





6-th Edition

TRADITION AND FUTURE

effepi Company, owner of the trade-mark VALVAUT, has been working for over 30 years in the production of pneumatic valves, which are the most advances of their kind currently available because of their features.

VALVAUT pneumatic valves are the reward of an unceasing research, directed to a continuous improvement of the product.

AIR ACTUATED VALVES AIM

Installation of automatic valves is more and more frequent in all kind of plants; the valves use the pneumatic energy as control tool, being the most practical, reliable and powerful system.

THE MARKET FULFILMENT

The wide range of **VALVAUT** valves offered by **effepi**, allows to fulfil any kind of requirement of plants and to intercept fluids of the most different kinds.

MATERIALS USED

effepi uses exclusively materials of high quality as aluminium from bar, brass from bar and printed brass, stainless steel rectified ,which assured the lack of any imperfections and porosity. Moreover, many parts, receive superficial treatments to increase their features of quality, whenever they need.

OUALITY

Control is constant during the different phases of machining and assembly, besides the final test is made on every single valve.

Such reliability, comes from an experience obtained in the years and with the active collaboration of its customers. It has allowed to obtain over 3 million valves working all over the world.

RANGE OF PRODUCTS

This catalogue describes widely the range of the valves produced. It contains any information about projects, materials and pressures, to satisfy any need.

Our Technical Department, sure of its promptly answer and its flexibility, is always, to the disposal of the customer for any kind of requests.



















INSTRUCTIONS

It is well known that many factors contribute to the choice of a valve, both from a point of view of performance requirements and operating saving.

The final decision will be taken according to an accurate analysis of all the variables affecting the valve operation, for the purposes of optimal performances of machinery or equipment.

We suggest to analyse the following data:

- 1) kind of fluid to intercept: water, steam, gas, vacuum.
- 2) compatibility of the fluid to intercept with the metals and seals of the valve.
- 3) resiliency to temperatures and take into account possible thermal shocks for seals, especially for ball and butterfly valves.
- 4) maximum pressures allowable and any possible condition that can cause the water hammer.
- 5) fluid features with regard to interception or break modes, taking into account that the valve movement can be reciprocating or rotary.
- 6) number of working cycles is important to choose the type of valve:shutter, ball, butterfly.

Only after a careful analysis of all the variables, it is possible to make a wise choice that allows a duration as long as possible, particularly when the valve is mounted on machineries and system requiring expensive warranty engagements and after-sale service.

In the following page there is an analytic table with all the necessary information, helpful for a correct choice of the valve to use.

Please do not hesitate to contact our Technical Office for any further information or investigations You might need.

You can also contact us to our e-mail address:

e-mail: info@pneuvano.com





6-th Edition



ANALYTIC TABLE				
DATE				
MEASURE OF THE VALVE				
VERSION OF THE VALVE:				
Double acting _	Normally closed _	No	rmally open _	
TYPE OF PLANT/MACHINE	RY			
Position of the valve				
	wer end of the valve?			
Is the valve installed on		YES		
Is the valve near by sou	-	YES∐	 -	
•				
Is the valve washed at the			NO	
	•		NO [
FLUID INTERCEPTED				
Liquid Gas		Vacuum		
			e open	
		ssure with valve		
The fluid is controlled	in only one direction _		in both direction _	
FEATURES OF THE FLUID				
	A1	1.13	07/4 1/1 ·	
_ Lubricant	_ Abrasive		With solid suspensions	
_ dry	_ Volatile	· -	With filamentous suspensions	
Calcareous	_ Acid	·—·	With abrasive suspensions	
_ It solidifies	_ It crystallizes			
WORKING FREQUENCY				
Opening time	Cl	osing time		
Operating cycles per day.	per month.		per year	
OPERATING AIR				
	Ma	ximum pressure	2	
_		s lubricated?	YES NO	
ENVIRONMENTAL CONDITI	ONS			
			ature	
1		1		
POSSIBLE SPECIAL USE CO	ONDITIONS			
		How long?		
_		_		
winimum temperature		110w 1011g:		





MARK CE

The directive of the Council of the European Communities n° 89/392 of the 14/06/1989, denominated "DIRECTIVE MACHINE" disciplines all the extant machines in the European Market.

It is in force since 01 January 1995.

For it as concerns the valves, only the motorised ones are considered as a machine, even under reserve.

Due to the different interpretations to the respect, the Technical Committee of the Normalisation has uttered a resolution to allow a uniform application of the Directive Machine in Europe.

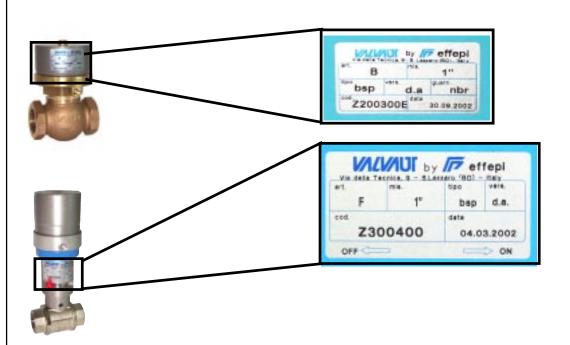
The resolution could be as resumed: a motorised valve in not a machine.

In effects, a valve does not work in an autonomous and independent way, it does not have autonomous orders, but it could work only if inserted in an installation.

The valves, even motorised, can be considered of the components of the installation and consequently it not necessary to affix the CE mark on of them, because only one mark must appear on the complete installation.

LABEL TEST

All our valves are identified by a label that quotes the constructional features of the valve itself. Label is irremovable, has indelible characters and has the date of test of the product. It represents the guarantee for authenticity too.



NOTICE

DA: double acting - It opens with air, closes with air

NC: normally closed - It opens with air, closes with spring

NA: normallly open - It closes with air, opens with spring

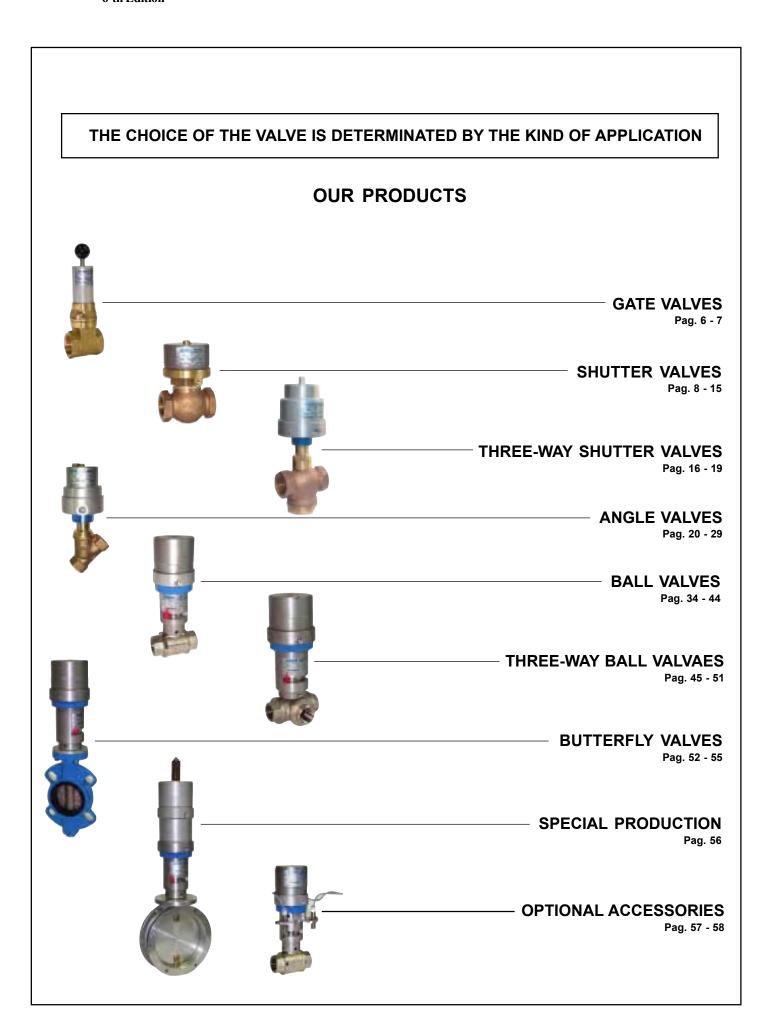
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Art. "A" - GATE VALVE



DESCRIPTION

Metal sealing with free disks (male/female disk) in the wedge of the gate.

Practically no maintenance is required for the special closing system (metal to metal), but a perfect airtight is not assured.

Pneumatic actuator, with reciprocating movement, is equipped with manual emergency knob

The pneumatic gate valve can intercept liquid fluids and gases without solid suspensions (keep into account the closing system).

Standard: Connections with inner GAS ISO 228 female-female.

On request: NPT connections.

Control air 1/8" GAS connections.

OPERATING TEMPERATURE: from -20°C to +80°C.

ACTUATOR PILOT PRESSURE: Max 8 bar.

VERSIONS AND SIZES

GAS threaded connection

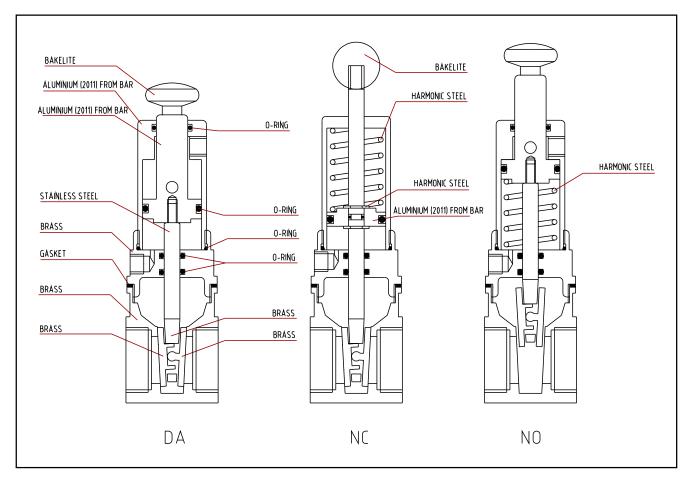
DA: 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4" SANC: 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3"

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

NPT connection

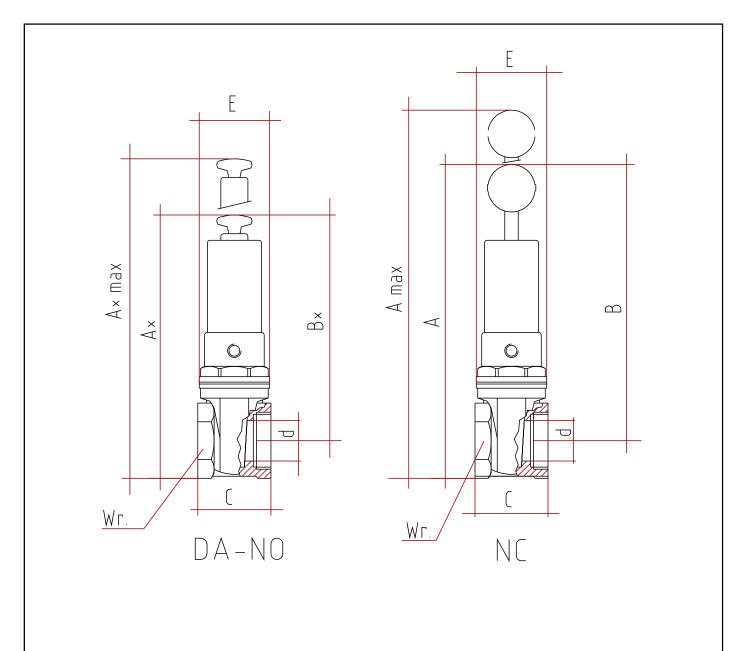
DA: 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 3" SANC: 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 3" SANO: 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZINGTREATMENT ON OUTSIDE DETAILS MADE IN ALUMINIUM





Art. "A"



OVERALL DIMENSIONS

The dimensions with asterisk refer to DA and NO version

mm				A max.	A*max	В	B*	C	d	Е	Wrench	KV	Weight
		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	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.

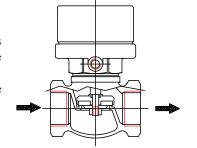
VERSIONS AND SIZES

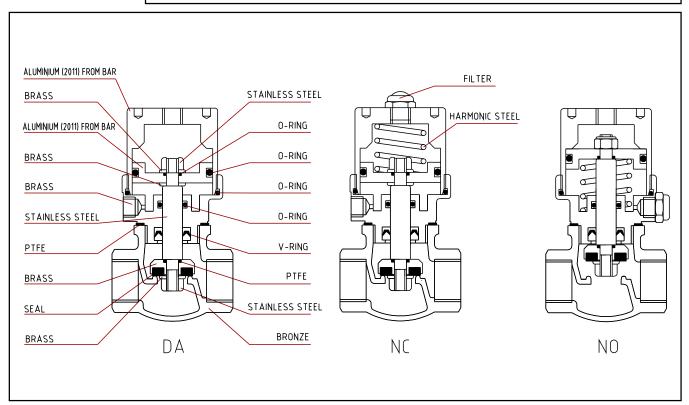
DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" SANC: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" SANO: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

It is <u>not subject</u> to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the shutter).







Art. "B"

DIFFERENTIAL PRESSURE CHART

NC : NBR-FPM-EPDM

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

5

NC : PTFE

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

DA/NO: NBR-FPM-EPDM

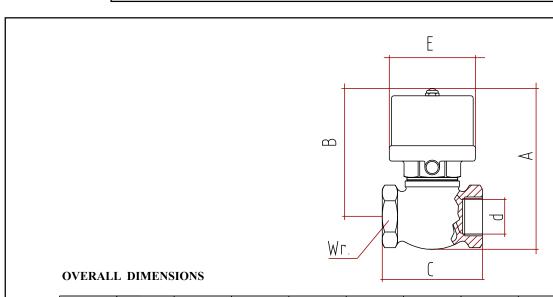
	PILOT	DeltaP
G	PRESS.	bar
1/2"	4	15
1/2"	5	19
3/4"	4	10
3/4"	5	13
1"	4	18
1"	5	23
1"1/4	4	11
1"1/4	5	14
1"1/2	4	11
1"1/2	5	13
2"	4	7
2"	5	9

DA/NO: PTFE

	PILOT	DeltaP
G	PRESS.	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"
Ваг	4.5	4.5	3.5	3.5	4	4



15 1/2" 106 86 60 17 50 27 3.4 59 20 3/4" 110 85 74 24 50 35 7.9 70 25 1" 128 98 85 30 76 46 11 140	DN	G	Α	В	С	d	E	Wrench	Κv	Weight
20 3/4" 110 85 74 24 50 35 7.9 70 25 1" 128 98 85 30 76 46 11 140	mm.		mm.	mm.	mm.	mm.	mm.	mm.	m3/h	gr.
25 1" 128 98 85 30 76 46 11 140	15	1/2"	106	86	60	17	50	27	3.4	590
	20	3/4"	110	85	74	24	50	35	7.9	700
32 1"1/4 138 106 95 39 76 52 18 165	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 28 260	40	1"1/2	166	130	110	45	89	60	28	2600
50 2" 184 139 120 55 89 72 44 340	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

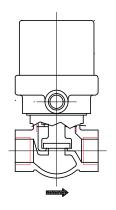
Operating temperature: from -20°C to +100°C

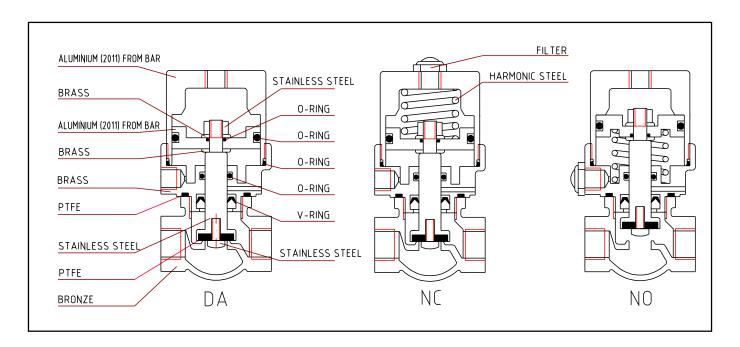
PILOT PRESSURE: Max. 8 bar. VERSIONS AND SIZES

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).







Art. "BHP"

DIFFERENTIAL PRESSURE CHART

NC VERSION

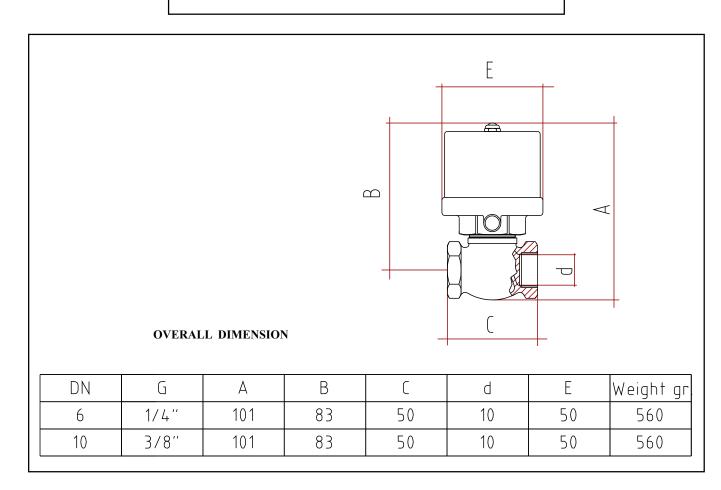
	DeltaP
G	bar
1/4"	21
3/8''	21

DA-NO VERSION

	PILOT	DeltaP
G	PRESS.	bar
1/4"	2	15
11	3	25
11	4	32
3/8''	2	15
11	3	25
11	4	32

MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/4"	3/8"
Ваг	5	5





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

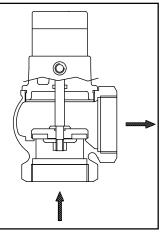
DA: 1"1/4 - 2" - 3"

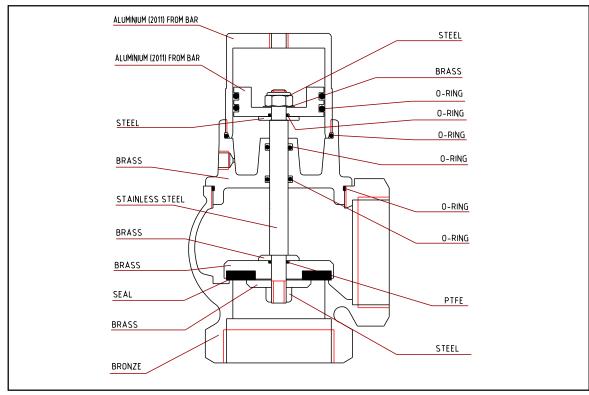
ANODIZING TREATMENT ON OUTSIDE DETAILS

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.





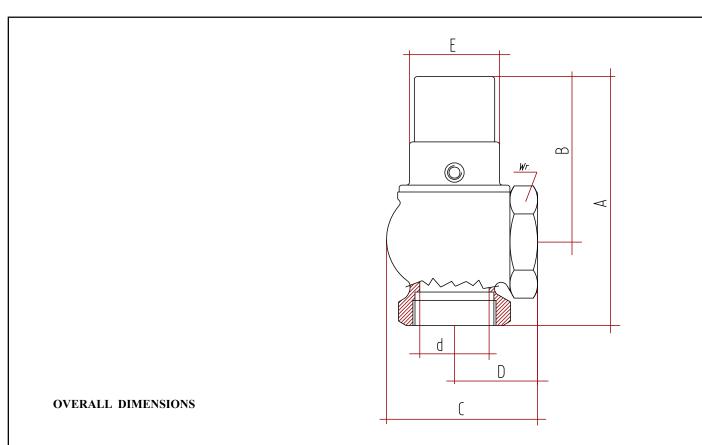
that are integral part of our Catalogue.



Art. "C"

DIFFERENTIAL PRESSURE CHART

PILOT	DeltaP
PRESS.	bar
4	7
5	9
6	10.5
4	4
5	5
6	6
4	2.5
5	3
6	3.5
	PRESS. 4 5 6 4 5 6 4 5 6 4 5 6



DN	G	А	В	C	D	Е	d	Wrench	Κv	Weight
mm.		mm.	m3/h	дг.						
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.

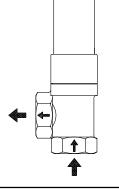
VERSIONS AND SIZES

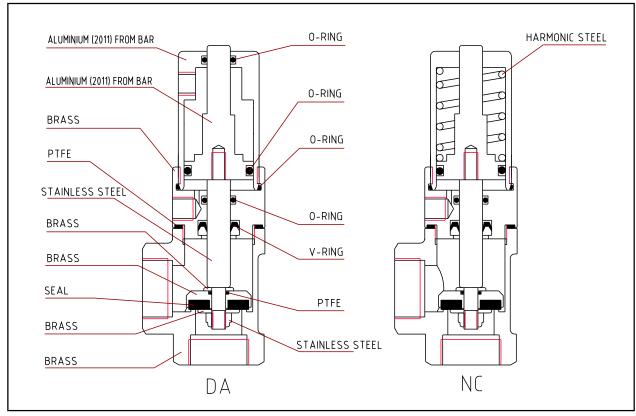
DA: 3/4" - 1" - 1"1/4 SANC: 3/4" - 1" - 1"1/4

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

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





Art. "T"

DIFFERENTIAL PRESSURE CHART

NC VERSION

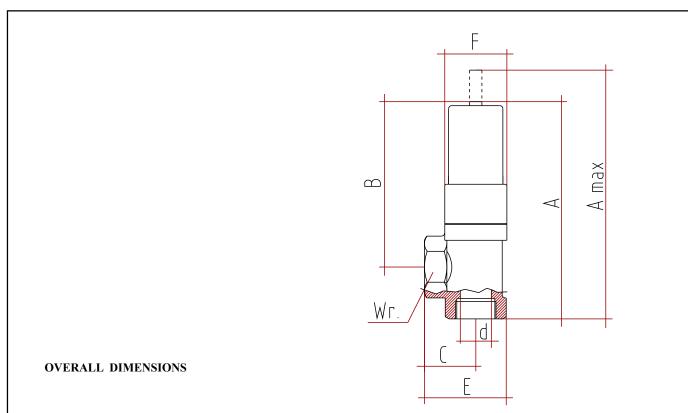
	DeltaP
G	bar
3/4"	3
1"	3
1"1/4	3

DA VERSION	DΑ	VERSION
------------	----	---------

	PILOT	DeltaP
G	PRESS.	bar
3/4"	3	3.5
3/4"	4	4.5
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



DN	G	А	A max	В	С	d	E	F	Wrench	Κγ	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	дг.
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 POSTIONING 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.

ALLOWABLETEMPERATURES

Operating temperature: -20°C+180°C **PILOT PRESSURE:** Max. 8 bar.

VERSIONS AND SIZES

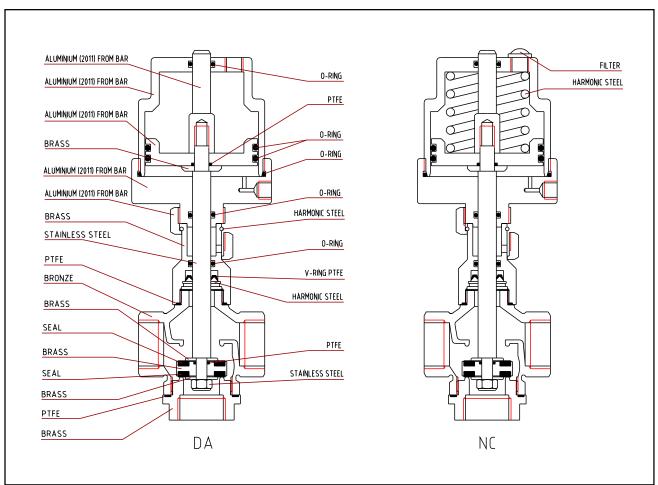
SA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

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.

1"1/2

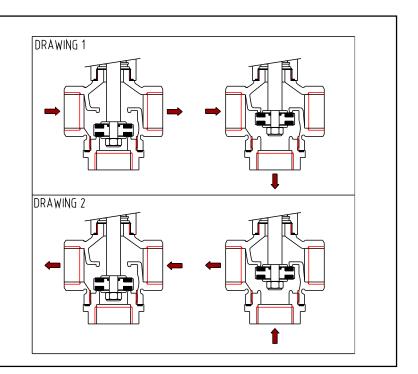
2"

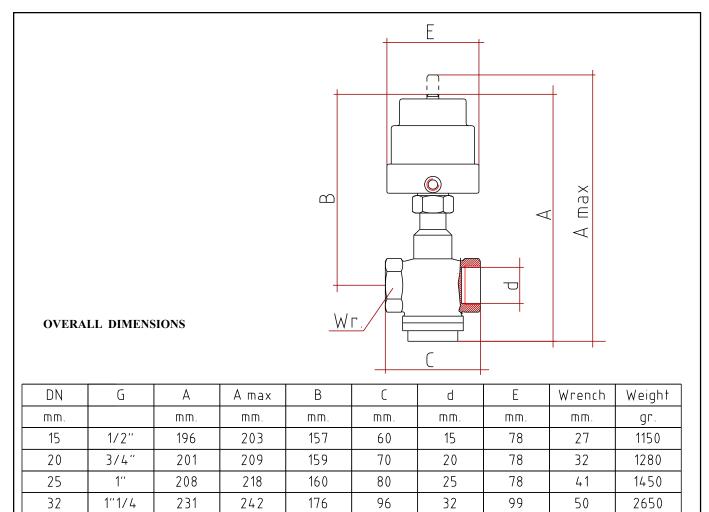
244

259

40

50





185

192

260

280

103

130

40

50

99

99

56

70

2820

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.

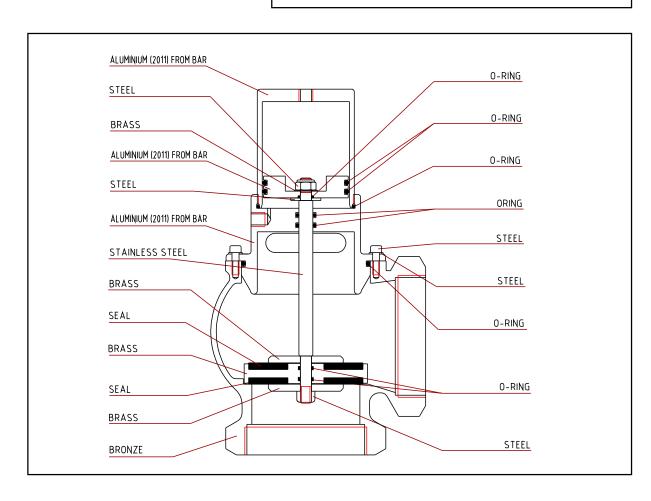
VERSIONS AND SIZES

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"

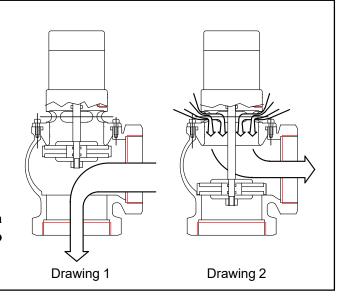
OPERATION

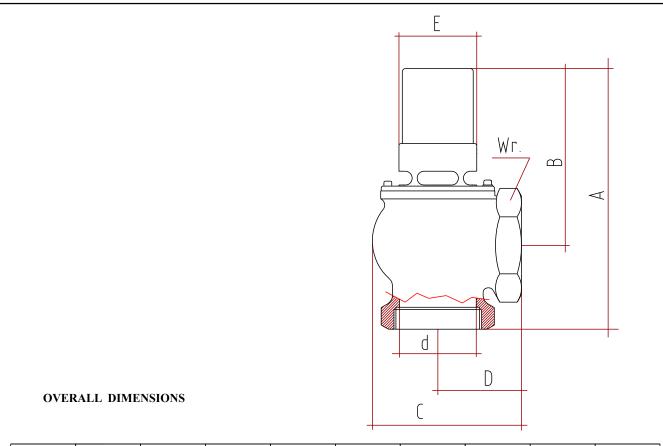
When the valve is open (drawing 1) the vacuum can be created and kept inside the unit, the arrow indicates the passage from the unit to the suction pump.

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 towardsthe 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.





DN	G	А	В	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"

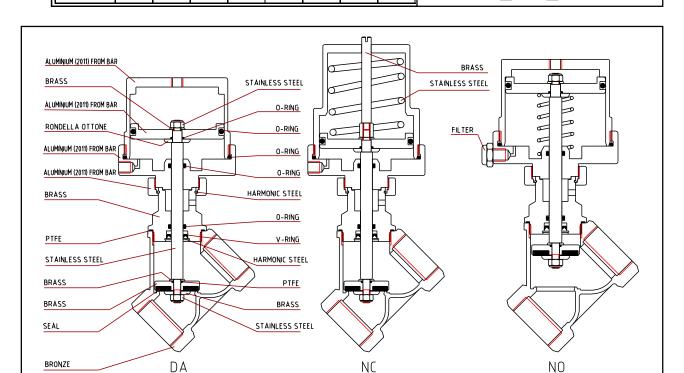
SANO: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

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).

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. "D"

DIFFERENTIAL PRESSURE CHARTE

NC: NBR-FPM-EPDM

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

FI	
	FI

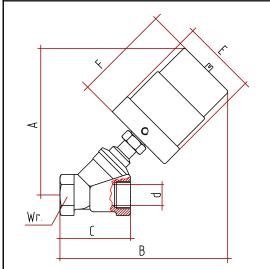
INC . I II L						
	DeltaP					
G	раг					
1/2"	22					
3/4"	20					
1"	16					
1"1/4	15					
1"1/2	13					
2"	7					
2"1/2	3					
3"	2					

DA/NO:	NBR-FPM-EPDM
DA/NO:	NUNTI I ITELI UIT

	PILOT	DeltaP	
G	PRESS.	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	

DA/N	10 :	PTFE
------	------	------

<u> </u>							
	PILOT	DeltaP					
G	PRESS.	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	А	В	С	d	E	F	Wrench	Κγ	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	Α	В	С	d	E	F	Wrench	Κγ	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 Satured

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"

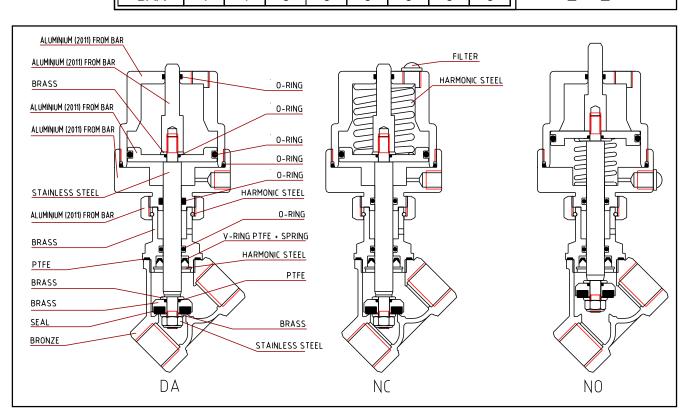
SANO: 1/2" - 3/4" - 1"

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).

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"

SATURED STEAM CHART

MANOMETER PRESSURE	TEMP.		
bar			
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		

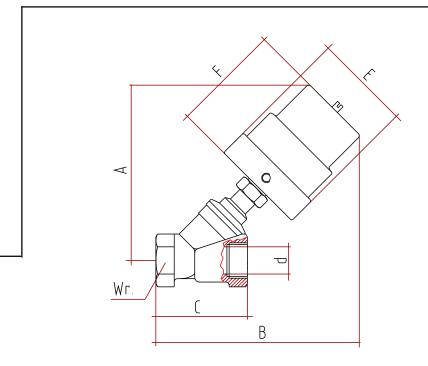
DIFFERENTIAL PRESSURE CHART

NC VERSION

	DeltaP
G	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

PRESS.	DeltaP
PILOTA	bar
4	18
5	23
4	16
5	22
4	15
5	20
	PILOTA 4 5 4 5 4



OVERALL DIMENSIONS

DN	G	А	В	C	d	E	F	Wrench	Κγ	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

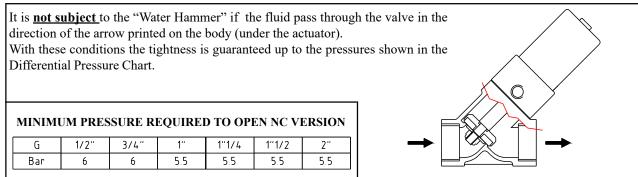
ACTUATOR PILOT PRESSURE: Max 8 bar.

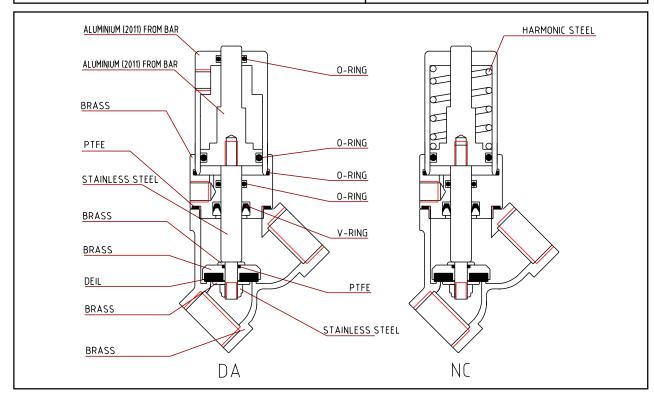
VERSIONS AND SIZES

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







Art. "Y"

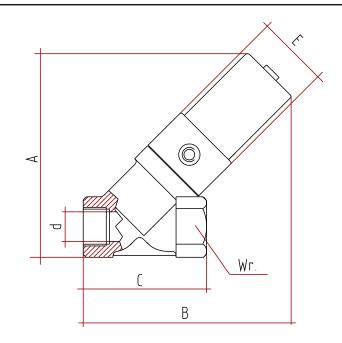
DIFFERENTIAL PRESSURE CHART

ИC

	DeltaP
G	bar
1/2"	4
3/4"	3
1''	3
1"1/4	3
1"1/2	3
2"	1.5

DA

	PILOT	DeltaP
G	PRESS.	bar
1/2"	4	9.5
1/2"	5	12
3/4"	4	4.5
3/4"	5	6
1''	4	4.5
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	А	В	С	d	E	Wrench	Κv	Weight
mm.		. mm	mm.	mm.	mm.	mm.	mm.	m3/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

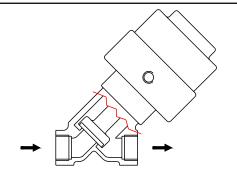
PILOT PRESSURE: Max 8 bar. VERSIONS AND SIZES

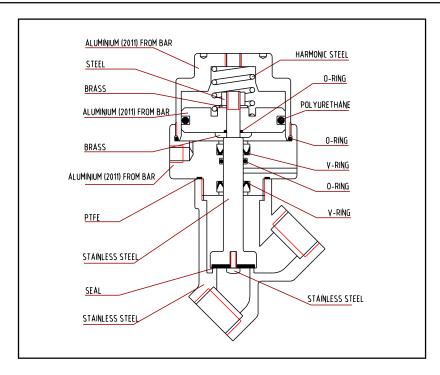
DA: 1/2" - 3/4"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

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

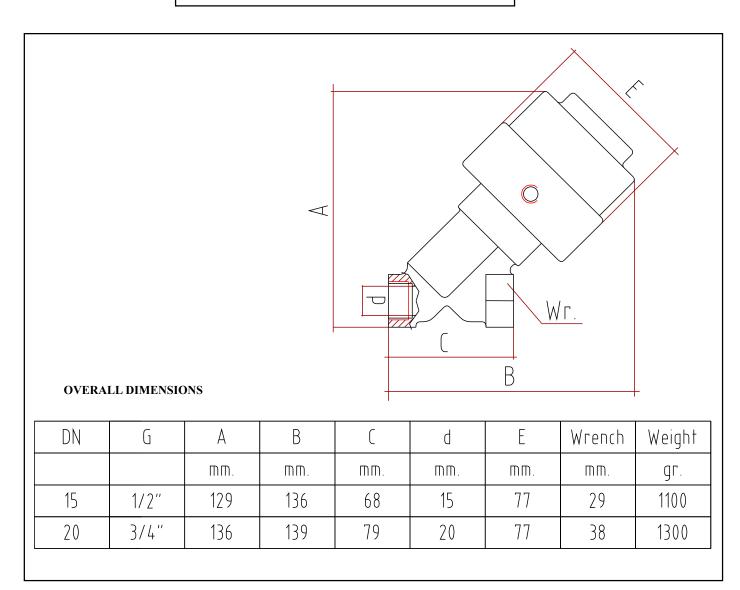






Art. "PET"

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





$\mathbf{Art.}$ " \mathbf{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 airtght. 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 $+200^{\circ}$ C.

For steam please refer to the Differential Pressure and Satured Steam Charts.

ACTUATOR PILOT PRESSURE: Max 8 bar.

VERSIONS AND SIZES

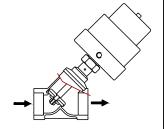
DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" SANC: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" SANO: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

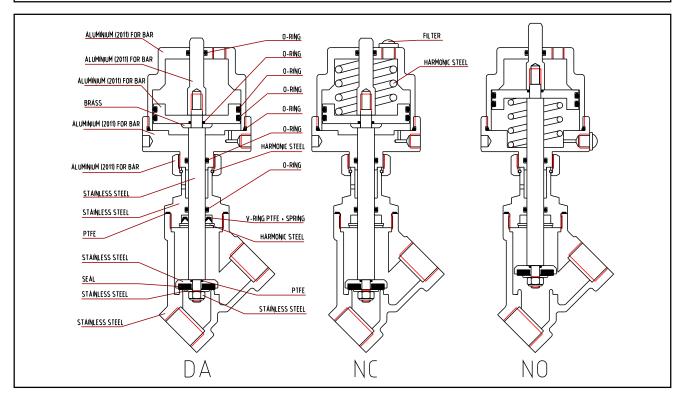
ANODIZINGTREATMENT ON OUTSIDE DETAILS

MADEINALUMINIUM.

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).

MINIMU	M PRE	SSURE	REQU	TRED T	го оре	N NC V	ERSION
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"

SATURED STEAM CHARTE

MANOMETER PRESSURE bar	TEMP.
0	100
1	120
2	134
3	144
4	152
5	159
6 7	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

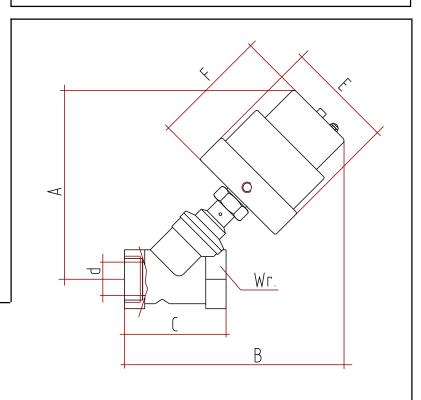
DIFFERENTIAL PRESSURE CHART

NC VERSION

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

DA/NO VERSION

	PRESS.	DeltaP
G	PILOTA	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	G	А	В	С	d	E	F	Wrench	Κv	Weight
mm.		mm.	m3/h	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.



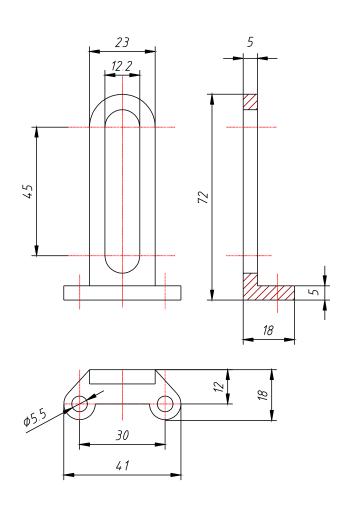


It is **NOT** possible to assembly switches in valves already installed because the actuators are not arranged in advance.



MOUNTING BRACKET KIT FOR SWITCHES







INFO

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

ROTARYACTUATORS

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 anodizied.

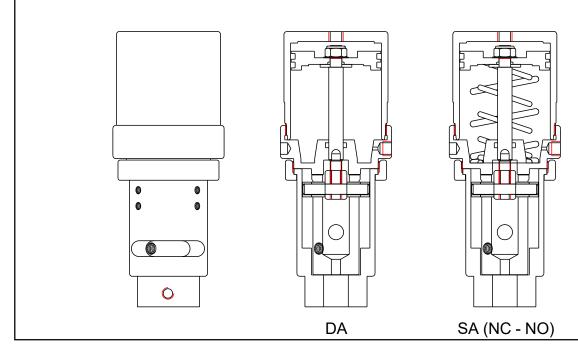
The VALVAUT rotary actuator has some specific and original features:

- 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

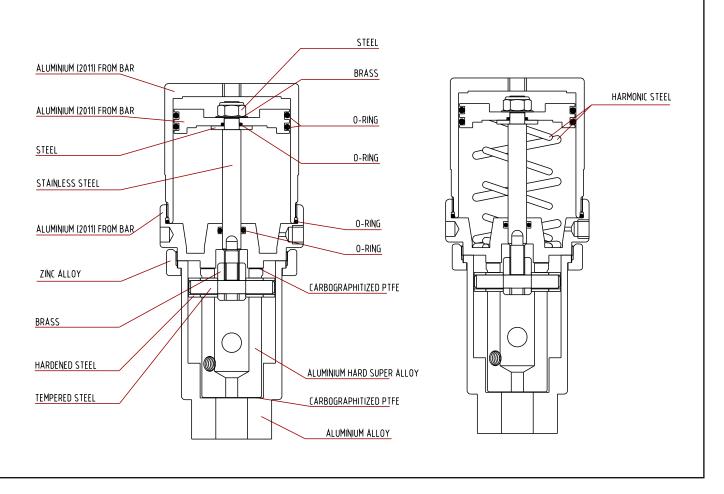
The torque is the same both for piston down and up stroke.

TORQUE OF SINGLE ACTING ROTARY ACTUATORS

(1Nm = 0.102 Kgfm - 1 Kgfm = 9.81 Nm)

ACTUATOR		SPF	RING	Air 4	lbar	Air5bar		bar Air6bar		Air7bar		Air8bar	
type		Beginning	End	Beginning	End	Beginning	End	Beginning	End	Beginning	End	Beginning	End
		of stroke	of stroke	of stroke	of stroke	of stroke	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 $+130^{\circ}$ 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;
- $+40^{\circ}\mathrm{C}$ 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.

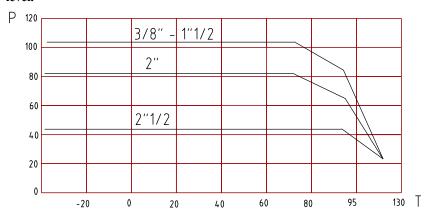


Diagram made with the following analysis:

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

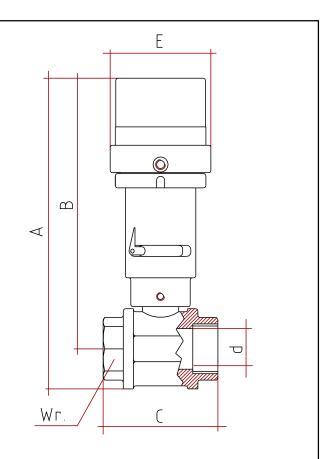
DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2

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	А	В	C	d	Е	Wrench	Κγ	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/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	А	В	С	d	Е	Wrench	Κv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/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.

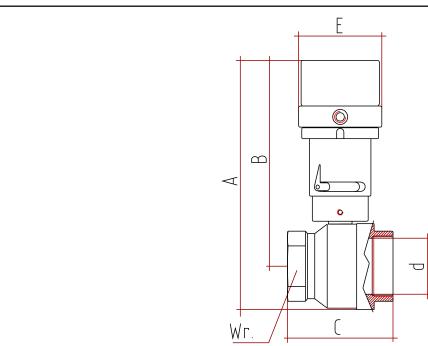
Control air 1/8" GAS connections.

VERSIONS AND SIZES

DA: 3" - 4"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM



OVERALL DIMENSIONS

DN	G	ACTUATOR	А	В	C	d	E	Wrench	Κv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/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 strenght, it has self-wrapping gaskets which guarantee a higher number of cycles.

Valve body: brass nickel plated.

Ball: brass haevy 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.

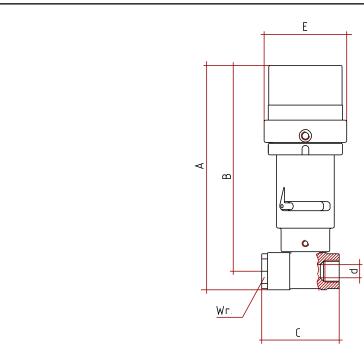
VERSION AND SIZES

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"						
	PΝ	210	210	210	210						



OVERALL DIMENSIONS

DN	G	ACTUATOR	А	В	C	d	Е	Wrench	Κγ	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/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;
- $+\,40^{\circ}\mathrm{C}$ 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

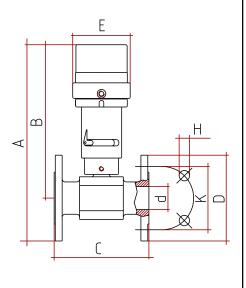
MADE IN ALUMINIUM

	RAT	TED PR	ESSURI	E "PN"			
DN	20	25	32	40	50	65	
PN	16	16	16	16	16	16	

	DOUBLE ACTING													
DN														
mm.	mm. type mm. mm. mm. mm. mm. mm. mm. n° m3/h gr.													
20	7.5													
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	65 DE1004 390 300 222 65 120 185 145 18 4 510 16150													

SINGLE ACTING (NC-NO)

DN	ACTUATOR	Α	В	С	d	Е	D	K	Н	Hole	Kγ	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





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

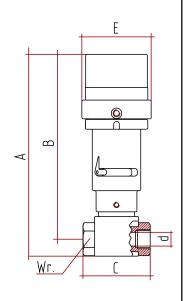
DA: 1/8" - 1/4" - 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

RATED PRESSURE "PN"														
SEAL IN POLYAMIDE														
G	G 1/8" 1/4" 3/8" 1/2" 3/4" 1" 1"1/4 1"1/2													
PN	PN 500 500 500 500 400 350 350 350													
	-		SEAL	IN PT	FE									
G	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2						
PN														

OVERALL DIMENSIONS

DN	G	ACTUATOR	Α	В	С	d	Е	Wrench	Κy	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



DESCRPTION

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 obteined 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;
- $+40^{\circ}\mathrm{C}$ 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

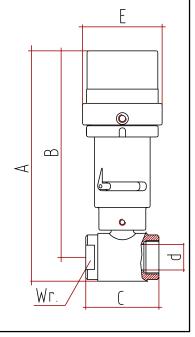
RATED PRESSURE "PN"												
G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"	4"		
PN	64	64	64	40	40	40	25	25	25	25		

PN 64 64 64 40 40 40 25 25 25

				DOL	JBLE AC	TING				
DN	G	ACTUATOR	Α	В	С	d	E	Wrench	Κγ	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"	DE 1155	417	351	150	80	133	115	770	13200
100	4"	DE 1155	447	365	178	100	133	125	1200	20200

SINGLE ACTING (NC-NO)

DN	G	ACTUATOR	Α	В	С	d	E	Wrench	Kγ	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



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 obteined 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

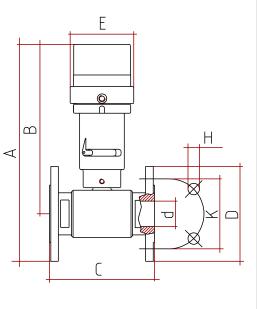
ANODIZINGTREATMENT ON OUTSIDE DETAILS

MADE INALUMINIUM

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 DΝ ACTUATOR В d Ε Κ Н Hole Κv Weight mm mm. mm. mm mm. mm. n° m3/h type mm. mm. mm. gг. DE5002 DE5002 DE6302 DE6302 DE8003 DE8003 DE8003 DE1004 DE 1155

SINGLE ACTING (NC-NO) ACTUATOR DN Α В C d Ε D K Н Hole Κv Weight n° m3/h type mm. mm. mm. mm. mm mm. mm. mm шш gг. SE5002 SE5002 SE6302 SE6302 SE8003 SE8003 SE1004





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

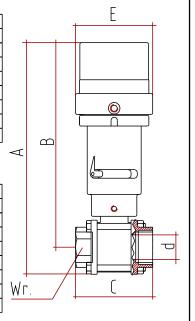
	RATED PRESSURE "PN"											
	G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"				
Ī	PN	64	64	40	40	25	25	25				

DOUBLE ACTING

DN	G	ACTUATOR	A	В	C	d	E	Wrench	Kγ	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	Α	В	С	d	E	Wrench	Κγ	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





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;

 $+\ 40^{\circ} C$ - 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

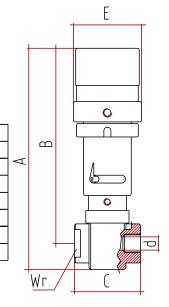
ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

	RAT	ED PR	RESSU	RE "PI	\"	
G	1/4"	3/8"	1/2"	3/4"	1"	1"1/4
PN	250	250	250	250	250	160
						•

OVERALL DIMENSIONS

DN	G	ACTUATOR	А	В	C	d	Е	Wrench	Κv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/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;

 $+40^{\circ}\mathrm{C}$ - 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

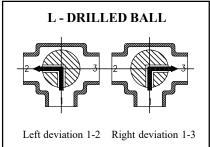
	RAT	ED PI	RESSU	RE "PI	J "	
DN	15	20	25	32	40	50
PN	40	40	40	40	40	16

OVERALL DIMENSIONS DOUBLE ACTING ACTUATOR DΝ В Ε Weight type mm. mm. m3/h gг. 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 DE8003 288 50 30 100 4 x M16 90 32 353 130 6400 α 4 x M16 230 40 DE8003 361 291 60 38 100 140 110 8000 4 x M16 50 DE8003 376 300 72 48 100 154 125 265 10000 SINGLE ACTING (NC-NO) ACTUATOR DN В d Ε D K K۷ Weight mm. mm. m3/h mm type mm. mm. mm. mm. mm. gг. SE5002 35 15 90 65 4 x M12 15 265 220 65 16 2400 30 20 SE6302 290 240 38 20 77 100 75 4 x M12 3200 25 SE6302 300 247 42 23 77 105 85 4xM12 43 3650 32 SE8003 353 288 50 30 100 130 100 4 x M16 90 6600 60 38 119 140 4 x M16 230 9800 40 SE1004 394 324 110 50 SE1004 409 332 72 48 119 154 125 4 x M16 265 12050



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

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

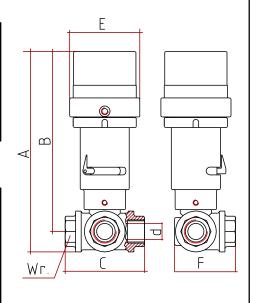
RATED PRESSURE "PN"											
G	1/2"	3/4"	1"	1"1/4	1"1/2	2"					
PN	40	40	25	16	16	16					

DOUBLE ACTING

DN	G	ACTUATOR	Α	В	C	d	E	F	Wrench	Κv	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	Α	В	C	d	E	F	Wrench	Κγ	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





Art. "F3T" - Brass 3-way ball valve - "t" drilled ball



Direct passage 1-2 Right deviation 1-3 ASSEMBLY 2-1 Left Deviation 2-3 Direct passage 1-2

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;
- $+\ 40^{\circ}\mathrm{C}$ 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

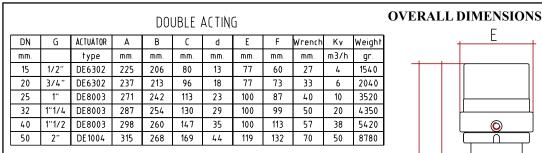
MADE IN ALUMINIUM

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.

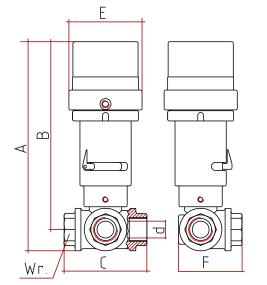
In the version SA the assembly 1-2 will be the ONLY possible.

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



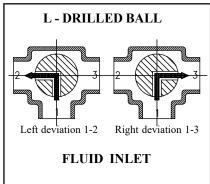
SINGLE ACTING

DN	G	ACTUATOR	Α	В	C	d	E	F	Wrench	Κγ	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



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

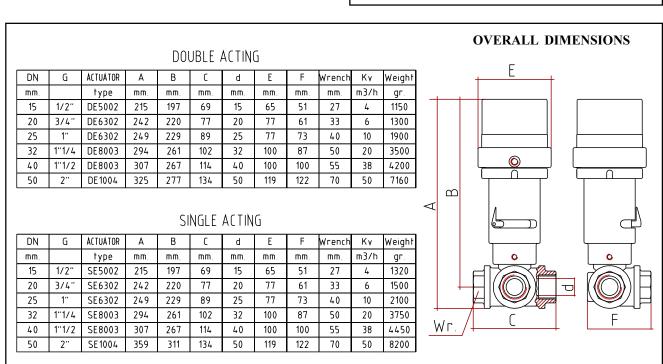
VERSIONS AND SIZES

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 domages to the valve.

	RA	TED P	RESSU	JRE "P	'N"		
G	1/2"	3/4"	1"	1"1/4	1"1/2	2"	
PN	10	10	10	10	10	10	





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



L - DRILLED BALL Left deviation 1-2 Right deviation 1-3 FLUID INLET

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

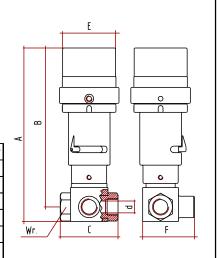
NOTE:

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.

RATED PRESSURE "PN"												
	SEAL	IN DEL	RIN									
1/8"	1/4"	3/8"	1/2"	3/4"	1"							
G 1/8" 1/4" 3/8" 1/2" 3/4" 1" PN 400 400 400 350 350 350												
	SEAL	_ IN PT	FE									
1/8"	1/4"	3/8"	1/2"	3/4"	1"							
100	100	100	100	100	100							
	1/8" 400 1/8"	SEAL 1/8" 1/4" 400 400 SEAI 1/8" 1/4"	SEAL IN DEL 1/8" 1/4" 3/8" 400 400 400 SEAL IN PT 1/8" 1/4" 3/8"	SEAL IN DELRIN 1/8" 1/4" 3/8" 1/2" 400 400 400 350 SEAL IN PTFE 1/8" 1/4" 3/8" 1/2"	SEAL IN DELRIN 1/8" 1/4" 3/8" 1/2" 3/4" 400 400 400 350 350 SEAL IN PTFE 1/8" 1/4" 3/8" 1/2" 3/4"							



DN	G	ACTUATOR	Α	В	C	d	E	F	Wrench	Κv	Weight
mm.		type	mm.	m3/h	дг.						
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



L - DRILLED BALL Left deviation 1-2 Right deviation 1-3

DESCRIPTION

3-way ball valve with rotary pneumatic actuator. Valve body and ball in stainless steel **AISI 316**

The body valve is obteined from block and polished.

Ball gasket: Virgin PTFE

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

ALLOWABLE TEMPERATURES

Operating temperature: from -15° C to $+100^{\circ}$ 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);
- $+\ 60^{\circ}\text{C}$ 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

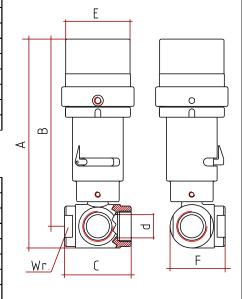
RATED PRESSURE "PN"												
G	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"					
PN	40	40	40	40	40	40	25					

DOUBLE ACTING

DN	Ù	ALTUATUR	Α	В	J	d	E	1	Wrench	Kγ	Weight
mm.		type	mm.	m3/h	дг.						
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	Α	В	C	d	E	F	Wrench	Κγ	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





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



T - DRILLED BALL ASSEMBLY 1-2 Direct passage Right deviation 1-2 1-3 ASSEMBLY 2-1 Left Deviation Direct passage 2-3 1-2

DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body and ball in stainless steel AISI 316

The body valve is obteined 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;
- $+40^{\circ}\mathrm{C}$ 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/lin the Double Acting version, please specify **ASSEMBLY 1-2** or **2-1**

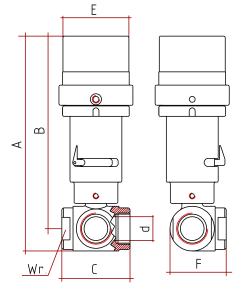
If not specified the assembly will be 1-2.

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

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					

		Weight	Κγ	Wrench	F	E	d	C	В	Α	ACTUATOR	G	DN
		gг.	m3/h	mm.	mm.	mm.	mm.	mm.	mm.	mm.	type		mm.
	_	2050	2	36	59	77	10	72	214	237	DE6302	3/8"	10
		2350	4	38	67	77	15	82	217	243	DE6302	1/2"	15
		4000	6	47	76	100	20	92	251	281	DE8003	3/4"	20
		4450	10	52	86	100	25	102	256	291	DE8003	1"	25
		6300	20	64	102	100	32	118	273	316	DE8003	1"1/4	32
		8600	38	80	117	100	40	134	281	332	DE8003	1"1/2	40
		444.00		0.5	407	440	50	144	286	342	DE 1004	2"	50
മ		11600	50	85	127	119	50	144	200	1 3 12	02.00		
മ	А	11600	50	85	127			NGLE /					30
മ	A	Weight		85 Wrench						A	ACTUATOR	G	DN
Β	A					j	\CTIN(NGLE /	SII				
В	A	Weight	Κγ	Wrench	F	-] E	ACTIN(NGLE A	SII	Α	ACTUATOR		DN
В	A	Weight gr.	Kv m3/h	Wrench mm.	F mm.	E mm.	ACTIN(d mm.	VGLE A	SIN B mm.	A mm.	ACTUATOR type	G	DN mm.
B	А	Weight gr. 2200	Ky m3/h 2	Wrench mm. 36	F mm. 59	E mm. 77	d mm. 10	C mm. 72	SIN B mm. 214	A mm. 237	ACTUATOR type SE6302	G 3/8"	DN mm. 10
Ω.	A	Weight gr. 2200 2500	Ky m3/h 2 4	Wrench mm. 36 38	F mm. 59 67	E mm. 77	d mm. 10	VGLE A C mm. 72 82	SIN B mm. 214 217	A mm. 237 243	ACTUATOR type SE6302 SE6302	G 3/8" 1/2"	DN mm. 10
Ω.	A	Weight gr. 2200 2500 4200	Ky m3/h 2 4	Wrench mm. 36 38 47	F mm. 59 67 76	E mm. 77 77 100	d mm. 10 15 20	VGLE A C mm. 72 82 92	SIN B mm. 214 217 251	A mm. 237 243 281	ACTUATOR type SE6302 SE6302 SE8003	G 3/8" 1/2" 3/4"	DN mm. 10 15 20
ω	⋖	Weight gr. 2200 2500 4200 4650	Ky m3/h 2 4 6	Wrench mm. 36 38 47 52	F mm. 59 67 76 86	E mm. 77 77 100 100	d mm. 10 15 20 25	C mm. 72 82 92 102	SIN B mm. 214 217 251 256	A mm. 237 243 281 291	ACTUATOR type SE6302 SE6302 SE8003 SE8003	G 3/8" 1/2" 3/4" 1"	DN mm. 10 15 20 25
	∢ -	Weight gr. 2200 2500 4200 4650 8400	Ky m3/h 2 4 6 10 20	Wrench mm. 36 38 47 52 64	F mm. 59 67 76 86 102	E mm. 77 77 100 100 119	d mm. 10 15 20 25	C mm. 72 82 92 102 118	SIN B mm. 214 217 251 256 305	A mm. 237 243 281 291 347	ACTUATOR type SE6302 SE6302 SE8003 SE8003 SE1004	3/8" 1/2" 3/4" 1" 1"1/4	DN mm. 10 15 20 25 32

DOUBLE ACTING



OVERALL DIMENSIONS

that are integral part of our Catalogue.



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



L - DRILLED BALL Left deviation 1-2 Right deviation 1-3 FLUID INLET

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)

ALLOWABLETEMPERATURES

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:

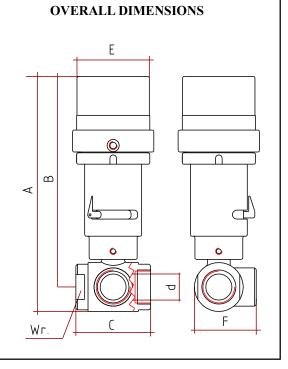
Only 3-way diverting ball allows exclusively to divert the flow to the right or to the left. The fluid must enter obligatorily by the central sleeve; otherwise fluid leakages and damages to the valve may happen.

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

				D0	UBLE	ACTIN	G				
DN	G	ACTUATOR	Α	В	C	d	E	F	Wrench	Κγ	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"	DE 1004	342	286	144	50	119	127	85	50	9600
65	2"1/2	DE 1004	354	293	160	65	119	141	94	80	12350
80	3"	DE 1155	451	375	190	80	133	171	100	120	21200
100	4"	DE 1155	493	405	240	100	133	211	120	170	31950

SINGLE ACTING

DN	G	ACTUATOR	Α	В	С	d	E	F	Wrench	Κγ	Weight
mm.		type	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





$Art. "F4G"-"F4A"- \ \ \text{butterfly valve in cast iron with disk in cast iron or stainless steel}$



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**

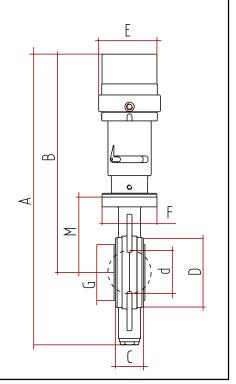
MADE IN ALUMINIUM

AVOID TO INTERCEPT SHARP MATERIALS

DIT 10 00 00 100 120 100	RATED PRESSURE "PN"														
	200	150	125	100	80	65	50	40	DN						
PN 16 16 16 16 16 16 16	16	16	16	16	16	16	16	16	PN						

OVERALL DIMENSIONS

DN	ACTUATOR	Α	В	C	D	d	E	F	G	Μ	Kγ	Weight
mm.	type	mm.	m3/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	49	5400
80	DE8003	471	351	46	140	83	100	90	107	131	78	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	DE 1004	633	440	60	274	198	119	90	240	225	1190	14000





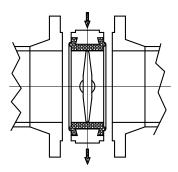
Art."F4G"-"F4A"

ASSEMBLY FOR BUTTERFLY VALVES

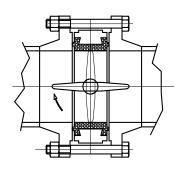
Art. F4 butterflly valves are constructed for installation between UNI, DIN or ASA flanges; they are inserted directly without any gasket.

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.

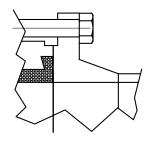
Flanges must be perfectly parallel and have well finished surfaces.



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

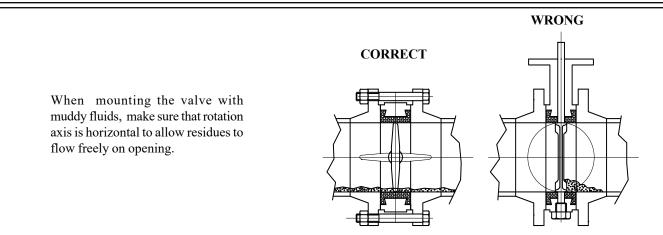


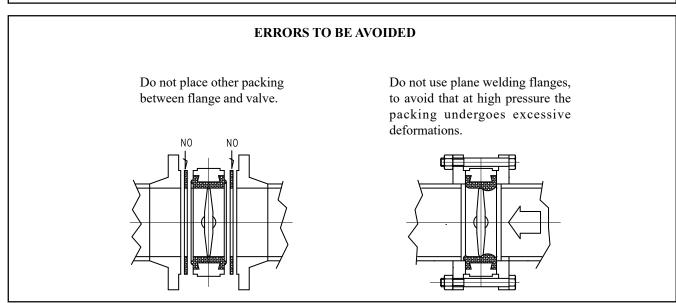
Open completly the valve before clasping flanges.



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.







Art. "AL4" - BUTTERFLY VALVE IN STAINLESS STEEL



	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							
								-						

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.

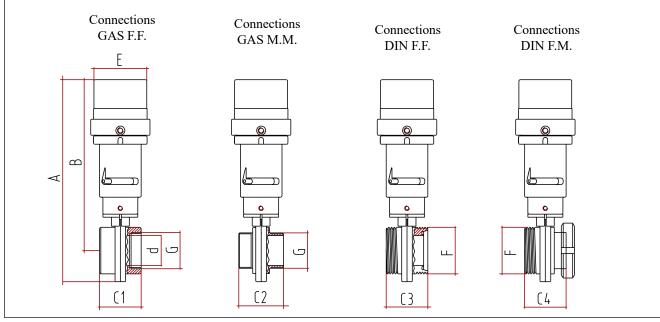
Control air 1/8" GAS connections.

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



OVERALL DIMENSIONS DOUBLE ACTING - SINGLE ACTING

DN	G	F	ACTUATOR	А	В	C1	C2	C3	C4	В	Е	Κv	Weight
mm.			type	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	дг.
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



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

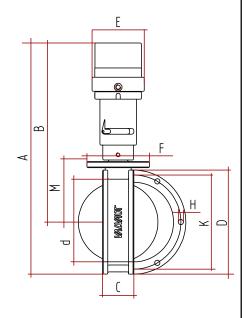
OVERALL DIMENSIONS

DOUBLE ACTING

DN	ACTUATOR	Α	В	C	D	d	E	F	Н	K	М	Hole	Weight
mm.	type	mm.	mm.	mm.	п°	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	Α	В	С	D	d	E	F	Н	К	М	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 WIT ACTUATOR FOR THE DOSING



DESCRIPTION

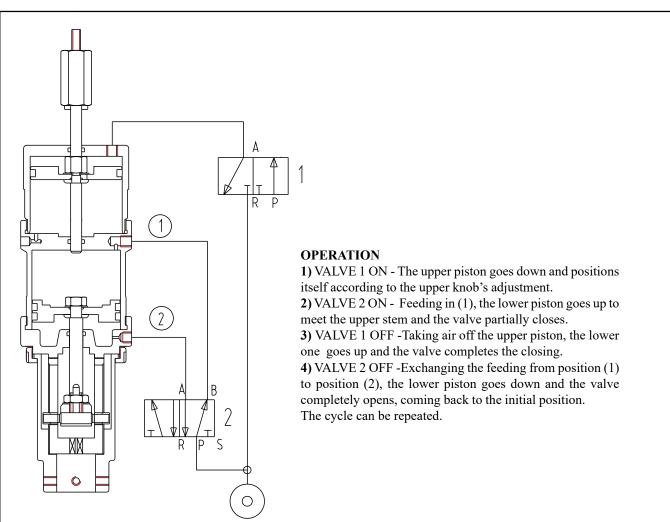
This actuator has been purposely conceived to obtain a partial and adjustable closing of the valve before its complete closing, or a partial opening of the valve before its complete opening.

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.





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.

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

It is not possible to assembly 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.

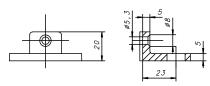
It is possible to assembly the protection ring in actuators already existing, using the suitable Kit.

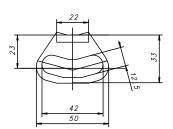
It is necessary to specify in the P/O the CODE of the valve.



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 bougt 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 whose 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.



