USE.
- 3 - ACCURACY AND POWER OF INTERVENTION.

There are no connecting brackets between valve and actuator, the valve pin is perfectly centered and the helicoid allows to follow the rotary movement without any constraint.

Moreover, the rotary movement is carried out metal on metal, not on rubber parts, present only in the reciprocating movement.

- 4 - EASY INSTALLATION AND MAINTENANCE.
- 5 - MAINTENANCE REDUCED TO A MINIMUM.



INFO

TORQUE OF DOUBLE ACTING ROTARY ACTUATORS

(1Nm = 0,102 Kgfm - 1 Kgfm = 9,81 Nm)

ACTUATOR		bar					
type		3	4	5	6	7	8
DE 5002	Nm	8	11	15	18	21	24
DE 6302	"	14	17	20	22	27	30
DE 8003	"	37	51	63	75	82	88
DE 1004	"	55	77	94	103	109	114
DE 1155	"	80	106	134	158	177	200

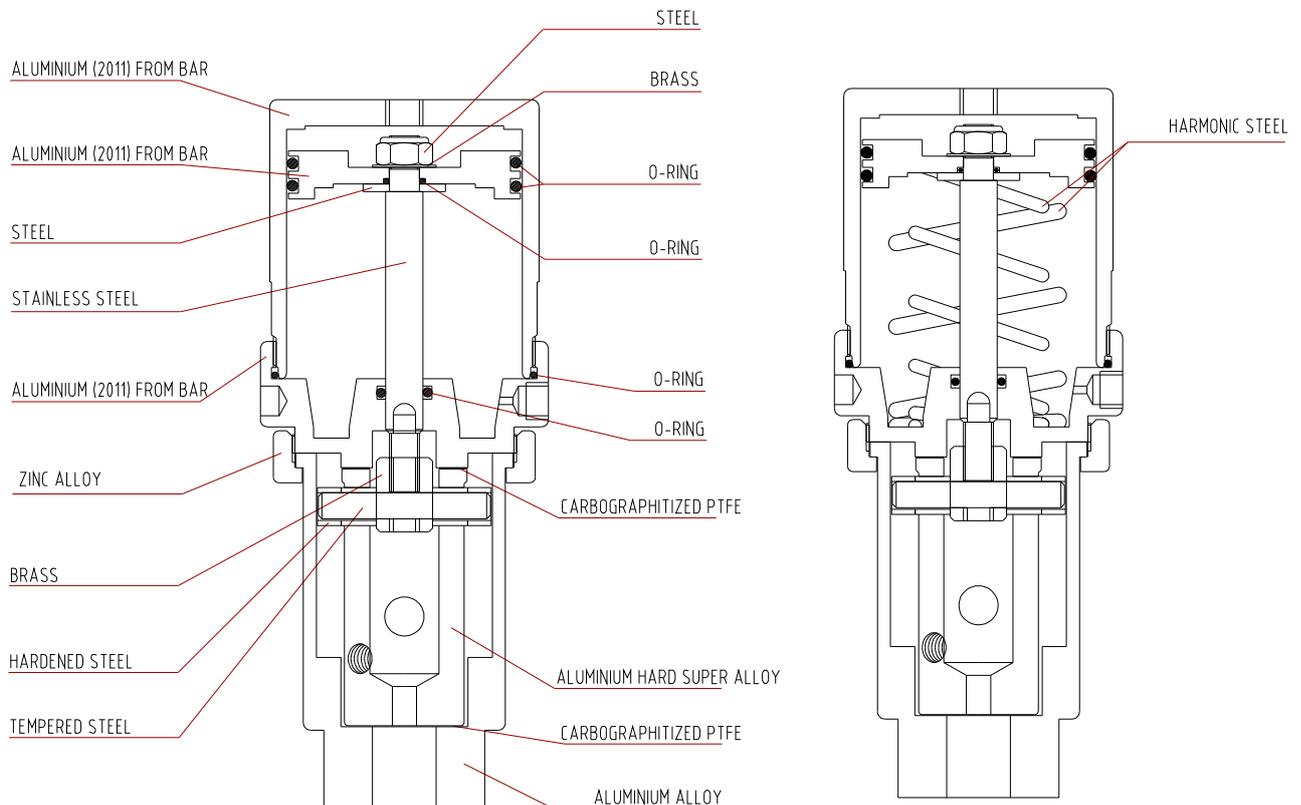
The torque is the same both for piston down and up stroke.

TORQUE OF SINGLE ACTING ROTARY ACTUATORS

(1Nm = 0,102 Kgfm - 1 Kgfm = 9,81 Nm)

ACTUATOR	type	SPRING		Air 4 bar		Air 5 bar		Air 6 bar		Air 7 bar		Air 8 bar	
		Beginning of stroke	End of stroke										
SE 5002	Nm	4,5	2			4	1,5	6	3,5	8	5,5	10	7,5
SE 6302	"	9	6	4	1	7	4	10	7	13	10	16	13
SE 8003	"	24	12	19	7	28	16	37	25	47	35	56	44
SE 1004	"	48	24	32	8	47	23	62	38	77	53	92	68

MATERIALS



Art. "F" - BRASS BALL VALVE



DESCRIPTION

Ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

TECHNICAL FEATURES

Allowable temperatures:

For liquid: from - 20°C up to + 130°C (with peaks of 150°C).

For gas: from - 20°C up to + 60°C.

Maximum temperatures for special uses (valve all open)

+100°C - fuel oils, mineral oils, margarine;

+ 90°C - seawater, drinking water (municipal water system);

+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;

+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

PRESSURE/TEMPERATURE LIMITS' DIAGRAM

For any pressure level there is the corresponding allowable temperature level.

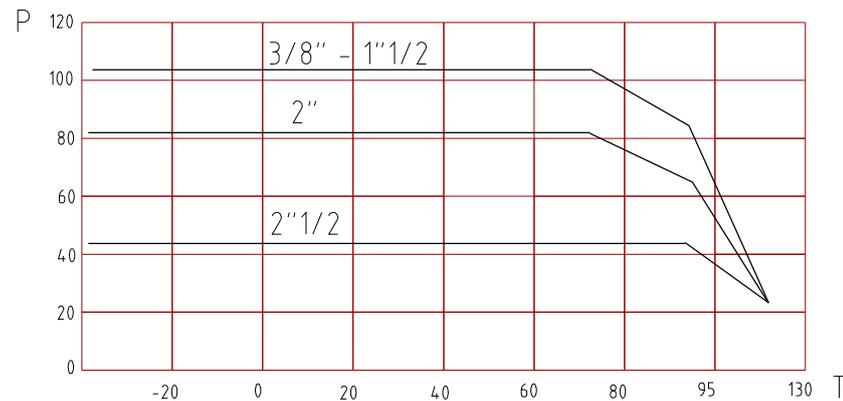


Diagram made with the following analysis:

Inside seats and seal: hydraulic-test of recirculation water-glycol at 50%, water hammer 1.1 PN e n° of cycles following UNI EN3828 - EN331.

Outside body and seal: hydraulic-test static 1.5 PN.

Limits of pressure: for liquids from 100 bar up to 40 bar.
for gas PN 5.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.

Single acting versions: from 6 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

On request with inner NPT connections.

Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1" 1/4 - 1" 1/2 - 2" - 2" 1/2

SANC: 3/8" - 1/2" - 3/4" - 1" - 1" 1/4 - 1" 1/2 - 2"

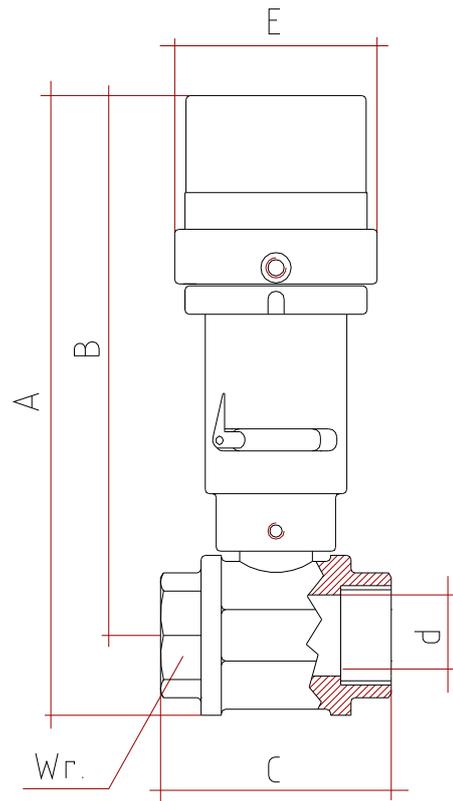
SANO: 3/8" - 1/2" - 3/4" - 1" - 1" 1/4 - 1" 1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM.

Art. "F" -

OVERALL DIMENSIONS



DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
10	3/8"	DE5002	207	193	54	10	65	22	11	1080
15	1/2"	DE5002	213	195	69	15	65	27	20	1220
20	3/4"	DE6302	241	218	77	20	77	33	60	1640
25	1"	DE6302	250	223	89	25	77	40	100	1900
32	1"1/4	DE8003	294	261	103	32	100	50	130	3420
40	1"1/2	DE8003	307	267	114	40	100	55	170	4120
50	2"	DE8003	327	279	134	50	100	70	280	5480
65	2"1/2	DE1004	358	298	147	65	120	86	510	8400

SINGLE ACTING (NC - NO)

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
10	3/8"	SE5002	207	193	54	10	65	22	11	1160
15	1/2"	SE5002	213	195	69	15	65	27	20	1280
20	3/4"	SE6302	241	218	77	20	77	33	60	1800
25	1"	SE6302	250	223	89	25	77	40	100	2040
32	1"1/4	SE8003	294	261	103	32	100	50	130	3620
40	1"1/2	SE8003	307	267	114	40	100	55	170	4340
50	2"	SE1004	359	310	134	50	120	70	280	7320

Art. "F" - BRASS BALL VALVE - LIGHT MODEL



DESCRIPTION

Ball valve with rotary actuator.
Valve body: brass.
Ball: brass heavy duty chromium plated.
Ball gasket: Virgin PTFE.

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.
Max operating temperature for special uses (valve all open):
+100°C - fuel oils, mineral oils, margarine;
+ 90°C - seawater, drinking water (municipal water system);
+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

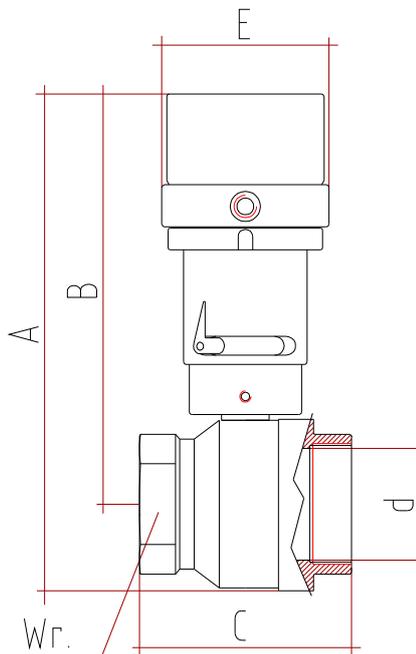
ACTUATOR PILOT PRESSURE

From 3 to 8 bar.
Connections with inner GAS ISO 228 thread female-female.
On request with inner NPT connections.
Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3" - 4"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**



OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
80	3"	DE1004	355	293	151	75	120	94	770	6900
100	4"	DE1155	433	358	180	90	134	120	1200	11400

Art. "FHP" - BRASS BALL VALVE FOR HIGH PRESSURE



DESCRIPTION

Ball valve with rotary actuator.

It has been conceived for high pressure and thus derived from a single piece of great strength, it has self-wrapping gaskets which guarantee a higher number of cycles.

Valve body: brass nickel plated.

Ball: brass heavy duty chromium plated.

Ball gasket: DELRIN 500 AF.

ALLOWABLE TEMPERATURE

Operating temperature: from -20°C to +80°C.

ACTUATOR PILOT PRESSURE

From 3 to 8 bar.

Connections with inner GAS UNI ISO 7/1 RP thread female-female.

Control air 1/8" GAS connections.

VERSION AND SIZES

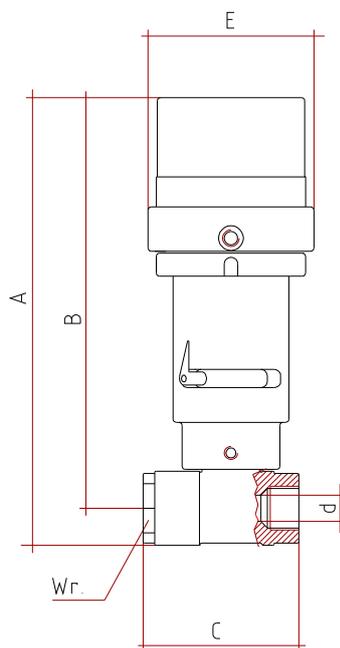
DA: 3/8" - 1/2" - 3/4" - 1"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM.

RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"
PN	210	210	210	210



OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
10	3/8"	DE5002	205	190	75	8	65	26	4.2	1300
15	1/2"	DE6302	225	207	85	12	77	32	9.4	1600
20	3/4"	DE8003	267	245	95	16	100	39	16.2	3100
25	1"	DE8003	275	249	105	20	100	48	27.7	3450

Art. "F2" - FLANGED BALL VALVE



DESCRIPTION

Flanged ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.

Max operating temperature for special uses (valve all open):

+100°C - fuel oils, mineral oils, margarine;

+ 90°C - seawater, drinking water (municipal water system);

+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;

+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas,
limewater, soda water.

ACTUATOR PILOT PRESSUR

Double acting versions: from 3 to 8 bar.

Single acting versions: from 6 to 8 bar.

Flange connections according to UNI 2240/67 - UNI 2229/67 - PN16.

Gauge between flanges according to ISO 5752 specifications.

Control air 1/8" GAS connections.

Between valve body and flanges, it is necessary to place an appropriate gasket, which is not supplied with the valve.

VERSIONS AND SIZES

DA: DN 20 - 25 - 32 - 40 - 50 - 65

SANC: DN 20 - 25 - 32 - 40 - 50

SANO: DN 20 - 25 - 32 - 40 - 50

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

RATED PRESSURE "PN"

DN	20	25	32	40	50	65
PN	16	16	16	16	16	16

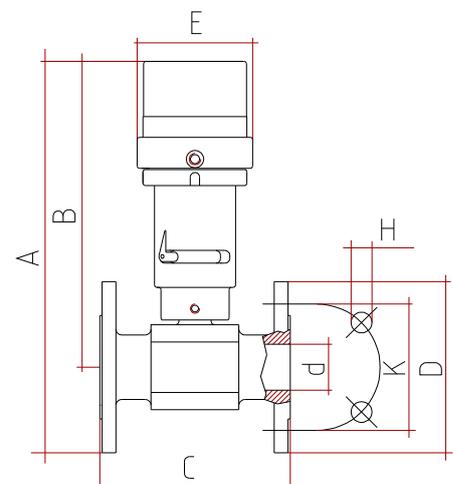
DOUBLE ACTING

DN	ACTUATOR	A	B	C	d	E	D	K	H	Hole	Kv	Weight
mm.	type	mm.	n°	m3/h	gr.							
20	DE6302	270	218	130	20	77	104	75	14	4	60	3750
25	DE8003	302	245	140	25	100	114	85	14	4	100	4800
32	DE8003	330	260	165	32	100	140	100	18	4	130	7750
40	DE8003	336	261	165	40	100	150	110	18	4	170	9750
50	DE8003	358	276	203	50	100	164	125	18	4	280	13450
65	DE1004	390	300	222	65	120	185	145	18	4	510	16150

SINGLE ACTING (NC-NO)

DN	ACTUATOR	A	B	C	d	E	D	K	H	Hole	Kv	Weight
mm.	type	mm.	n°	m3/h	gr.							
20	SE6302	270	218	130	20	77	104	75	14	4	60	3900
25	SE8003	302	245	140	25	100	114	85	14	4	100	5000
32	SE8003	330	260	165	32	100	140	100	18	4	130	7950
40	SE8003	336	261	165	40	100	150	110	18	4	170	9950
50	SE1004	389	307	203	50	120	164	125	18	4	280	13650

OVERALL DIMENSIONS



Art. "HP" - BALL VALVE FOR HIGH PRESSURE IN CARBON STEEL



DESCRIPTION

Ball valve wit rotary pneumatic actuator.
Valve body: carbon steel.
Ball: chromium-plated carbon steel- heavy duty.
Ball gasket: standard POLYAMIDE.
on request: virgin PTFE.

ALLOWABLE TEMPERATURES

Operating temperature up to +100°C.

ACTUATOR PILOT PRESSURE

From 5 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 1/8" - 1/4" - 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

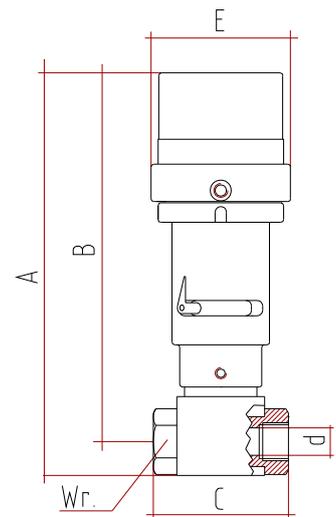
RATED PRESSURE "PN"

SEAL IN POLYAMIDE								
G	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4"	1"1/2"
PN	500	500	500	500	400	350	350	350
SEAL IN PTFE								
G	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4"	1"1/2"
PN	100	100	100	100	100	100	100	100

OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
4	1/8"	DE5002	211	199	69	5	65	22	0.9	1150
7	1/4"	DE5002	211	199	69	6	65	22	2	1150
10	3/8"	DE6302	231	215	73	10	77	27	5.5	1550
15	1/2"	DE6302	232	214	85	13	77	30	10	1620
20	3/4"	DE8003	278	253	97	20	100	41	21	3450
25	1"	DE8003	281	254	113	24	100	46	30	4000
32	1"1/4"	DE8003	281	254	122	24	100	50	30	4050
40	1"1/2"	DE8003	281	254	125	24	100	55	30	4150



Art. "AL" - "AL1" - BALL VALVE IN STAINLESS STEEL AISI 304 - 316



DESCRIPTION

Ball valve with rotary pneumatic actuator.
Valve body and ball in stainless steel **AISI 304** for Art: **AL**.
Valve body and ball in stainless steel **AISI 316** for Art: **AL1**.
The valve body is obtained from a block and polished.
Ball gasket: Virgin PTFE.

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.
Max operating temperature for special uses (valve all open):
+100°C - fuel oils, mineral oils, margarine;
+ 90°C - seawater, drinking water (municipal water system);
+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.
Single acting versions: from 6 to 8 bar.
Connections with inner GAS ISO 228 thread female-female.
On request with NPT or DIN connections.
Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4"
SANC: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
SANO: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
PN	64	64	64	40	40	40	25	25	25	25

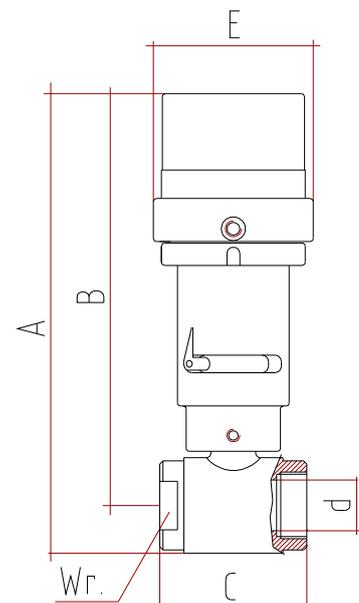
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
10	3/8"	DE5002	210	195	52	10	65	26	11	1160
15	1/2"	DE5002	216	198	62	15	65	32	20	1260
20	3/4"	DE6302	236	215	72	20	77	38	60	1660
25	1"	DE6302	246	220	82	25	77	48	100	2020
32	1"1/4	DE8003	283	253	92	32	100	52	130	3300
40	1"1/2	DE8003	297	260	104	40	100	64	170	3980
50	2"	DE8003	317	273	116	50	100	80	280	5260
65	2"1/2	DE1004	344	288	128	65	119	100	510	8800
80	3"	DE1155	417	351	150	80	133	115	770	13200
100	4"	DE1155	447	365	178	100	133	125	1200	20200

SINGLE ACTING (NC-NO)

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
10	3/8"	SE5002	210	195	52	10	65	26	11	1220
15	1/2"	SE5002	216	198	62	15	65	32	20	1340
20	3/4"	SE6302	236	215	72	20	77	38	60	1860
25	1"	SE6302	246	220	82	25	77	48	100	2200
32	1"1/4	SE8003	283	253	92	32	100	52	130	3440
40	1"1/2	SE8003	297	260	104	40	100	64	170	4180
50	2"	SE1004	349	305	116	50	119	80	280	7000

OVERALL DIMENSIONS



Art. "AL2/1" - FLANGED BALL VALVE IN STAINLESS STEEL AISI 316



DESCRIPTION

FLANGED ball valve with rotary pneumatic actuator.
Valve body, ball and flanges in stainless steel **AISI 316**.
The valve body is obtained from a block and polished.
Ball gasket: Virgin PTFE.

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.
Max operating temperature for special uses (valve all open):
+100°C - fuel oils, mineral oils, margarine;
+ 90°C - seawater, drinking water (municipal water system);
+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.
Single acting versions: from 6 to 8 bar.
Revolving flange connections according to UNI 2223/67 - PN10-16.
Between valve body and flanges, it is necessary to place an appropriate gasket, which is not supplied with the valve.
Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: DN 10 - 15 - 20 - 25 - 32 - 40 - 50 - 65 - 80
SANC: DN 10 - 15 - 20 - 25 - 32 - 40 - 50
SANO: DN 10 - 15 - 20 - 25 - 32 - 40 - 50

ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

RATED PRESSURE "PN"

DN	10	15	20	25	32	40	50	65	80
PN	40	40	40	40	40	25	25	16	16

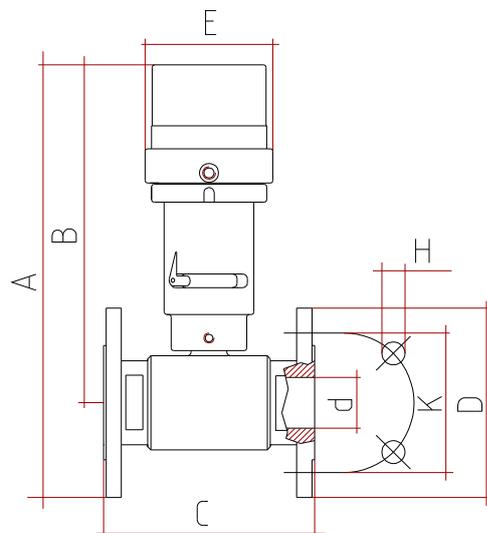
DOUBLE ACTING

DN	ACTUATOR	A	B	C	d	E	D	K	H	Hole	Kv	Weight
mm.	type	mm.	n°	m ³ /h	gr.							
10	DE5002	240	195	110	10	65	90	60	14	4	8	2350
15	DE5002	245	198	115	15	65	95	65	14	4	18	2550
20	DE6302	267	215	120	20	77	105	75	14	4	38	3500
25	DE6302	277	220	125	25	77	115	85	14	4	65	4350
32	DE8003	323	253	130	32	100	140	100	18	4	115	7100
40	DE8003	335	260	140	40	100	150	110	18	4	200	8450
50	DE8003	355	273	150	50	100	165	125	18	4	330	10750
65	DE1004	380	288	170	65	119	185	145	18	4	610	15850
80	DE1155	451	351	180	80	133	200	160	18	8	900	20400

SINGLE ACTING (INC-NO)

DN	ACTUATOR	A	B	C	d	E	D	K	H	Hole	Kv	Weight
mm.	type	mm.	n°	m ³ /h	gr.							
10	SE5002	240	195	110	10	65	90	60	14	4	8	2450
15	SE5002	245	198	115	15	65	95	65	14	4	18	2650
20	SE6302	267	215	120	20	77	105	75	14	4	38	3650
25	SE6302	277	220	125	25	77	115	85	14	4	65	4500
32	SE8003	323	253	130	32	100	140	100	18	4	115	7300
40	SE8003	335	260	140	40	100	150	110	18	4	200	8650
50	SE1004	387	305	150	50	119	165	125	18	4	330	12600

OVERALL DIMENSIONS



Art. "R1" - BALL VALVE IN STAINLESS STEEL AISI 316 WITH BOLTS



DESCRIPTION

Ball valve with rotary pneumatic actuator.
 Valve body: stainless steel AISI 316 made of three parts joined from bolts.
 Ball: stainless steel AISI 316
 Ball gasket: Virgin PTFE

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C
 Max operating temperature for special uses (valve all open):
 +100°C - fuel oils, mineral oils, margarine;
 + 90°C - seawater, drinking water (municipal water system);
 + 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
 + 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar
 Single acting versions: from 6 to 8 bar
 Connections with inner GAS ISO 228 thread female-female
 Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
 SANC: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
 SANO: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	64	64	40	40	25	25	25

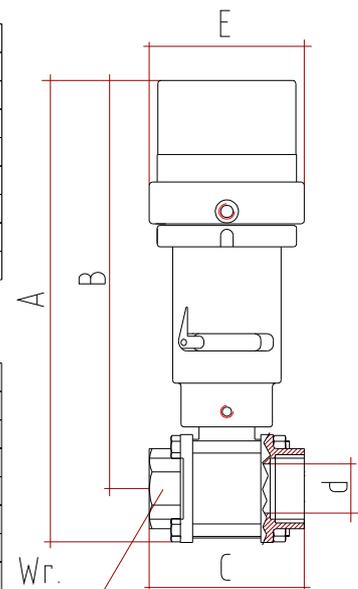
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
10	3/8"	DE5002	216	196	70	10	65	24	11	1200
15	1/2"	DE5002	216	196	70	15	65	24	14	1200
20	3/4"	DE6302	236	213	80	20	77	30	25	1600
25	1"	DE6302	249	220	88	25	77	41	31	2160
32	1"1/4	DE8003	282	249	98	32	100	50	73	3600
40	1"1/2	DE8003	304	266	115	40	100	55	150	4700
50	2"	DE8003	313	268	135	50	100	68	200	6000

SINGLE ACTING (NC-NO)

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
10	3/8"	SE5002	216	196	70	10	65	24	11	1350
15	1/2"	SE5002	216	196	70	15	65	24	14	1350
20	3/4"	SE6302	236	213	80	20	77	30	25	1800
25	1"	SE6302	249	220	88	25	77	41	31	2350
32	1"1/4	SE8003	282	249	98	32	100	50	73	3800
40	1"1/2	SE8003	304	266	115	40	100	55	150	4900
50	2"	SE1004	342	297	135	50	119	68	200	8050

OVERALL DIMENSIONS



Art. "HPX" - BALL VALVE IN STAINLESS STEEL AISI 316 FOR HIGH PRESSURE



DESCRIPTION
 Ball valve with rotary pneumatic actuator.
 Valve body: stainless steel AISI 316
 Ball: stainless steel AISI 316
 Ball gasket: PTFE with metal stiffener.

ALLOWABLE TEMPERATURES
 Operating temperature: from -15°C to +100°C
 Max operating temperature for special uses (valve all open):
 +100°C - fuel oils, mineral oils, margarine;
 + 90°C - seawater, drinking water (municipal water system);
 + 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
 + 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE
 From 4 to 8 bar
 Connections with inner GAS ISO 228 thread female-female.
 Control air 1/8" GAS connections

VERSIONS AND SIZES
 DA: 1/4" - 3/8" - 1/2" - 3/4" - 1" - 1"1/4

ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

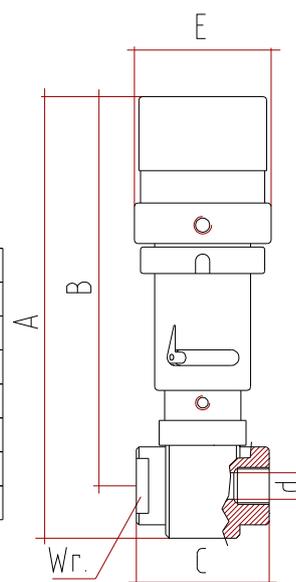
RATED PRESSURE "PN"

G	1/4"	3/8"	1/2"	3/4"	1"	1"1/4"
PN	250	250	250	250	250	160

OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m ³ /h	gr.
8	1/4"	DE6302	244	219	50	8	77	30	2	1750
10	3/8"	DE6302	244	219	60	10	77	30	5.5	1800
15	1/2"	DE6302	253	223	75	15	77	38	10	2350
20	3/4"	DE6302	258	226	80	19	77	42	21	2550
25	1"	DE8003	290	253	90	25	100	50	30	4300
32	1"1/4"	DE8003	298	258	110	30	100	55	40	5300



Art. "G1" - BALL VALVE IN STAINLESS STEEL AISI 316 WITH FLAT BODY



DESCRIPTION

Ball valve with rotary pneumatic actuator.
Valve body: stainless steel AISI 316.
Ball: stainless steel AISI 316.
Ball Gasket: Virgin PTFE.

On request: glass loaded PTFE.

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.
Max operating temperature for special uses (valve all open):
+100°C - fuel oils, mineral oils, margarine;
+ 90°C - seawater, drinking water (municipal water system);
+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.
Single acting versions: from 6 to 8 bar.
Flange coupling PN10-16-25-40-UNI 2223- DIN 2501.
Coupling holes threaded ISO R/262.

Between valve body and flanges, it is necessary to place an appropriate gasket which is not supplied with the valve.

Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: DN 15 - 20 - 25 - 32 - 40 - 50
SANC: DN 15 - 20 - 25 - 32 - 40 - 50
SANO: DN 15 - 20 - 25 - 32 - 40 - 50

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

RATED PRESSURE "PN"

DN	15	20	25	32	40	50
PN	40	40	40	40	40	16

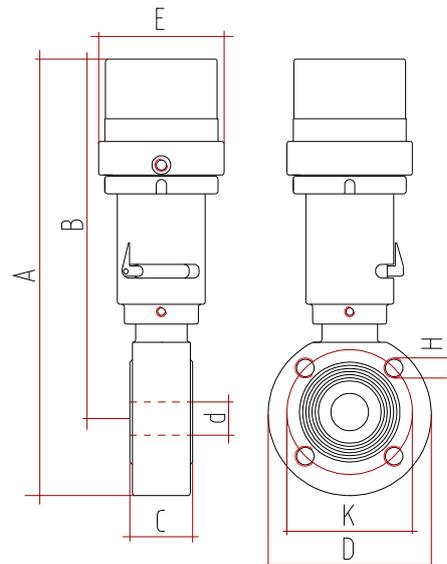
DOUBLE ACTING

DN	ACTUATOR	A	B	C	d	E	D	K	H	Kv	Weight
mm.	type	mm.		m3/h	gr.						
15	DE5002	265	220	35	15	65	90	65	4 x M12	16	2200
20	DE6302	290	240	38	20	77	100	75	4 x M12	30	3050
25	DE6302	300	247	42	23	77	105	85	4 x M12	43	3500
32	DE8003	353	288	50	30	100	130	100	4 x M16	90	6400
40	DE8003	361	291	60	38	100	140	110	4 x M16	230	8000
50	DE8003	376	300	72	48	100	154	125	4 x M16	265	10000

SINGLE ACTING (NC-NO)

DN	ACTUATOR	A	B	C	d	E	D	K	H	Kv	Weight
mm.	type	mm.		m3/h	gr.						
15	SE5002	265	220	35	15	65	90	65	4 x M12	16	2400
20	SE6302	290	240	38	20	77	100	75	4 x M12	30	3200
25	SE6302	300	247	42	23	77	105	85	4 x M12	43	3650
32	SE8003	353	288	50	30	100	130	100	4 x M16	90	6600
40	SE1004	394	324	60	38	119	140	110	4 x M16	230	9800
50	SE1004	409	332	72	48	119	154	125	4 x M16	265	12050

OVERALL DIMENSIONS



Art. "F3L" - BRASS 3-WAY BALL VALVE - "L" DRILLED BALL



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

3/2 function (3-way and 2-position).

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C.

Max operating temperature for special uses (valve all open):

- +100°C - fuel oils, mineral oils, margarine;
- + 90°C - seawater, drinking water (municipal water system);
- + 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
- + 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 4 to 8 bar.

Single acting versions: from 6 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

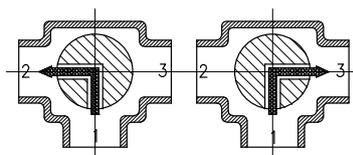
VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

SA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

RATED PRESSURE "PN"

G	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	40	40	25	16	16	16

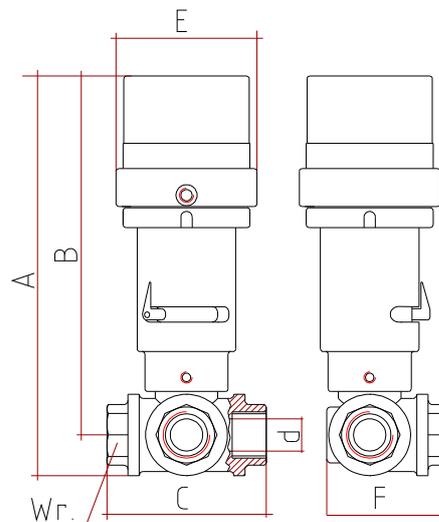
OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m ³ /h	gr.						
15	1/2"	DE6302	225	206	80	13	77	60	27	4	1540
20	3/4"	DE6302	237	213	96	18	77	73	33	6	2040
25	1"	DE8003	271	242	113	23	100	87	40	10	3520
32	1"1/4	DE8003	287	254	130	29	100	99	50	20	4350
40	1"1/2	DE8003	298	260	147	35	100	113	57	38	5420
50	2"	DE1004	315	268	169	44	119	132	70	50	8780

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m ³ /h	gr.						
15	1/2"	SE6302	225	206	80	13	77	60	27	4	1780
20	3/4"	SE6302	237	213	96	18	77	73	33	6	2200
25	1"	SE8003	271	242	113	23	100	87	40	10	3740
32	1"1/4	SE8003	287	254	130	29	100	99	50	20	4560
40	1"1/2	SE1004	330	291	147	35	119	113	57	38	7260
50	2"	SE1004	349	302	169	44	119	132	70	50	11200



Art. "F3T" - BRASS 3-WAY BALL VALVE - "T" DRILLED BALL



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated

Ball: brass OT 58 heavy duty chromium plated

Ball gasket: Virgin PTFE

3/2 function (3-way and 2-position)

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C

Max operating temperature for special uses (valve all open):

+100°C - fuel oils, mineral oils, margarine;

+ 90°C - seawater, drinking water (municipal water system);

+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;

+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 4 to 8 bar.

Single acting versions: from 6 to 8 bar

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

SA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

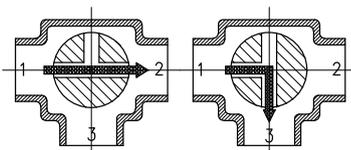
NOTE: When ordering art.F3/T in the Double Acting version, please specify: **ASSEMBLY 1-2** or **2-1**

If not specified the assembly will be 1-2 .

In the version SA the assembly 1-2 will be the **ONLY** possible.

T - DRILLED BALL

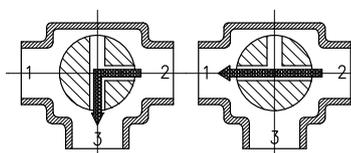
ASSEMBLY 1-2



Direct passage
1-2

Right deviation
1-3

ASSEMBLY 2-1



Left Deviation
2-3

Direct passage
1-2

RATED PRESSURE "PN"

G	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	40	40	25	16	16	16

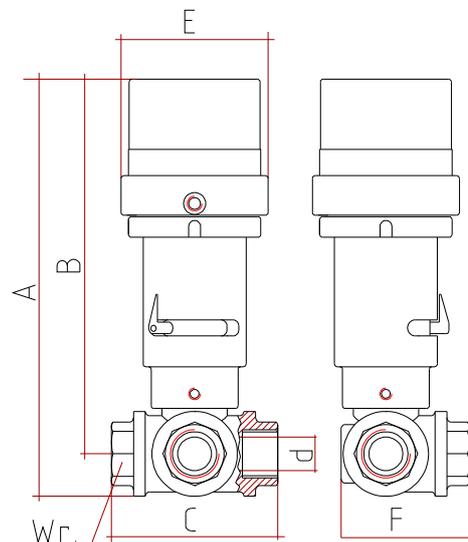
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
15	1/2"	DE6302	225	206	80	13	77	60	27	4	1540
20	3/4"	DE6302	237	213	96	18	77	73	33	6	2040
25	1"	DE8003	271	242	113	23	100	87	40	10	3520
32	1"1/4	DE8003	287	254	130	29	100	99	50	20	4350
40	1"1/2	DE8003	298	260	147	35	100	113	57	38	5420
50	2"	DE1004	315	268	169	44	119	132	70	50	8780

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
15	1/2"	SE6302	225	206	80	13	77	60	27	4	1780
20	3/4"	SE6302	237	213	96	18	77	73	33	6	2200
25	1"	SE8003	271	242	113	23	100	87	40	10	3740
32	1"1/4	SE8003	287	254	130	29	100	99	50	20	4560
40	1"1/2	SE1004	330	291	147	35	119	113	57	38	7260
50	2"	SE1004	349	302	169	44	119	132	70	50	11200

OVERALL DIMENSIONS



Art. "F3D" - BRASS 3-WAY DIVERTING BALL VALVE



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated

Ball: brass OT 58 heavy duty chromium plated

Ball gasket: Virgin PTFE

3/2 function (3-way and 2-position)

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C

Max operating temperature for special uses (valve all open):

+100°C - fuel oils, mineral oils, margarine;

+ 90°C - seawater, drinking water (municipal water system);

+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;

+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.

Single acting versions: from 5 to 8 bar

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

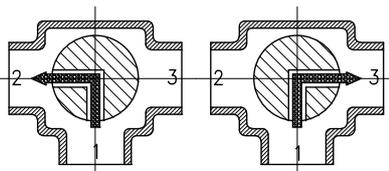
SA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

Only L-drilled ball available, that allows exclusively to divert the flow to the right or to the left. The fluid must enter obligatorily by the central sleeve; otherwise there may be fluid leakages and damages to the valve.

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

FLUID INLET

RATED PRESSURE "PN"

G	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	10	10	10	10	10	10

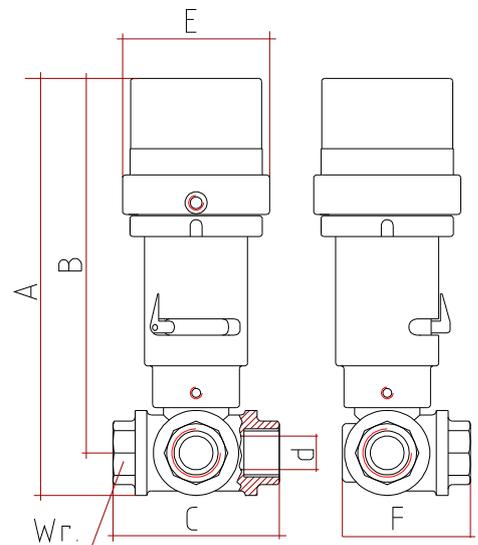
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
15	1/2"	DE5002	215	197	69	15	65	51	27	4	1150
20	3/4"	DE6302	242	220	77	20	77	61	33	6	1300
25	1"	DE6302	249	229	89	25	77	73	40	10	1900
32	1"1/4	DE8003	294	261	102	32	100	87	50	20	3500
40	1"1/2	DE8003	307	267	114	40	100	100	55	38	4200
50	2"	DE1004	325	277	134	50	119	122	70	50	7160

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
15	1/2"	SE5002	215	197	69	15	65	51	27	4	1320
20	3/4"	SE6302	242	220	77	20	77	61	33	6	1500
25	1"	SE6302	249	229	89	25	77	73	40	10	2100
32	1"1/4	SE8003	294	261	102	32	100	87	50	20	3750
40	1"1/2	SE8003	307	267	114	40	100	100	55	38	4450
50	2"	SE1004	359	311	134	50	119	122	70	50	8200

OVERALL DIMENSIONS



Art. "HP3" - 3-WAY BALL VALVE DIVERTING IN CARBON STEEL FOR HIGH PRESSURE



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.
Valve body: carbon steel.
Ball: chromium-plated carbon steel- heavy duty.
Ball gasket: standard DELRIN.
On request: virgin PTFE.
3-2 function (3-way and 2-position).

ALLOWABLE TEMPERATURES

Operating temperature up to +100°C.

ACTUATOR PILOT PRESSURE

From 5 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 1/8" - 1/4" - 3/8" - 1/2" - 3/4" - 1"

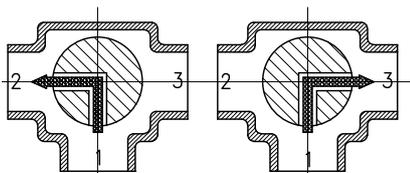
ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

NOTE:

Only L-drilled ball available, that allows exclusively to divert the flow to the right or to the left. The fluid must enter obligatorily by the central sleeve; otherwise fluid leakages and damages to the valve may happen.

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

FLUID INLET

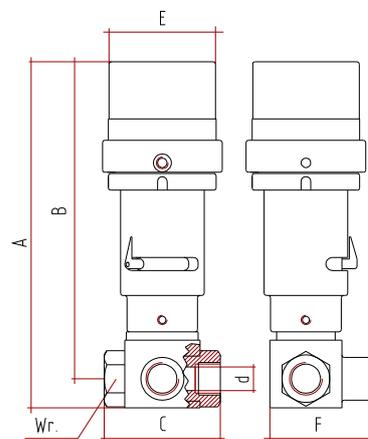
RATED PRESSURE "PN"

SEAL IN DELRIN						
G	1/8"	1/4"	3/8"	1/2"	3/4"	1"
PN	400	400	400	350	350	350
SEAL IN PTFE						
G	1/8"	1/4"	3/8"	1/2"	3/4"	1"
PN	100	100	100	100	100	100

OVERALL DIMENSIONS

DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
4	1/8"	DE5002	211	199	69	5	65	45	22	0.5	1220
7	1/4"	DE5002	211	199	69	6	65	45	22	1	1220
10	3/8"	DE6302	231	215	73	10	77	51	27	2	1500
15	1/2"	DE6302	232	215	85	13	77	54	30	4	1650
20	3/4"	DE8003	277	253	97	20	100	76	41	6	3400
25	1"	DE8003	281	254	113	24	100	90	46	10	4000



Art. "AL3L/1" - 3-WAY BALL VALVE "L" DRILLED BALL IN STAINLESS STEEL 316



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.
 Valve body and ball in stainless steel **AISI 316**
 The body valve is obtained from block and polished.
 Ball gasket: Virgin PTFE
 3/2 function (3-way and 2-position)

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C
 Max operating temperature for special uses (valve all open):
 +100°C - fuel oils, mineral oils, margarine;
 + 90°C - seawater, drinking water (municipal water system);
 + 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
 + 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas,
 limewater, soda water.

ACTUATOR PILOT PRESSURE

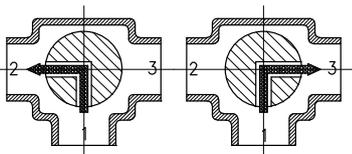
Double acting versions: from 4 to 8 bar.
 Single acting versions: from 6 to 8 bar
 Connections with inner GAS ISO 228 thread female-female.
 Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"
 SA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	40	40	40	40	40	40	25

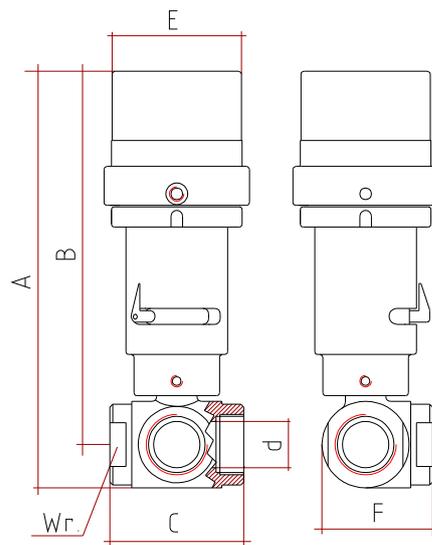
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
10	3/8"	DE6302	237	214	72	10	77	59	36	2	2050
15	1/2"	DE6302	243	217	82	15	77	67	38	4	2350
20	3/4"	DE8003	281	251	92	20	100	76	47	6	4000
25	1"	DE8003	291	256	102	25	100	86	52	10	4450
32	1"1/4	DE8003	316	273	118	32	100	102	64	20	6300
40	1"1/2	DE8003	332	281	134	40	100	117	80	38	8600
50	2"	DE1004	342	286	144	50	119	127	85	50	11600

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm.	m3/h	gr.						
10	3/8"	SE6302	237	214	72	10	77	59	36	2	2200
15	1/2"	SE6302	243	217	82	15	77	67	38	4	2500
20	3/4"	SE8003	281	251	92	20	100	76	47	6	4200
25	1"	SE8003	291	256	102	25	100	86	52	10	4650
32	1"1/4	SE1004	347	305	118	32	119	102	64	20	8400
40	1"1/2	SE1004	363	312	134	40	119	117	80	38	10650
50	2"	SE1004	377	322	144	50	119	127	85	50	11900

OVERALL DIMENSIONS



Art. "AL3T/1" - 3-WAY BALL VALVE "T" DRILLED BALL IN STAINLESS STEEL 316



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.
Valve body and ball in stainless steel **AISI 316**
The body valve is obtained from block and polished.
Ball gasket: Virgin PTFE
3/2 function (3-way and 2-position)

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C
Max operating temperature for special uses (valve all open):
+100°C - fuel oils, mineral oils, margarine;
+ 90°C - seawater, drinking water (municipal water system);
+ 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
+ 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas,
limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.
Single acting versions: from 6 to 8 bar
Connections with inner GAS ISO 228 thread female-female.
Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1.1/4" - 1.1/2" - 2"
SA: 3/8" - 1/2" - 3/4" - 1" - 1.1/4" - 1.1/2" - 2"

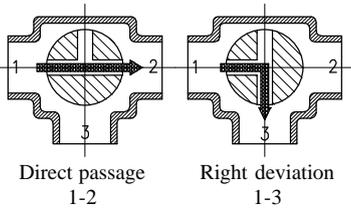
**ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM**

NOTE:

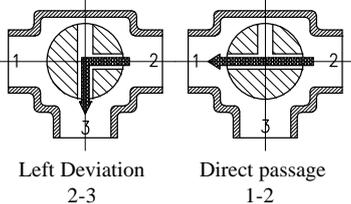
When ordering art.AL3-T and AL3-T/1 in the Double Acting version,
please specify **ASSEMBLY 1-2** or **2-1**
If not specified the assembly will be 1-2 .
In the version SA the assembly 1-2 will be the only possible.

T - DRILLED BALL

ASSEMBLY 1-2



ASSEMBLY 2-1



RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	40	40	40	40	40	40	25

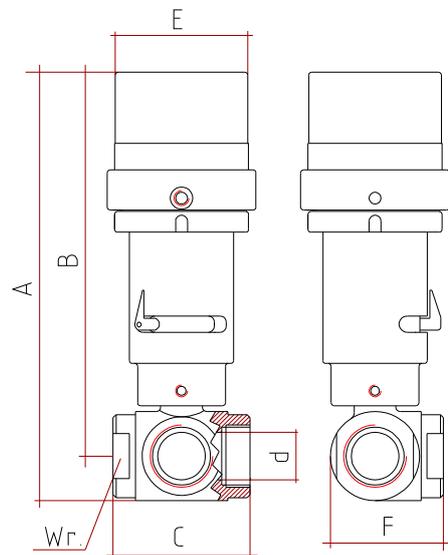
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm		type	mm	mm	mm	mm	mm	mm	mm	m3/h	gr.
10	3/8"	DE6302	237	214	72	10	77	59	36	2	2050
15	1/2"	DE6302	243	217	82	15	77	67	38	4	2350
20	3/4"	DE8003	281	251	92	20	100	76	47	6	4000
25	1"	DE8003	291	256	102	25	100	86	52	10	4450
32	1"1/4	DE8003	316	273	118	32	100	102	64	20	6300
40	1"1/2	DE8003	332	281	134	40	100	117	80	38	8600
50	2"	DE1004	342	286	144	50	119	127	85	50	11600

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm		type	mm	mm	mm	mm	mm	mm	mm	m3/h	gr.
10	3/8"	SE6302	237	214	72	10	77	59	36	2	2200
15	1/2"	SE6302	243	217	82	15	77	67	38	4	2500
20	3/4"	SE8003	281	251	92	20	100	76	47	6	4200
25	1"	SE8003	291	256	102	25	100	86	52	10	4650
32	1"1/4	SE1004	347	305	118	32	119	102	64	20	8400
40	1"1/2	SE1004	363	312	134	40	119	117	80	38	10650
50	2"	SE1004	377	322	144	50	119	127	85	50	11900

OVERALL DIMENSIONS



Art. "AL3D" - 3-WAY DIVERTING BALL VALVE IN STINLESS STEEL 316



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.
 Valve body: stainless steel AISI 316
 Ball: stainless steel AISI 316
 Ball gasket: Virgin PTFE
 3/2 function (3-way and 2-position)

ALLOWABLE TEMPERATURES

Operating temperature: from -15°C to +100°C
 Max operating temperature for special uses (valve all open):
 +100°C - fuel oils, mineral oils, margarine;
 + 90°C - seawater, drinking water (municipal water system);
 + 60°C - trichloroethylene, butane, methane, propane, carbon dioxide;
 + 40°C - inflammable alcohol, gasoline, illuminating gas, natural gas, limewater, soda water.

ACTUATOR PILOT PRESSURE

Double acting versions: from 4 to 8 bar.
 Single acting versions: from 6 to 8 bar
 Connections with inner GAS iso 228 thread female-female.
 Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4"
 SA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

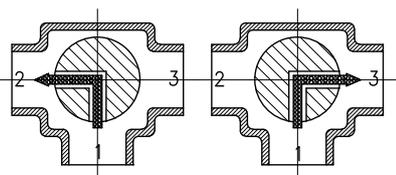
ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

NOTE:

Only 3-way diverting ball allows exclusively to divert the flow to the right or to the left. The fluid must enter obligatorily by the central sleeve; otherwise fluid leakages and damages to the valve may happen.

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

FLUID INLET

RATED PRESSURE "PN"

G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
PN	40	40	40	40	25	25	25	25	16	16

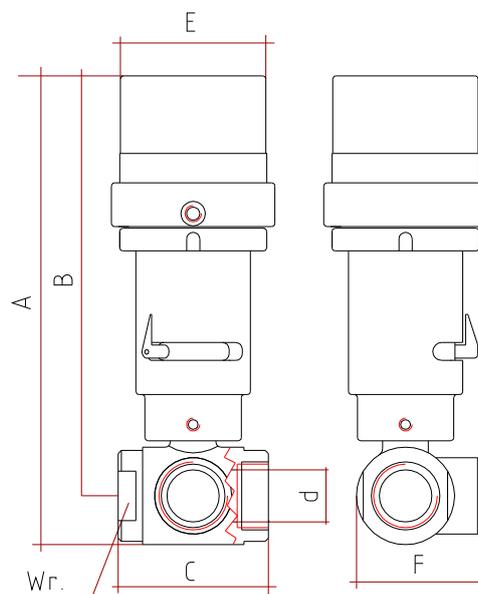
DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm	mm	mm	mm	mm	mm	mm.	m3/h	gr.
10	3/8"	DE6302	237	214	72	10	77	59	36	2	1700
15	1/2"	DE6302	243	217	82	15	77	67	38	4	2000
20	3/4"	DE8003	281	251	92	20	100	76	47	6	3500
25	1"	DE8003	291	256	102	25	100	86	52	10	3700
32	1"1/4	DE8003	316	273	118	32	100	102	64	20	5200
40	1"1/2	DE8003	332	281	134	40	100	117	80	38	7050
50	2"	DE1004	342	286	144	50	119	127	85	50	9600
65	2"1/2	DE1004	354	293	160	65	119	141	94	80	12350
80	3"	DE1155	451	375	190	80	133	171	100	120	21200
100	4"	DE1155	493	405	240	100	133	211	120	170	31950

SINGLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	F	Wrench	Kv	Weight
mm.		type	mm	mm	mm	mm	mm	mm	mm.	m3/h	gr.
10	3/8"	SE6302	237	214	72	10	77	59	36	2	1850
15	1/2"	SE6302	243	217	82	15	77	67	38	4	2050
20	3/4"	SE8003	281	251	92	20	100	76	47	6	3650
25	1"	SE8003	291	256	102	25	100	86	52	10	3900
32	1"1/4	SE1004	347	305	118	32	119	102	64	20	7200
40	1"1/2	SE1004	363	312	134	40	119	117	80	38	9100
50	2"	SE1004	377	322	144	50	119	127	85	50	10100

OVERALL DIMENSIONS



Art. "F4G" - "F4A" - BUTTERFLY VALVE IN CAST IRON WITH DISK IN CAST IRON OR STAINLESS STEEL



DESCRIPTION

Butterfly valve with rotary pneumatic actuator.

ART. "F4/G": Valve body: Spheroidal cast iron GS 400/12 UNI 4544.

Disk: spheroidal **cast iron** GS.400/12 UNI 4544 nickel-plated.

Stem: Stainless steel AISI 303.

ART. "F4/A" Valve body: Spheroidal cast iron GS 400/12 UNI 4544.

Disk: stainless steel **AISI 316**.

Stem: Stainless steel AISI 303.

Gasket: NBR, EPDM, FPM.

CONNECTIONS

Assembly between the flanges UNI PN 10-16 and ANSI 125-150.

Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Seal in NBR: from -20°C to +100°C

Seal in EPDM: from -35°C to +130°C

Seal in FPM: from -10°C to +160°C

ACTUATOR PILOT PRESSURE

From 5 to 8 bar.

VERSIONS AND SIZES

"F4G" DA: DN 65 - 80 - 100 - 125 - 150 - 200

"F4A" DA: DN 40 - 50 - 65 - 80 - 100 - 125 - 150 - 200

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

**AVOID TO INTERCEPT
SHARP MATERIALS**

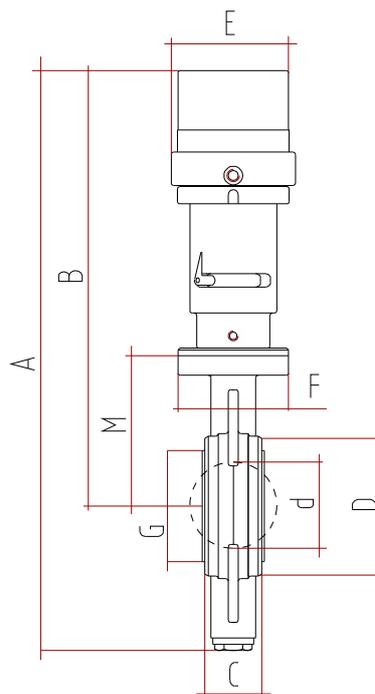
RATED PRESSURE "PN"

DN	40	50	65	80	100	125	150	200
PN	16	16	16	16	16	16	16	16

OVERALL DIMENSIONS

DOUBLE ACTING

DN	ACTUATOR	A	B	C	D	d	E	F	G	M	Kv	Weight
mm.	type	mm.	m ³ /h	gr.								
40	DE8003	410	318	34	90	46	100	90	65	98	13.5	4600
50	DE8003	427	329	44	100	56	100	90	79	110	22	4980
65	DE8003	452	342	47	122	70	100	90	91	122	4.9	5400
80	DE8003	471	351	46	140	83	100	90	107	131	7.8	6340
100	DE8003	507	374	52	162	105	100	90	133	154	300	7060
125	DE1004	543	393	57	202	128	119	90	160	178	635	10900
150	DE1004	575	409	57	224	153	119	90	190	194	841	12400
200	DE1004	633	440	60	274	198	119	90	240	225	1190	14000



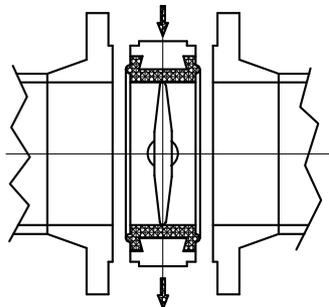
Art. "F4G" - "F4A"

ASSEMBLY FOR BUTTERFLY VALVES

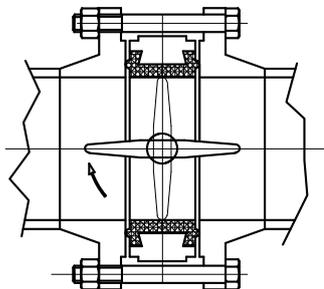
Art. F4 butterfly valves are constructed for installation between UNI, DIN or ASA flanges; they are inserted directly without any gasket.

They can be fitted into the piping in any position, preferably not near bends or fittings, especially upstream, in order to avoid alteration of the flow characteristics.

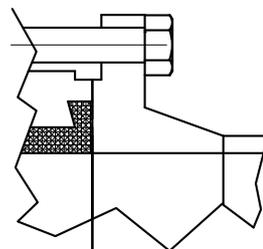
Flanges must be perfectly parallel and have well finished surfaces.



Position flanges at such a distance that valve assembling or disassembling is easy.



Open completely the valve before claspng flanges.

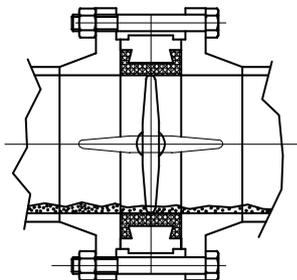


Tighten bolts till flanges are into contact with valve body.

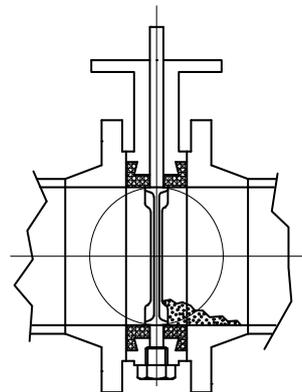
ATTENTION: spot-weld the pipes with the valve already assembled between flanges. Remove the valve before finishing the welding to avoid that heat causes packing distorsion.

When mounting the valve with muddy fluids, make sure that rotation axis is horizontal to allow residues to flow freely on opening.

CORRECT

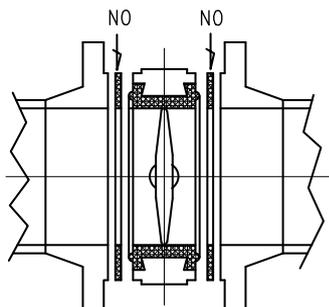


WRONG

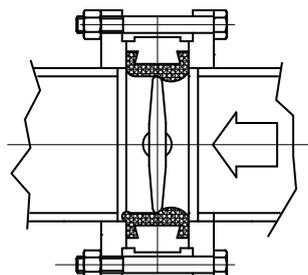


ERRORS TO BE AVOIDED

Do not place other packing between flange and valve.



Do not use plane welding flanges, to avoid that at high pressure the packing undergoes excessive deformations.



Art. "AL4" - BUTTERFLY VALVE IN STAINLESS STEEL



DESCRIPTION

Butterfly valve with rotary pneumatic actuator.
 Valve body: stainless steel AISI 304.
 Butterfly: stainless steel AISI 304.
 Gasket: SILICONE rubber.

ALLOWABLE TEMPERATURES

Operating temperature:
 from 0°C to +150°C depending on fluid intercepted.

ACTUATOR PILOT PRESSURE

Double acting versions: from 5 to 8 bar.
 Single acting versions: from 6 to 8 bar

CONNECTIONS

Available connections:
 - with inner GAS ISO 228 female-female connections.
 - with outer GAS ISO 228 male-male connections.
 - with female-female DIN thread.
 - with female-male DIN thread and locking nut.
 Control air 1/8" GAS connections.

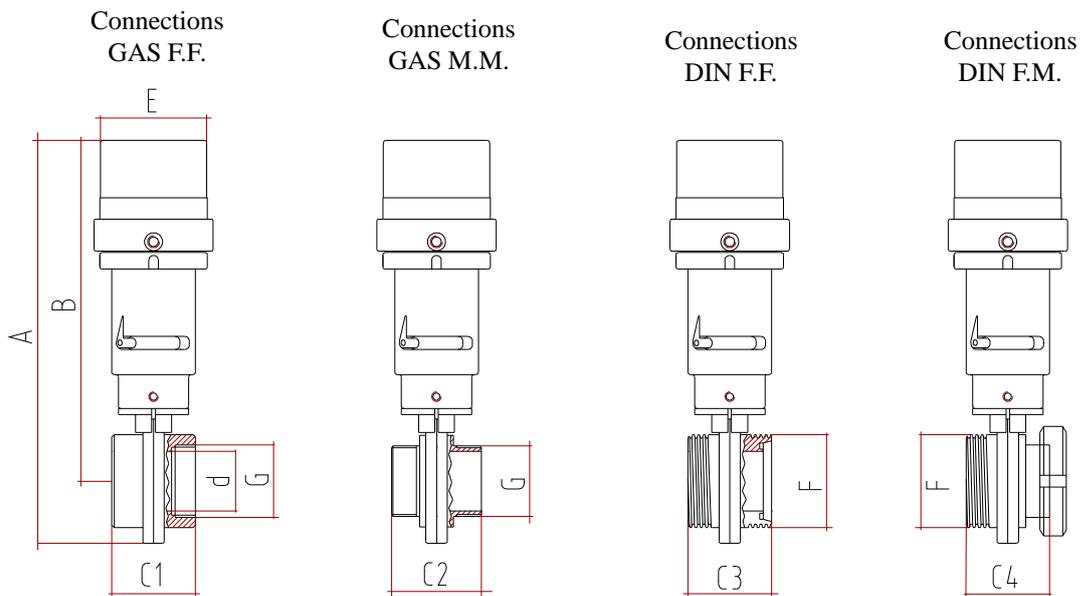
VERSIONS AND SIZES

DA: 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4"
 SANC: 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3"
 SANO: 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3"

**ANODIZING TREATMENT ON OUTSIDE DETAILS
 MADE IN ALUMINIUM**

RATED PRESSURE "PN"

B.S.P.	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"
PN	6	6	6	6	6	6	6



OVERALL DIMENSIONS

DOUBLE ACTING - SINGLE ACTING

DN	G	F	ACTUATOR	A	B	C1	C2	C3	C4	d	E	Kv	Weight
mm.			type	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
25	1"	52 x 1/6"	DE6302 - SE6302	270	230	65	67	65	72.5	25	77	3	1800
32	1"1/4	58 x 1/6"	DE6302 - SE6302	275	232	65	67	65	72.5	32	77	8	2000
40	1"1/2	65 x 1/6"	DE6302 - SE6302	283	236	70	70	70	75	38	77	13.5	2400
50	2"	78 x 1/6"	DE8003 - SE8003	327	274	70	73	70	78	50	100	22	3800
65	2"1/2	95 x 1/6"	DE8003 - SE8003	343	285	70	75	76	81	66	100	49	4420
80	3"	110 x 1/4"	DE8003 - SE8003	363	293	80	80	88	95	80	100	78	5460
100	4"	130 x 1/4"	DE8003	393	308	90	90	90	97.5	100	100	300	6000

SUBJECT TO MODIFICATIONS WITHOUT NOTICE

Please refer yourselves to the section of the INSTRUCTIONS, that are integral part of our Catalogue.

Art. "VF" - BUTTERFLY VALVE IN ALUMINIUM



DESCRIPTION

Butterfly valve suitable for intercepting granulates, powders, cereals and to reduce the outlet of smokes and hot air.

It is **NOT** suitable for intercepting liquids because it has no seal.

MATERIALS:

- Valve body: aluminium
- Butterfly: aluminium
- Disc pins: brass OT 58
- O-ring pins: NBR

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.

Single acting versions: from 5 to 8 bar

CONNECTIONS

Flange connections. Between valve body and flanges, it is necessary to place an appropriate gasket, which is not supplied with the valve.

The flanges are **NOT** according to any standards.

Control air 1/8" GAS connections

VERSIONS AND SIZES

DA: DN 80 - 100 - 150 - 200 - 250

SANC: DN 80 - 100 - 150 - 200 - 250

SANO: DN 80 - 100 - 150 - 200 - 250

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

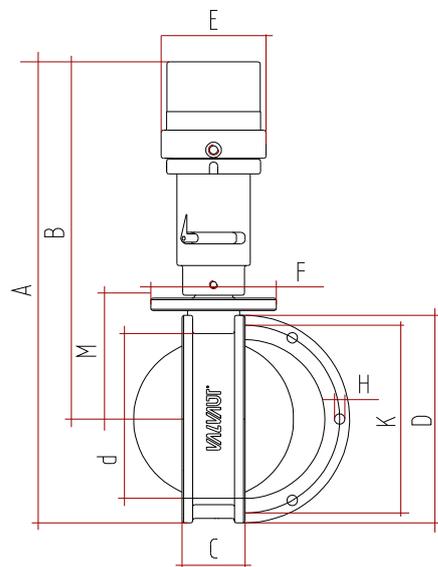
OVERALL DIMENSIONS

DOUBLE ACTING

DN	ACTUATOR	A	B	C	D	d	E	F	H	K	M	Hole	Weight
mm.	type	mm.	mm.	mm.	n°	gr.							
80	DE5002	318	253	50	130	80	65	80	9	105	76	4	1900
100	DE5002	341	266	50	150	103	65	80	9	129	88	4	2000
150	DE8003	436	336	60	200	153	100	80	9	181	117	6	4300
200	DE8003	523	383	70	280	200	100	119	9	251	158	6	6500
250	DE8003	574	409	80	330	251	100	119	10.5	306	183	8	8400

SINGLE ACTING

DN	ACTUATOR	A	B	C	D	d	E	F	H	K	M	Hole	Weight
mm.	type	mm.	mm.	mm.	n°	gr.							
80	SE5002	318	253	50	130	80	65	80	9	105	76	4	2100
100	SE5002	341	266	50	150	103	65	80	9	129	88	4	2200
150	SE8003	436	336	60	200	153	100	80	9	181	117	6	4500
200	SE8003	523	383	70	280	200	100	119	9	251	158	6	6700
250	SE8003	574	409	80	330	251	100	119	10.5	306	183	8	8800



ATTENTION !!

Available also in the manual version
 Art. "VFM" with lever.
 Sizes DN 80, 100, 150, 200, 250.



VALVE WITH ACTUATOR FOR THE DOSING



DESCRIPTION

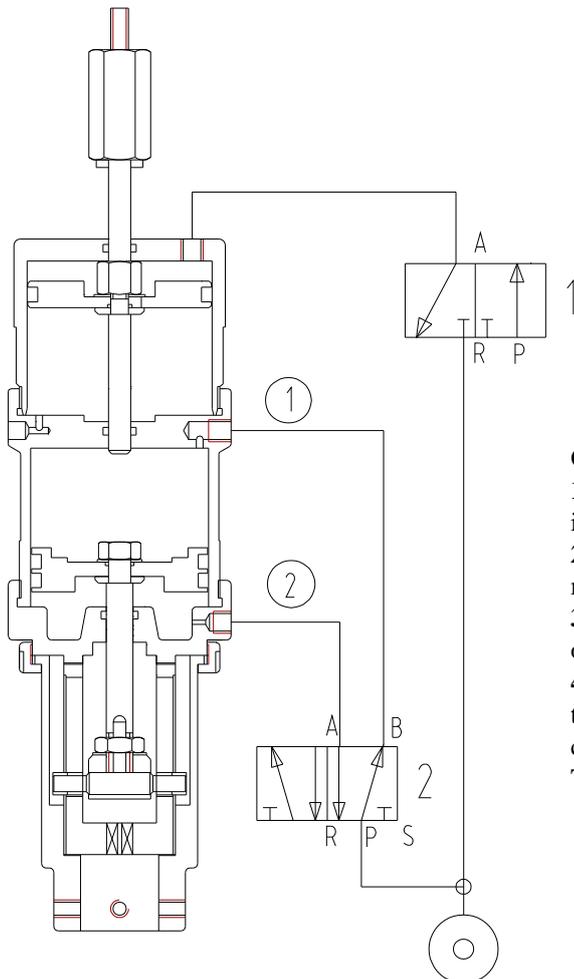
This actuator has been purposely conceived to obtain a partial and adjustable closing of the valve before its complete closing, or a partial opening of the valve before its complete opening.

The adjustment is obtained by means of the upper knob and allows very exact and repetitive cycles.

APPLICATIONS

With normally open (NO) valves it can be used in automatic equipments for filling sacks or packages.

With normally closed (NC) valves it can be used in distribution systems of compressed air.



OPERATION

- 1) VALVE 1 ON - The upper piston goes down and positions itself according to the upper knob's adjustment.
 - 2) VALVE 2 ON - Feeding in (1), the lower piston goes up to meet the upper stem and the valve partially closes.
 - 3) VALVE 1 OFF - Taking air off the upper piston, the lower one goes up and the valve completes the closing.
 - 4) VALVE 2 OFF - Exchanging the feeding from position (1) to position (2), the lower piston goes down and the valve completely opens, coming back to the initial position.
- The cycle can be repeated.

ACTUATOR WITH PLATES IN CONFORMITY WITH “ISO” AND “NAMUR”



All the ball and butterfly valves can be supplied with actuators that have been realised to offer the possibility of fitting, directly on the cylinder, electrovalves according to **ISO5599/1** or NAMUR standards.

Installation of these electrovalves is possible by means of two different interface plates.

The actuators type DA 1155 are excluded.

ISO connections group 2 can only receive electric impulse valve, ISO connections group 3-4 can receive both electric and pneumatic impulse valves.

It is not possible to assemble the electrovalves with their under-bases on the standard actuators because they are not arranged in advance.

An ISO actuator can become NAMUR, and vice versa, by simply changing the relevant interface plate.

NOTE: When ordering please specify always if you request actuator with ISO or NAMUR connections.

MANUAL CONTROL WITH LEVER



All the ball and butterfly valves with **double acting** can be equipped with a lever to obtain also the manual working of the valve.

It is applied instead of the positioning indicator (the red arrow) and it can be assembled in the actuators already existing. In this way it is necessary to specify in the P/O the CODE of the valve.

SLOTTED HOLE PROTECTION RING



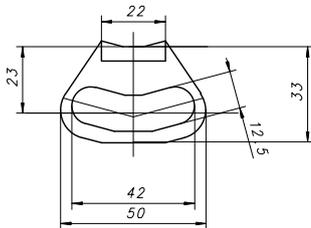
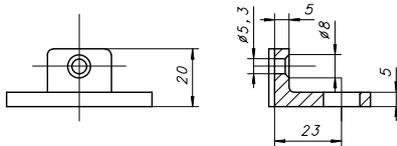
All the ball and butterfly valves can be supplied with slotted hole protection ring, for use in particularly dusty environment or if water or mud are present (washing plants, building yards, etc.) .

This solution allows to keep the ON-OFF indication of the valve or the manual control with lever.

It is possible to assemble the protection ring in actuators already existing, using the suitable Kit.

It is necessary to specify in the P/O the CODE of the valve.

MOUNTING BRACKETS KIT FOR SWITCHES - BALL AND BUTTERFLY VALVES



It is possible to fit switches on valves already installed by using the mounting bracket kit that it can be also bought separately;

It includes:

- No. 2 clamps to fit in the relevant holes present on the actuator,
- No. 1 pin dia.8 mm for actuators 5002,6302,8003 or dia. 10mm for actuators 1004, 1155 to apply in place of the position indicator,
- Attachment screws.

It can be equipped only the mounting Kit for the use of switch different from those we supplied.

ATTENTION: in the purchase order it is necessary to specify if the Kit has to be for proximity switch or for the electromechanical ones.

All the valves with rotary actuator can be supplied with proximity and electromechanical switch. They can be fit one by one or a pair of them to signal the position open or closed of the valve.

The proximity and electromechanical switches that we supply have the following features:

PROXIMITY SWITCH IN DIRECT CURRENT (D.C)

Inductive proximity switch with threaded body M12, available in the PNP or NPN version.
Feed 10-30 Vdc .
Max current 200mA.
Max residual ripple 10%.
Degree of protection IP 67.
Line of temperature -25°C +70°C.
Equipped with a signalling LED and 2m of cable.

ELECTROMECHANICAL SWITCH

The electromechanical proximity switch is actuated by a pin mounted in place of the position indicator. It has two contacts, one open and the other closed, electrically splitted.
Degree of protection IP 67.
In accordance with the rules IEC, VDE, NFC, CEI.
Lengh of cable 2m.

