6-th Edition

## *1/1/1/*01

#### **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.

#### QUALITY

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: effepi@valvaut.it



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### **GENERAL CATALOGUE**

6-th Edition

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1.454	AT 11 - A	7 H.	
1.6.4		6 A 11	
			- A - A

	ANALY	TIC TABL	Æ
DATE			
MEASURE OF THE VALVE.			
VERSION OF THE VALVE:			
Double acting	Normally closed  _	Nor	nally open _
	ower end of the valve?		
Is the valve installed on	6	YES	
-	rces of vibration?	_	
			NO
Is the valve washed at t Kind of washing fluid?		YES	
Tring of Washing Hald			
FLUID INTERCEPTED			
Liquid     Gas	Steam	/acuum	
Temperature	Conc	entration	
Pressure with valve close	ePressi	ure with valve	open
The fluid is controlled	in only one direction  _		in both direction  _
FEATURES OF THE FLUID			
_  Lubricant	_ Abrasive		7 ith solid suspensions
_  dry			ith filamentous suspensions
_  Calcareous     It solidifies	_ Acid		ith abrasive suspensions
	_  It crystallizes	_	
WORKING FREQUENCY			
	Clos	ing time	
			per year
OPERATING AIR			
-		-	
It is filtered ? YI	$ES \bigsqcup NO \bigsqcup \qquad It is l$	ubricated?	YES [] NO []
ENVIRONMENTAL CONDIT	IONS		
			ture
POSSIBLE SPECIAL USE C	ONDITIONS		
Maximum temperature		-	





# MARK **(E**

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.

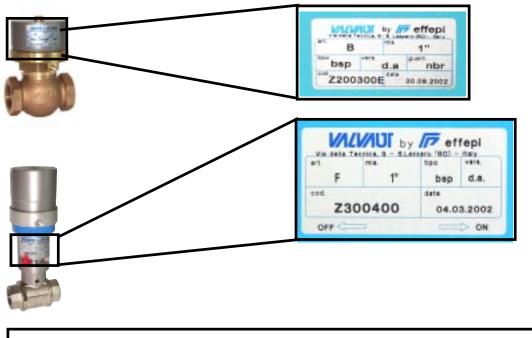
The resolution could be as resumed: a motorised valve in not a machine.

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

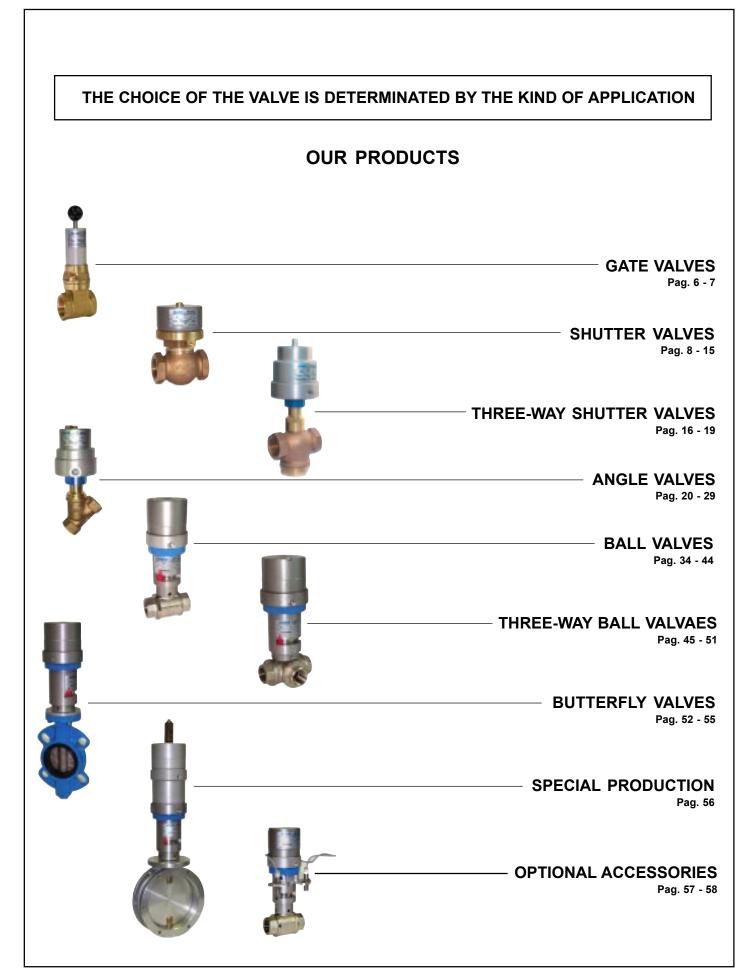
# DA: double acting - It opens with air , closes with air NC: normally closed - It opens with air, closes with spring NA: normallly open - It closes with air, opens with spring

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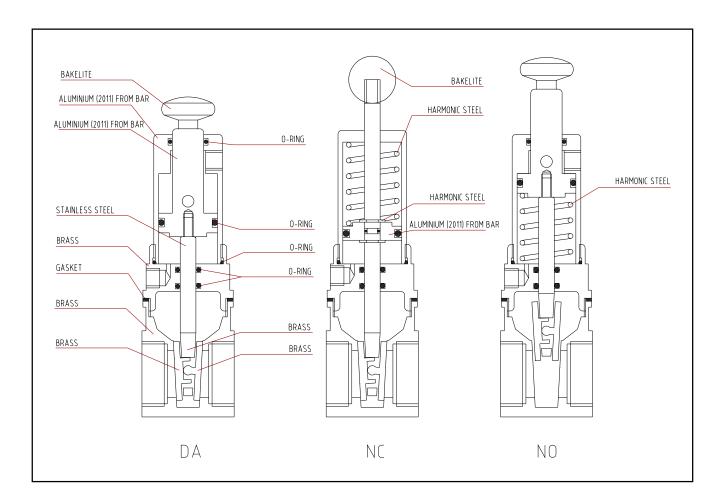


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# Art. "A" - GATE VALVE

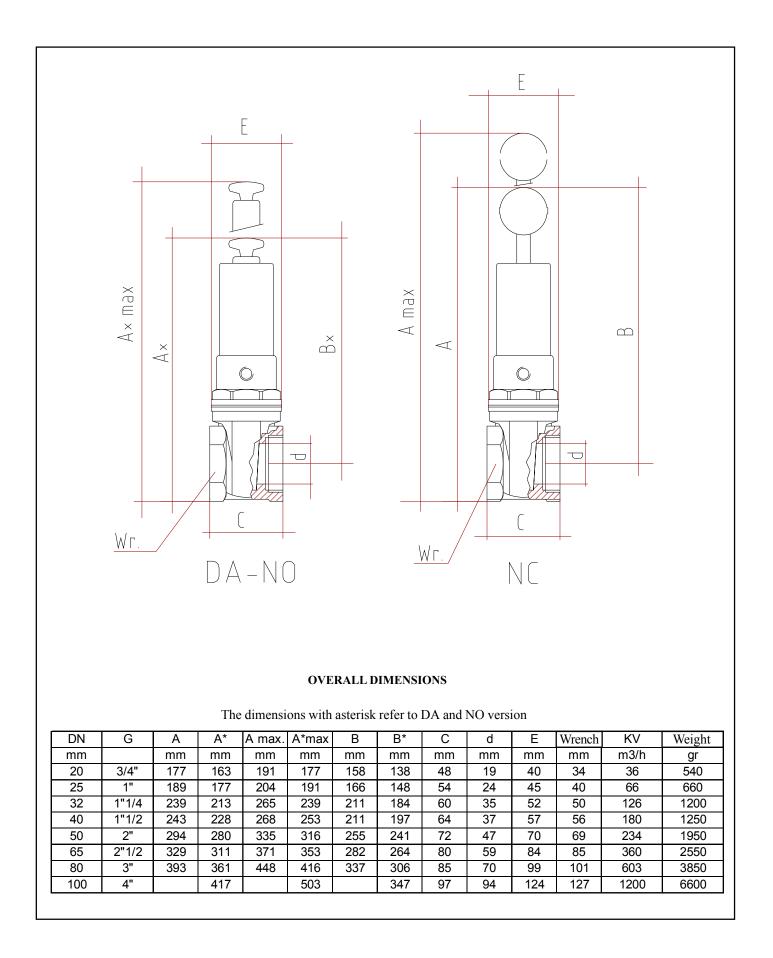




SUBJECT TO MODIFICATIONS WITHOUT NOTICE Please refer yourselves to the section of the INSTRUCTIONS, that are integral part of our Catalogue.

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### Art. "B" - SHUTTER GLOBE VALVE

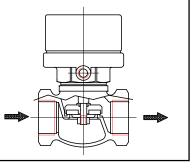


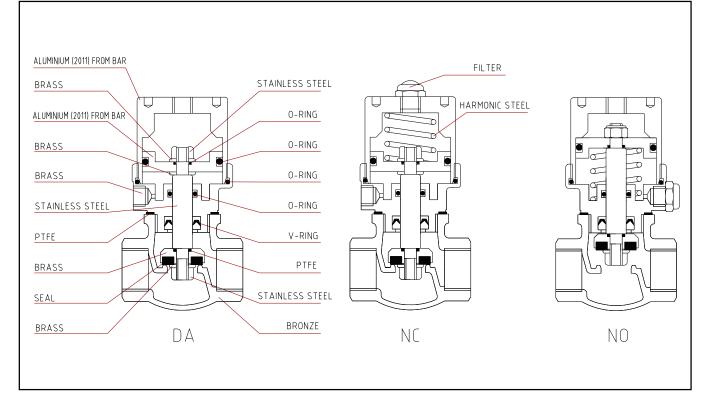
#### DESCRIPTION

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  $-15^{\circ}C$  to  $+100^{\circ}C$ 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** 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" DA: 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.





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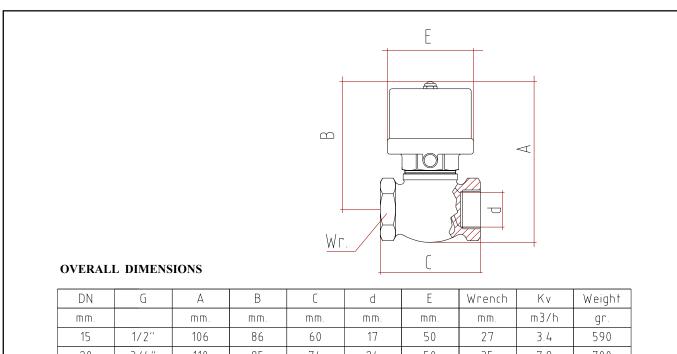
### GENERAL CATALOGUE

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# Art. "B"

			FFERENTIA							
NC : NBR-	-FPM-EPDM	NC :	PTFE		DA/NO	: NBR-FPI	M-EPDM	DA	NO: PTF	E
	DeltaP		DeltaP	Γ		PILOT	DeltaP		PILOT	DeltaP
G	bar	G	bar		G	PRESS.	bar	G	PRESS.	bar
1/2″	8	1/2″	8	Γ	1/2″	4	15	1/2″	4	15
3/4″	7	3/4"	5		1/2″	5	19	1/2″	5	19
1"	7	1''	6		3/4"	4	10	3/4″	4	8
1''1/4	5.5	1''1/4	4.5	Γ	3/4"	5	13	3/4″	5	11
1''1/2	8	1''1/2	6		1′′	4	18	1''	4	15
2″	5	2″	3.5		1′′	5	23	1′′	5	20
		<u>_</u>	J		1''1/4	4	11	1''1/4	4	9
					1''1/4	5	14	1''1/4	5	12
				Γ	1''1/2	4	11	1''1/2	4	10
					1''1/2	5	13	1''1/2	5	12
					2″	4	7	2″	4	6
					2″	5	9	2"	5	8

		MINIMUM PI	RESSURE REG	QUIRED TO C	<b>DPEN NC VER</b>	SION
G	1/2″	3/4″	1"	1''1/4	1''1/2	2''
Ваг	4.5	4.5	3.5	3.5	4	4



DN	G	А	В	C	d	E	Wrench	Κv	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
	mm. 15 20 25 32 40	mm.           15         1/2"           20         3/4"           25         1"           32         1"1/4           40         1"1/2	mm.         mm.           15         1/2"         106           20         3/4"         110           25         1"         128           32         1"1/4         138           40         1"1/2         166	mm.         mm.         mm.           15         1/2"         106         86           20         3/4"         110         85           25         1"         128         98           32         1"1/4         138         106           40         1"1/2         166         130	mm.         mm.         mm.         mm.           15         1/2"         106         86         60           20         3/4"         110         85         74           25         1"         128         98         85           32         1"1/4         138         106         95           40         1"1/2         166         130         110	mm.mm.mm.mm.mm.151/2"106866017203/4"110857424251"128988530321"1/41381069539401"1/216613011045	mm.mm.mm.mm.mm.mm.151/2"10686601750203/4"11085742450251"12898853076321"1/4138106953976401"1/21661301104589	mm.mm.mm.mm.mm.mm.mm.151/2"1068660175027203/4"1108574245035251"1289885307646321"1/413810695397652401"1/2166130110458960	mm.mm.mm.mm.mm.mm.mm.mm.m3/h151/2"10686601750273.4203/4"11085742450357.9251"128988530764611321"1/41381069539765218401"1/216613011045896028



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



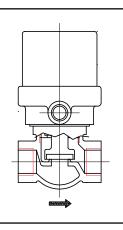
#### DESCRIPTION

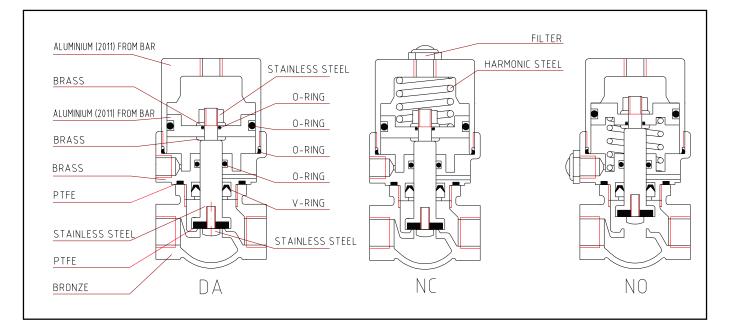
Valve with flat shutter closing. Seal : PTFE/NBR and PTFE/FPM. The closing is carried out through the piston stem, at whose end the seal is directly applied. Perfect airtight. Reduced overall dimensions. The very simple construction allows high operating frequencies, high differential pressures (see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

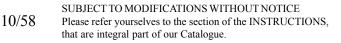
ANODIZING TREATMENT ON OUTSIDE DETAILS MADE IN ALUMINIUM

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.







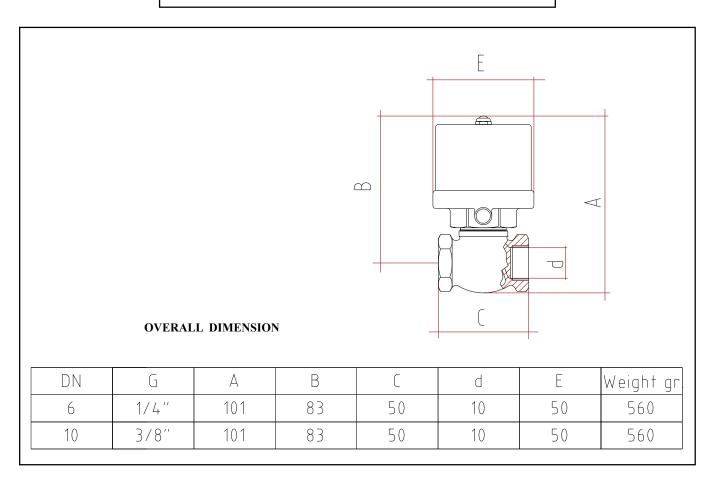


# Art. "BHP"

NC VI	ERSION		DA-NO VERSION			
	DeltaP			PILOT	DeltaP	
	bar		G	PRESS.	bar	
		_	1/4″	2	15	
1/4″	21		11	3	25	
3/8′′	21		11	4	32	
			3/8″	2	15	
				3	25	
			11	4	32	

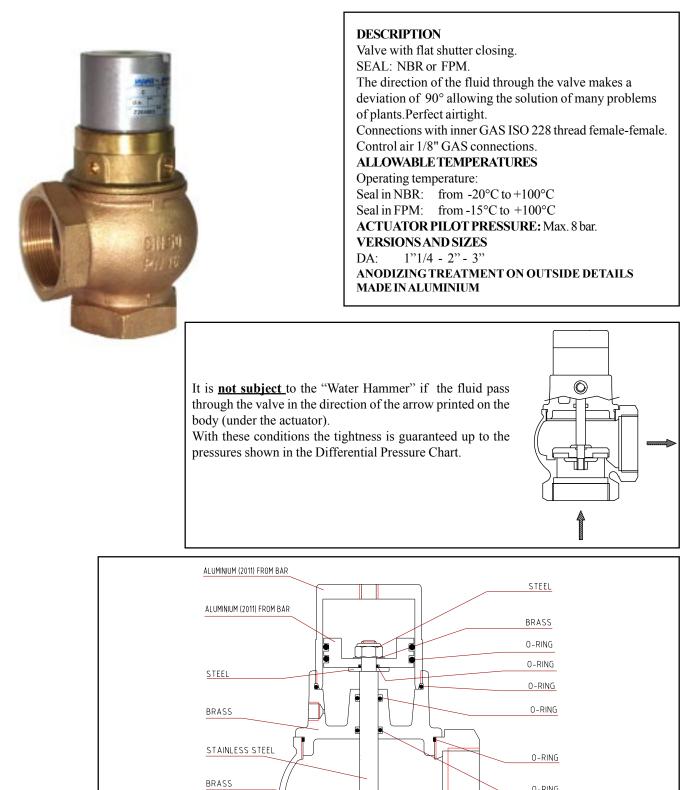
#### MINIMUM PRESSURE REQUIRED TO OPEN NC VERSION

G	1/4''	3/8″
Ваг	5	5





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



BRASS

SEAL

BRASS

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0-RING

PTFE

STEEL

# **GENERAL CATALOGUE**

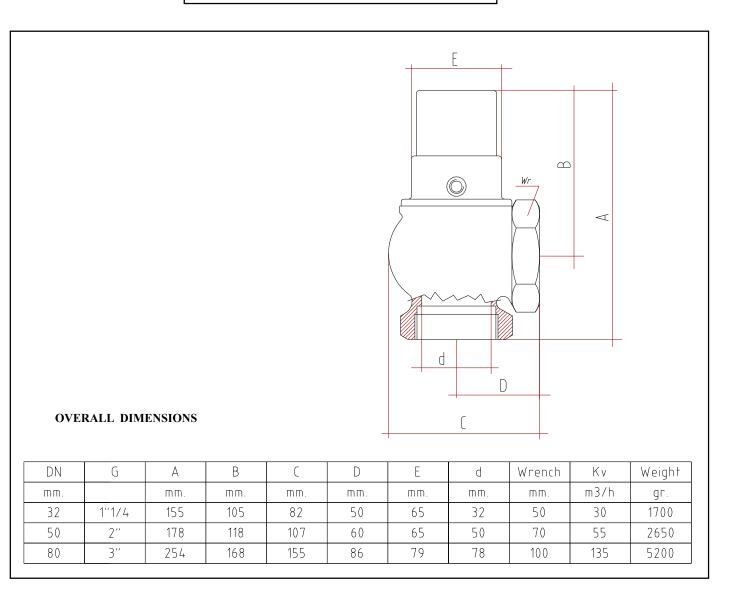
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#### DIFFERENTIAL PRESSURE CHART

	PILOT	DeltaP
G	PRESS.	bar
1''1/4	4	7
11	5	9
11	6	10.5
2″	4	4
11	5	5
	6	6
3″	4	2.5
11	5	3
11	6	3.5





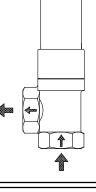
# Art. "T" - shutter value with right-angle connection for low pressure

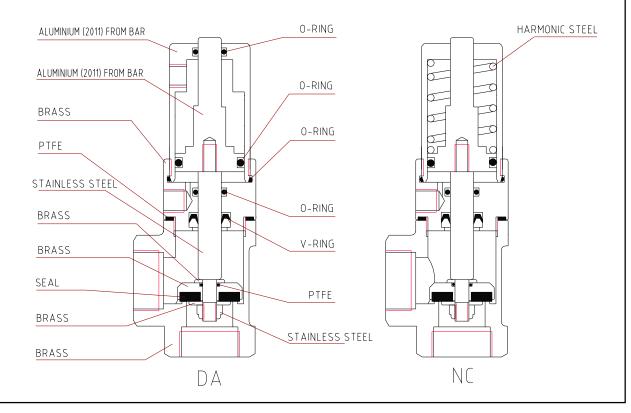


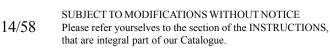
DESCRIPTION Valve with flat shutter closing. SEAL: NBR or FPM. Perfect airtight even with high operating frequencies. Pneumatic actuator with reciprocating piston movement. Connections with inner GAS ISO 228 thread female-female. On request with NPT connections. Control air 1/8" GAS connections. ALLOWABLE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







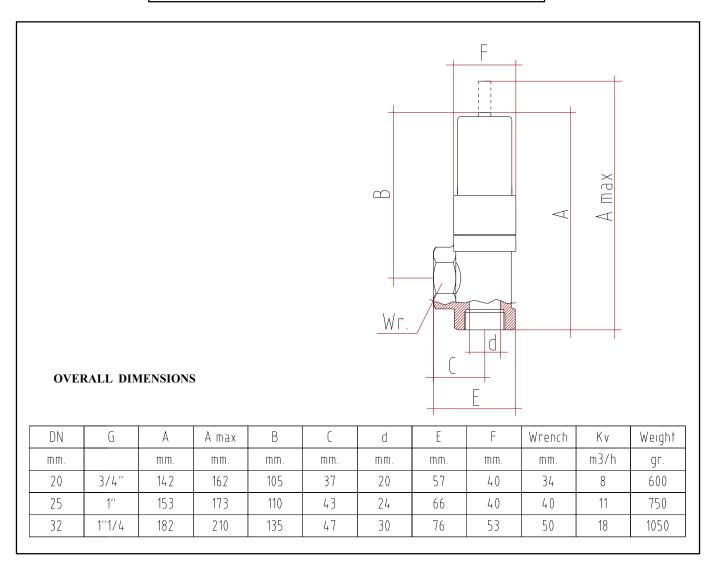


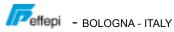
# Art. "T"

	DIFFE	RENTIAL PRESSURE	CHART				
NC VERSION DA VERSION							
	DeltaP			PILOT	DeltaP		
G	bar		G	PRESS.	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





### Art. "B3" - THREE WAY SHUTTER VALVE

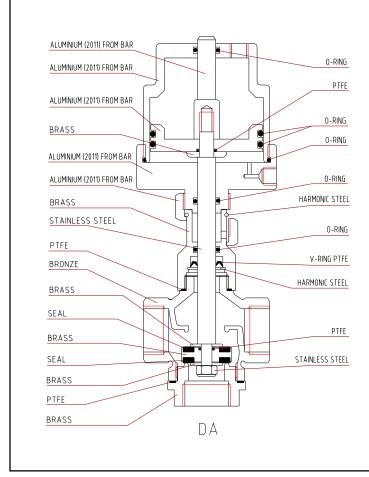


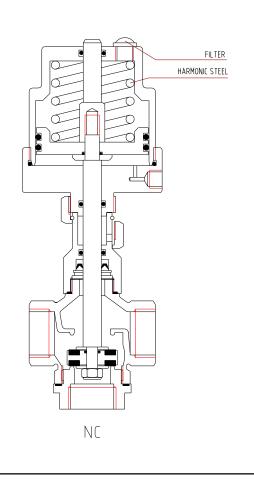
#### DESCRIPTION

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. **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

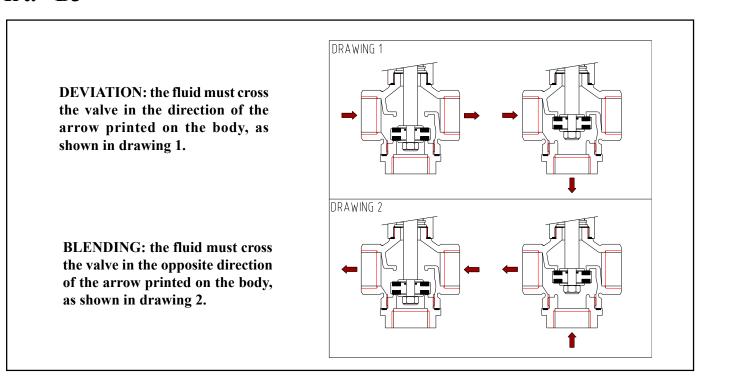


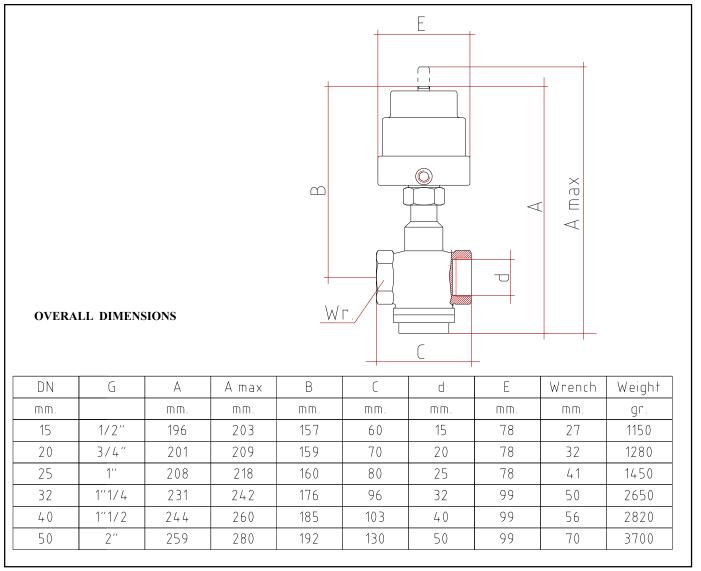


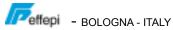
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# Art. "B3"







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

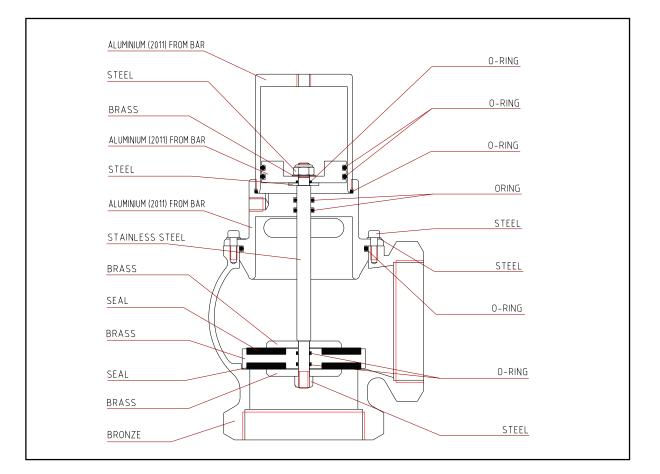


#### DESCRIZIONE

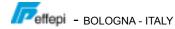
Intercepting valve purposely conceived to suddenly break the vacuum in the system (i.e. release of suction cups). Pneumatic actuator with reciprocating piston movement. Flat shutter closing with double seal in NBR. Three-way and 2-position function (3/2). Perfect airtight. SECTORS OF USE It is generally 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 <sup>2</sup>	1,13	8,6	12,6	19,5



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### Art. "C3"

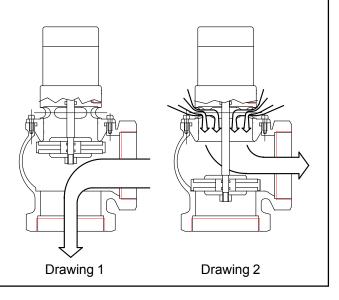
#### OPERATION

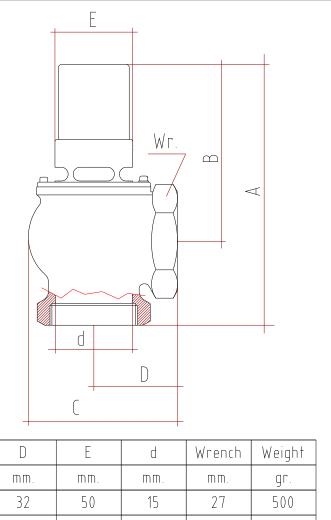
When the valve is open (drawing 1) the vacuum can be created and kept inside the unit, the arrow indicates the passage from the unit to the suction pump.

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

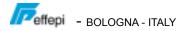
The direction of vacuum flow must be as shown in drawing 1, i.e. OPPOSITE to the arrow printed into the valve body.



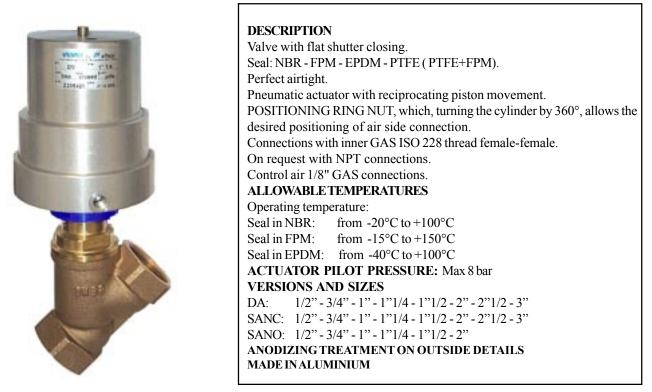


#### **OVERALL DIMENSIONS**

DN	G	А	В	C	D	E	d	Wrench	Weight
ΠΠ.		mm.	g٢.						
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

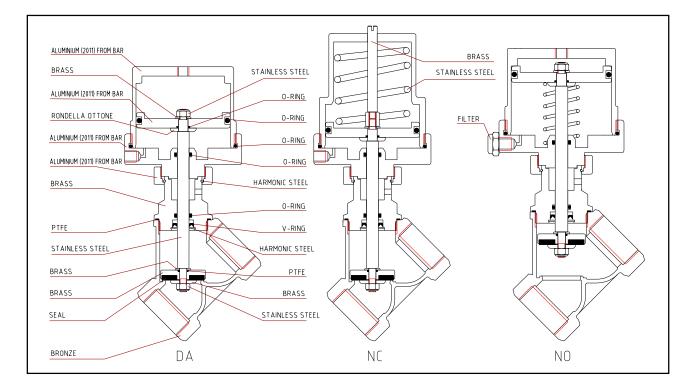


It is **not subject** to the "Water Hammer" if the fluid pass through the valve in the direction of the arrow printed on the body (under the actuator). With these conditions the tightness is guaranteed up to the pressures shown in the

Differential Pressure Chart.

MINIMUM PRESSURE	REQUIRED T	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



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# Art. "D"

NC

				DIFF	EREN	TIAL PRE	SSURE CH	ARTE			
IC : NBR-	FPM-EPDM		NC :	PTFE		DA/NO :	NBR-FP1	1-EPDM		D	A/N
	DeltaP			DeltaP			PILOT	DeltaP	]		F
G	bar		G	bar		G	PRESS.	bar		G	P
1/2″	24		1/2″	22		1/2"	3	14	-	1/2″	
3/4″	20		3/4"	20		1/2''	4	20		1/2"	
1" 1"1/4	18 18		1" 1"1/4	16 15		3/4"	3	13		3/4"	
1"1/2	15		1"1/2	13		3/4″	4	19		3/4''	
2″	9		2″	7		1''	3	10		1''	
2"1/2	4		2‴1/2	3		1''	4	18		1''	
3″	3		3″	2		1''1/4	3	15		1''1/4	
						1''1/4	4	20		1''1/4	
			$\times$			1''1/2	3	12		1‴1/2	
-						1''1/2	4	15		1‴1/2	
	~ <u>~</u>			KB		2''	3	8		2″	
	$\checkmark$		$\sim$	$\langle \rangle$		2''	4	10		2″	
		$\langle \rangle$				2‴1/2	4	6		2″1/2	
$\triangleleft$						2‴1/2	5	8		2″1/2	
		S				3''	4	4	1	3"	
			$\checkmark$			3"	5	6	1	3"	
									-		

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#### **OVERALL DIMENSIONS DA/NO VERSIONS**

DN	G	А	В	C	d	E	F	Wrench	Κv	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	А	В	C	d	E	F	Wrench	Κv	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

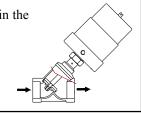


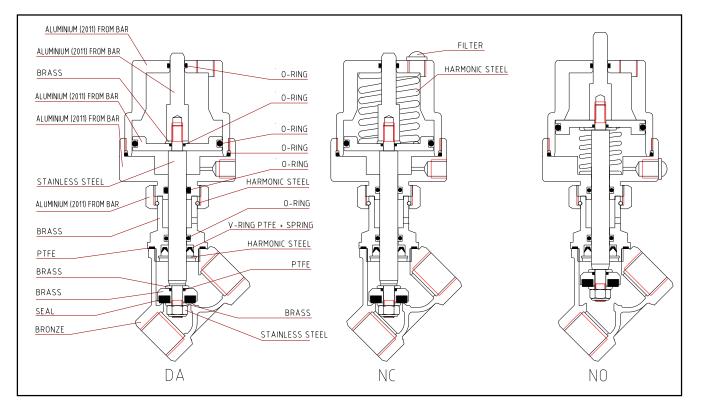
#### DESCRIPTION

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). 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 5 5 5 4 4 5 5 5





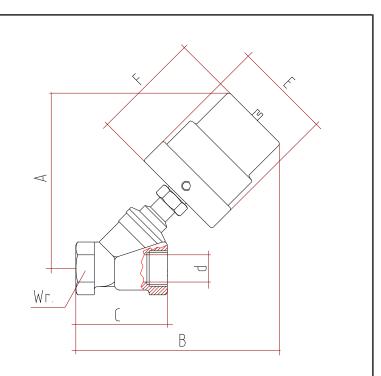


# Art. "DV"

SATURED ST	EAM CHAR	Г
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	

RT
NO
PF
ΡI

#### VERSIONS RESS. DeltaP ILOTA bar 4 18 5 23 4 16 5 22 15 4 5 20



#### **OVERALL DIMENSIONS**

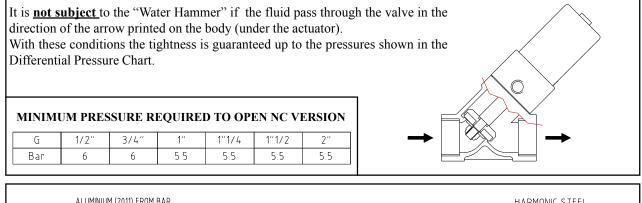
DN	G	А	В	С	d	E	F	Wrench	Κv	Weight
mm.		mm.	m3/h	gr.						
15	1/2"	118	136	61	15	64	67	27	4.5	780
20	3/4"	124	144	70	20	64	67	33	11	920
25	1''	131	154	81	25	78	73	38	13	1180
32	1''1/4	183	210	95	32	100	111	49	30	2460
40	1''1/2	191	219	110	40	100	111	56	42	2900
50	2″	203	239	130	50	100	111	69	66	3760
65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

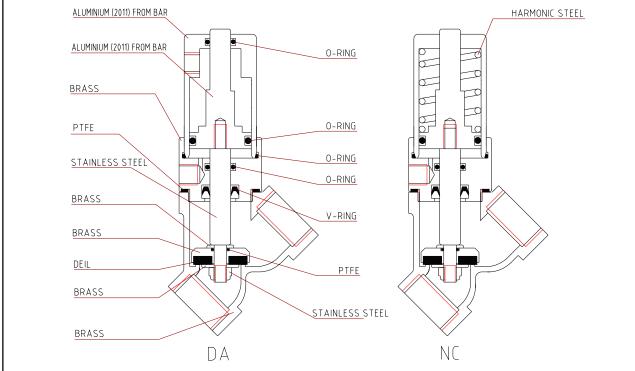




### Art. "Y" - SHUTTER ANGLE VALVE FOR LOW PRESSURE



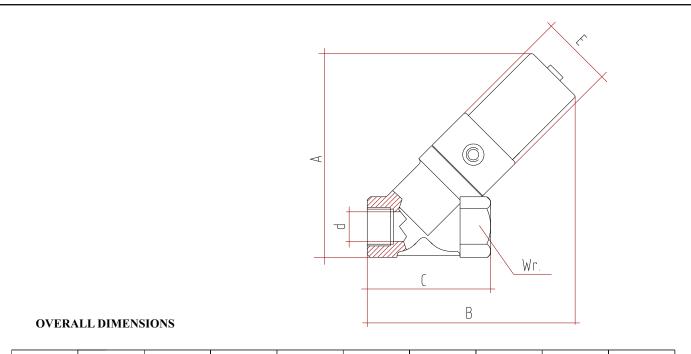






# Art. "Y"

	DIF	FERENTIAL PRESSURE	CHART		
Ν	C			DA	
	DeltaP			PILOT	DeltaP
G	bar		G	PRESS.	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



DN	G	А	В	С	d	E	Wrench	Κv	Weight
mm.		mm.	mm.	mm.	mm.	mm.	mm.	m3/h	g٢.
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

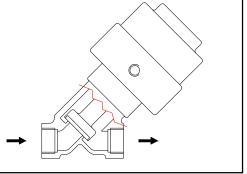


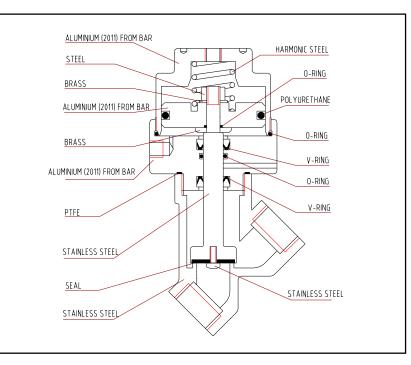
#### DESCRIPTION

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

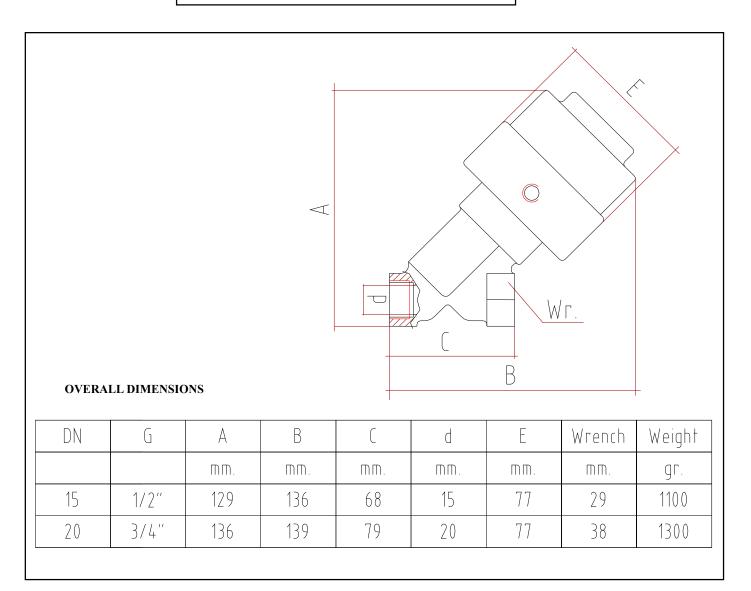






# Art. "PET"

DIFFERENTIAL PRESSURE CHART										
PILOT	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								





## Art. "AX" - shutter angle value in stainless steel for steam and high temperature $\mathbf{A}$



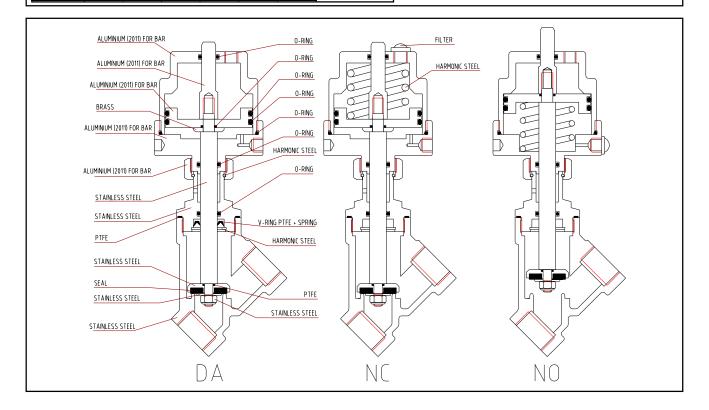
#### DESCRIPTION

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  $-20^{\circ}$ 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 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" DA: 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 INALUMINIUM.

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 5 5 5 5



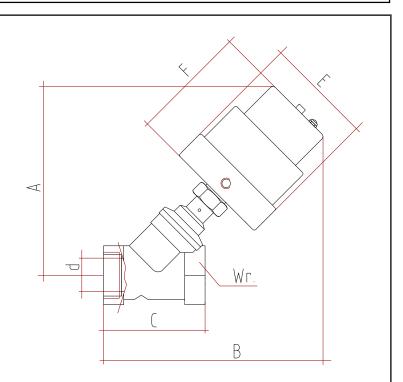


# **/////U**

# Art. "AX"

SATURED STI	EAM CHARTE
MANOMETER PRESSURE bar	TEMP. C°
0	100
1	120
2	134
2	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

	DIFFERE	NTIAL	PRESSURF	CHART	
NC VE	RSION		DA	'NO VERSI	ON
	DeltaP			PRESS.	DeltaP
G	bar		G	PILOTA	bar
1/2"	21		1/2"	4	18
3/4"	15		1/2"	5	23
1″	13		3/4″	4	16
1''1/4	20		3/4"	5	22
1‴1/2	15		1"	4	15
2″	9		1''	5	20
			1''1/4	4	16
			1''1/4	5	20
			111/2	4	12
			1''1/2	5	15
			2"	4	9
			2″	5	11



#### **OVERALL DIMENSIONS**

DN	G	А	В	C	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.



# **1/1/1/1**01







#### 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.

32/58

2 - GREAT VERSATILITY OF USE.

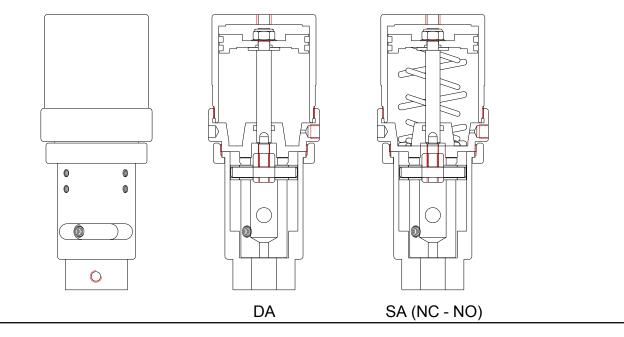
3-ACCURACYAND POWER OF INTERVENTION.

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.



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



6-th Edition

### 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

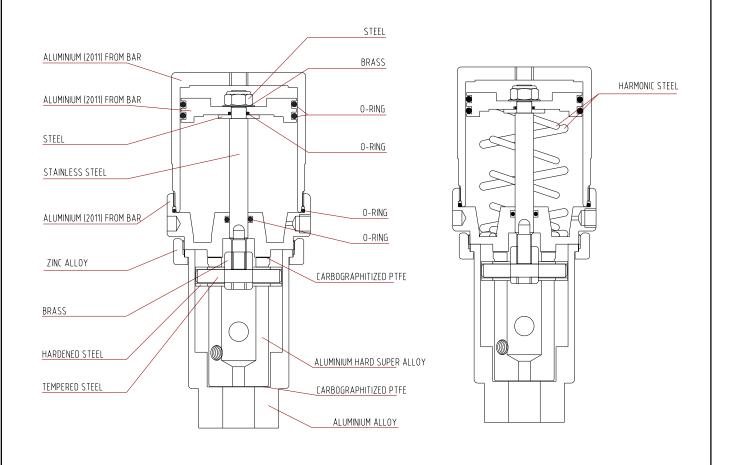
The torque is the same both for piston down and up stroke.

#### TORQUE OF SINGLE ACTING ROTARY ACTUATORS

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

ACTUATOR	TOR SPRING		RING	Air 4 bar		Air 5 bar		Air 6 bar		Air7bar		Air 8 bar	
type		Beginning	End	End Beginning End		Beginning	End	Beginning	End	Beginning	End	Beginning	End
		of stroke	of stroke	of stroke	of stroke	of stroke	of stroke	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



Feffepi - BOLOGNA - ITALY

## 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 -  $20^{\circ}$ C up to +  $130^{\circ}$ C (with peaks of  $150^{\circ}$ C). For gas: from -  $20^{\circ}$ C up to +  $60^{\circ}$ 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.

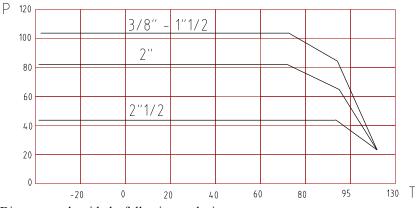


Diagram made with the following analysis: Inside seats and seal: hydraulic-test of recirculation water-glycol at 50%, water hammer 1.1 PN e n° of cycles following UNI EN3828 - EN331. Outside body and seal: hydraulic-test static 1.5 PN. Limits of pressure: for liquids from 100 bar up to 40 bar.

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.

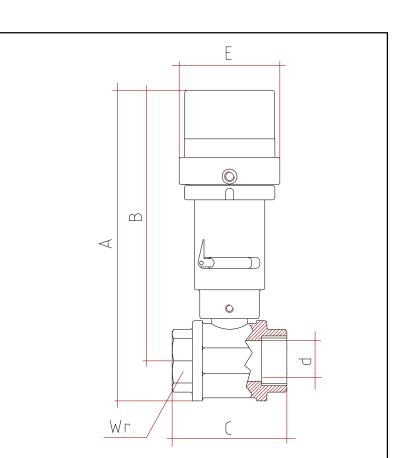
On request with inner NPT connections.

Control air 1/8" GAS connections.

#### VERSIONSAND 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.





*V/LV/*UI

#### **OVERALL DIMENSIONS**

#### DOUBLE ACTING

DN	G	ACTUATOR	А	В	С	d	E	Wrench	Κv	Weight
ΠΠ.		type	mm.	mm.	mm.	mm.	mm.	mm.	m3/h	g٢.
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	C	d	E	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

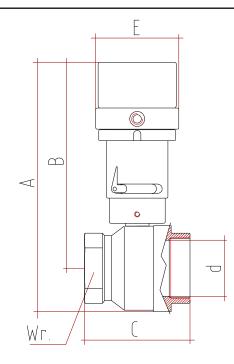


# Art. "F" - BRASS BALL VALVE - LIGHT MODEL



#### DESCRIPTION

DESCRIPTION
Ball valve with rotary actuator.
Valve body: brass.
Ball: brass heavy duty chromium plated.
Ball gasket: Virgin PTFE.
ALLOWABLE TEMPERATURES
Operating temperature: from $-15^{\circ}$ 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°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

ſ	DN	G	ACTUATOR	A	В	C	d	E	Wrench	Κv	Weight
	mm.		type	mm.	mm.	mm.	mm.	ΠΠ.	mm.	m3/h	gr.
	80	3"	DE1004	355	293	151	75	120	94	770	6900
	100	4 ''	DE 1155	433	358	180	90	134	120	1200	11400



GENERAL CATALOGUE 6-th Edition



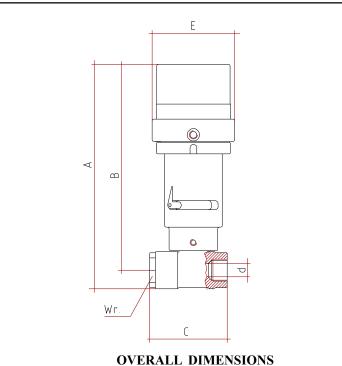
# Art. "FHP " - BRASS BALL VALVE FOR HIGH PRESSURE



# 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"							
ΡN	210	210	210	210							



# DOUBLE ACTING

[	DN	G	ACTUATOR	А	В	C	d	E	Wrench	Κv	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
ſ	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  $-15^{\circ}C$  to  $+100^{\circ}C$ .

- Max operating temperature for special uses (valve all open):
- $+100^{\circ}$ C fuel oils, mineral oils, margarine;
- + 90°C seawater, drinking water (municipal water system);
- +  $60^{\circ}$ 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

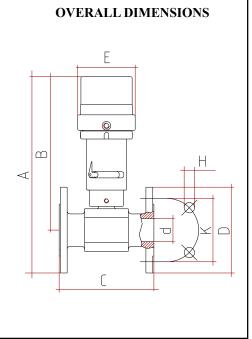
## **RATED PRESSURE "PN"**

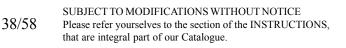
DN	20	25	32	40	50	65
PN	16	16	16	16	16	16

					DC	UBLE	ACTI	NG					
	DN	ACTUATOR	А	В	C	d	E	D	K	Н	Hole	Κv	Weight
L	mm.	type	MM.	mm.	MM.	mm.	mm.	mm.	mm.	mm.	n°	m3/h	gr.
L	20	DE6302	270	218	130	20	77	104	75	14	4	60	3750
L	25	DE8003	302	245	140	25	100	114	85	14	4	100	4800
L	32	DE8003	330	260	165	32	100	140	100	18	4	130	7750
L	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
l	65	DE1004	390	300	222	65	120	185	145	18	4	510	16150

# SINGLE ACTING (NC-NO)

L													
l	DN	ACTUATOR	А	В	C	d	E	D	K	Н	Hole	Κv	Weight
l	mm.	type	mm.	٦°	m3/h	gr.							
l	20	SE6302	270	218	130	20	77	104	75	14	4	60	3900
l	25	SE8003	302	245	140	25	100	114	85	14	4	100	5000
l	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
н		-											





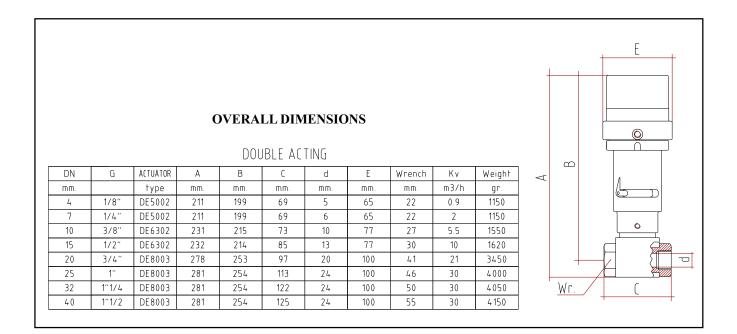


# Art. "HP" - BALL VALVE FOR HIGH PRESSURE IN CARBON STEEL



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 1/8" - 1/4" - 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 DA ANODIZING TREATMENT ON OUTSIDE DETAILS **MADE IN ALUMINIUM** 

	RATED PRESSURE "PN"														
SEAL IN POLYAMIDE															
G															
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	100	100	100	100	100	100	100	100							



# GENERAL CATALOGUE

6-th Edition

# 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  $-15^{\circ}$ 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°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

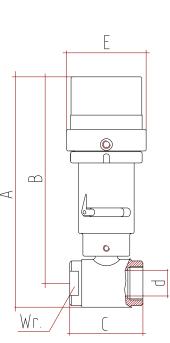
DA: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" - 2"1/2 - 3" - 4" SANC: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" SANO: 3/8" - 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2" ANODIZING TREATMENT ON OUTSIDE DETAILS MADE IN ALUMINIUM

# 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

							IBLE AC			16701700		
		Weight	Κv	Wrench	E	d	C	В	A	ACTUATOR	G	DN
		gr.	m3/h	mm.	MM.	MM.	mm.	mm.	mm.	type		MM.
		1160	11	26	65	10	52	195	210	DE5002	3/8"	10
		1260	20	32	65	15	62	198	216	DE5002	1/2"	15
		1660	60	38	77	20	72	215	236	DE6302	3/4"	20
	+	2020	100	48	77	25	82	220	246	DE6302	1"	25
		3300	130	52	100	32	92	253	283	DE8003	1''1/4	32
		3980	170	64	100	40	104	260	297	DE8003	1"1/2	40
		5260	280	80	100	50	116	273	317	DE8003	2″	50
		8800	510	100	119	65	128	288	344	DE1004	2"1/2	65
		13200	770	115	133	80	150	351	417	DE 1155	3″	80
		20200	1200	125	133	100	178	365	447	DE1155	4 ''	100
	$\triangleleft$	Weight	Κv	Wrench	E	(NC-NO) d	ACTING c	SINGLE . b	A	ACTUATOR	G	DN
		gr.	m3/h	ΠΠ.	MM.	MM.	MM.	MM.	MM.	type		MM.
		1220	11	26	65	10	52	195	210	SE5002	3/8"	10
		1340	20	32	65	15	62	198	216	SE5002	1/2"	15
		1860	60	38	77	20	72	215	236	SE6302	3/4"	20
		2200	100	48	77	25	82	220	246	SE6302	1"	25
			130	52	100	32	92	253	283	SE8003	1''1/4	32
		3440	120								4114.10	
\_/_	+	3440 4180	170	64	100	40	104	260	297	SE8003	1''1/2	40







# 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

# ANODIZING TREATMENT ON OUTSIDE DETAILS

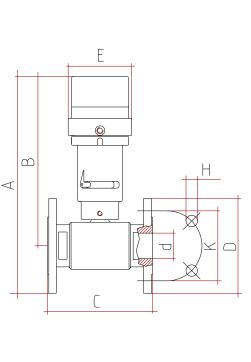
MADEINALUMINIUM

		RAT	'ED P	RESS	SURE	"PN"			
DN	10	15	20	25	32	40	50	65	80
PN	40	40	40	40	40	25	25	16	16

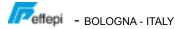
DN	ACTUATOR	А	В	C	d	E	D	Κ	Н	Hole	Κv	Weight
mm.	type	MM.	n°	m3/h	gr.							
10	DE5002	240	195	110	10	65	90	60	14	4	8	2350
15	DE5002	245	198	115	15	65	95	65	14	4	18	2550
20	DE6302	267	215	120	20	77	105	75	14	4	38	3500
25	DE6302	277	220	125	25	77	115	85	14	4	65	4350
32	DE8003	323	253	130	32	100	140	100	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	DE 1155	451	351	180	80	133	200	160	18	8	900	20400

# 

	DN	ACTUATOR	А	В	C	d	E	D	К	Н	Hole	Κv	Weight
	MM.	†ype	MM.	n°	m3/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** 



## **GENERAL CATALOGUE** 6-th Edition

# 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

											OVERALL DIMENSION
				DOL	JBLE AC	TING					r.
DN	G	ACTUATOR	А	В	C	d	E	Wrench	Κv	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	А	В	C	d	E	Wrench	Kγ	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	] Wr. / [
50	2"	SE1004	342	297	135	50	119	68	200	8050	



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

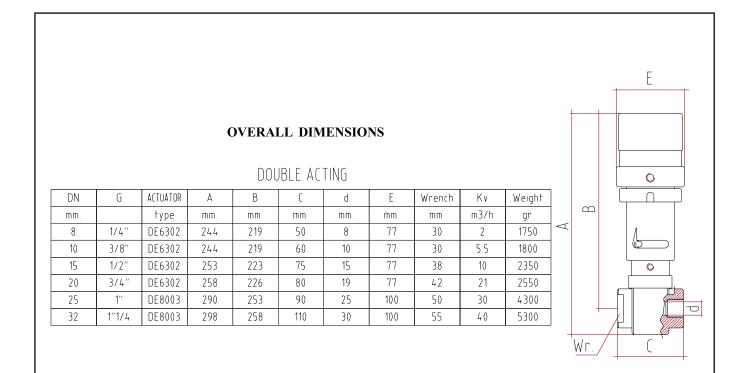


## DESCRIPTION

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



DN mm.

15

20

25

32

40

50

44/58

DE8003

DE8003

361

376

291

300

60

72

# GENERAL CATALOGUE 6-th Edition

# Art. "G1" - ball valve in stainless steel aisi 316 with flat body



# DESCRIPTION

DESCR	IPTION
Ball val	ve with rotary pneumatic actuator.
Valve b	ody: stainless steel AISI 316.
Ball: sta	inless steel AISI 316.
Ball Gas	sket: Virgin PTFE.
On requ	est: glass loaded PTFE.
ALLOV	VABLE TEMPERATURES
Operatii	ng temperature: from $-15^{\circ}$ C to $+100^{\circ}$ C.
Max op	erating 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.
ACTUA	ATOR PILOT PRESSURE
Double	acting versions: from 3 to 8 bar.
ingle a	cting versions: from 6 to 8 bar.
Flange c	oupling PN10-16-25-40-UNI 2223- DIN 2501.
Couplin	g holes threaded ISO R/262.
Betwee	n valve body and flanges, it is necessary to place an appropriate
gasket v	which is not supplied with the valve.
Control	air 1/8" GAS connections
VERSI	ONS 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
ANODI	ZING TREATMENT ON OUTSIDE DETAILS
MADE I	NALUMINIUM

# **RATED PRESSURE "PN"**

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

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**OVERALL DIMENSIONS** 

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			DO	UBLE	ACTIN	G					_		
ACTUATOR	А	В	C	d	E	D	Κ	Н	Kγ	Weight			
type	MM.	mm.	MM.	MM.	<b>ΠΠ</b> .	MM.	<b>Μ</b>		m3/h	gr.			
DE5002	265	220	35	15	65	90	65	4×M12	16	2200		ΙL	
DE6302	290	240	38	20	77	100	75	4 x M 12	30	3050			
DE6302	300	247	42	23	77	105	85	4 x M 12	43	3500	1		
DE8003	353	288	50	30	100	130	100	4 x M 16	90	6400	1	l L	

110

125

4 x M 16

4 x M 16

230

265

8000

10000

140

154

JINULL ACTINU (NC-NO)	SINGLE	AC	TING	(NC-	-NO)
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100

100

38

48

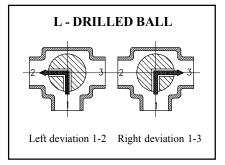
	DN	ACTUATOR	А	В	C	d	E	D	Κ	Н	Κv	Weight
	mm.	type	MM.		m3/h	gr.						
	15	SE5002	265	220	35	15	65	90	65	4 x M 12	16	2400
	20	SE6302	290	240	38	20	77	100	75	4×M12	30	3200
	25	SE6302	300	247	42	23	77	105	85	4 x M 12	43	3650
	32	SE8003	353	288	50	30	100	130	100	4 x M 16	90	6600
	40	SE1004	394	324	60	38	119	140	110	4 x M 16	230	9800
[	50	SE1004	409	332	72	48	119	154	125	4 x M 16	265	12050



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





## DESCRIPTION

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

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

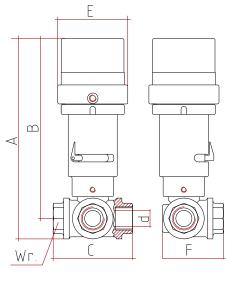
DA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

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 F 6 ന <1 SINGLE ACTING O υ Wг



**OVERALL DIMENSIONS** 

DN	G	ACTUATOR	А	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

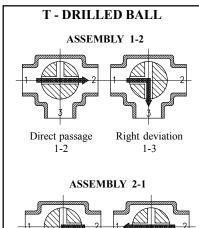
DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	Weight
mm.		type	mm.	m3/h	gr.						
15	1/2″	SE6302	225	206	80	13	77	60	27	4	1780
20	3/4"	SE6302	237	213	96	18	77	73	33	6	2200
25	1″	SE8003	271	242	113	23	100	87	40	10	3740
32	1''1/4	SE8003	287	254	130	29	100	99	50	20	4560
40	1‴1/2	SE1004	330	291	147	35	119	113	57	38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

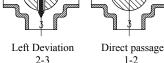
# effepi - BOLOGNA - ITALY

## GENERAL CATALOGUE 6-th Edition

# 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.

# RATED PRESSURE "PN"

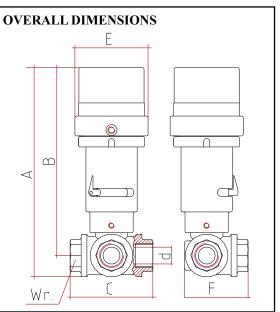
G	1/2"	3/4"	1"	1"1/4	1"1/2	2"
PN	40	40	25	16	16	16

## DOUBLE ACTING

DN	G	ACTUATOR	А	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

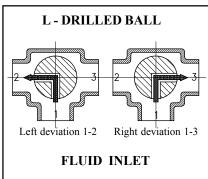
DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	Weight
mm.		type	MM.	m3/h	gr.						
15	1/2"	SE6302	225	206	80	13	77	60	27	4	1780
20	3/4″	SE6302	237	213	96	18	77	73	33	6	2200
25	1"	SE8003	271	242	113	23	100	87	40	10	3740
32	1''1/4	SE8003	287	254	130	29	100	99	50	20	4560
40	1''1/2	SE1004	330	291	147	35	119	113	57	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

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" SA:

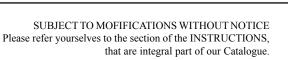
## ANODIZING TREATMENT ON OUTSIDE DETAILS MADE IN ALUMINIUM

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.

### **RATED PRESSURE "PN"** 1/2" 3/4" 1" 1"1/4 1"1/2 G 2" ΡN 10 10 10 10 10 10

### **OVERALL DIMENSIONS** DOUBLE ACTING F DN ACTUATOR А В С d F F Wrench Kγ Weight G mm mm. mm. m3/h type mm mm mm mm mт qг 15 1/2 DE5002 215 197 69 15 65 51 27 4 1150 20 20 3/4 DE6302 242 220 77 77 61 33 6 1300 DE6302 229 89 25 77 73 40 10 1900 25 1' 249 32 1''1/4 DE8003 294 261 102 32 100 87 50 20 3500 $\bigcirc$ 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 $\square$ $\triangleleft$ SINGLE ACTING 0 O

DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	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



Wг

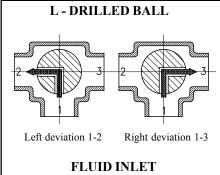
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# Art. "HP3" - 3-WAY BALL VALVE DIVERTING IN CARBON STEEL FOR HIGH PRESSURE





# DESCRIPTION

	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							
		SEAI	_ IN PT	FE									
G	G 1/8" 1/4" 3/8" 1/2" 3/4" 1"												
PN	100	100	100	100	100	100							

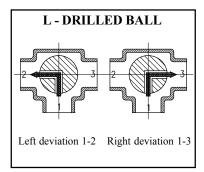
												. E .
			(	OVER				8				
				DOI	JBLE ,		J					
DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	Weight	
mm.		type	mm.	mm.	mm.	mm.	MM.	mm.	mm.	m3/h	g٢.	
4	1/8″	DE5002	211	199	69	5	65	45	22	0.5	1220	
7	1/4″	DE5002	211	199	69	6	65	45	22	1	1220	
10	3/8″	DE6302	231	215	73	10	77	51	27	2	1500	
15	1/2"	DE6302	232	215	85	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	



# 1/1///10

# 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 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°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						

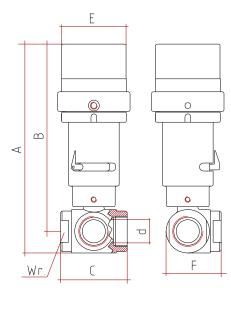
# DOUBLE ACTING

DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Kγ	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	А	В	C	d	E	F	Wrench	Kγ	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



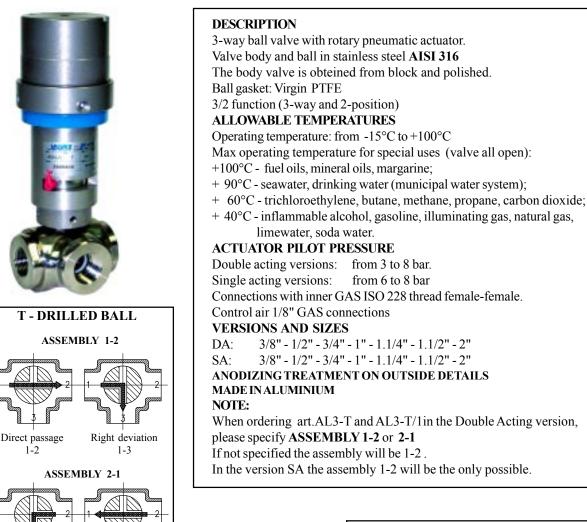




Left Deviation

2 - 3

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



# 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

Direct passage

1 - 2

DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	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″	DE 1004	342	286	144	50	119	127	85	50	11600

## SINGLE ACTING

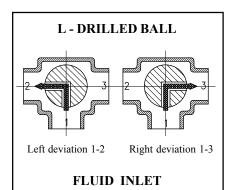
DN	G	ACTUATOR	А	В	С	d	Е	F	Wrench	Κv	Weight
mm.		type	mm.	m3/h	g٢.						
10	3/8"	SE6302	237	214	72	10	77	59	36	2	2200
15	1/2"	SE6302	243	217	82	15	77	67	38	4	2500
20	3/4"	SE8003	281	251	92	20	100	76	47	6	4200
25	1″	SE8003	291	256	102	25	100	86	52	10	4650
32	1''1/4	SE1004	347	305	118	32	119	102	64	20	8400
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 $-15^{\circ}$ 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°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:

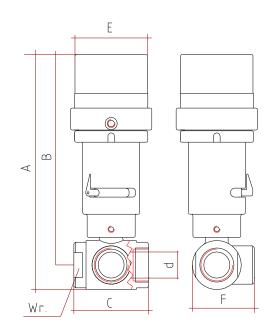
Only 3-way diverting ball allows exclusively to divert the flow to the right or to the left. The fluid must enter obligatorily by the central sleeve; otherwise fluid leakages and damages to the valve may happen.

### **RATED PRESSURE "PN"** 1/2' 3/4" 1''1/4 2‴ 3/8 1" 1"1/2 2"1/2 3″ 4" G ΡN 40 40 40 40 25 25 25 25 16 16

				DO	UBLE	ACTIN	G				
DN	G	ACTUATOR	А	В	C	d	Е	F	Wrench	Κv	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"	DE1155	493	405	240	100	133	211	120	170	31950

# SINGLE ACTING

DN	G	ACTUATOR	А	В	C	d	E	F	Wrench	Κv	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			





# **GENERAL CATALOGUE** 6-th Edition

# Art. ``F4G''-''F4A''- butterfly valve in cast iron with disk in cast iron or stainless steel



# AVOID TO INTERCEPT SHARP MATERIALS

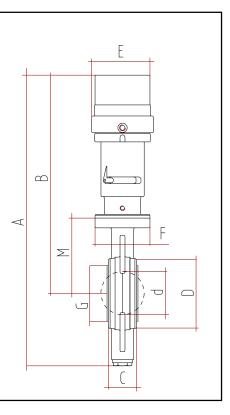
DESCRIPTION
Butterfly valve with rotary pneumatic actuator.
ART. "F4/G" : Valve body: Spheroidal cast iron GS 400/12 UNI 4544.
Disk: spheroidal cast iron GS.400/12 UNI 4544 nickel-plated.
Stem: Stainless steel AISI 303.
ART. <b>"F4/A"</b> Valve body: Spheroidal cast iron GS 400/12 UNI 4544.
Disk: stainless 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 $-20^{\circ}$ C to $+100^{\circ}$ C
Seal in EPDM: from $-35^{\circ}$ C to $+130^{\circ}$ C
Seal in FPM: from $-10^{\circ}$ C to $+160^{\circ}$ C
ACTUATOR PILOT PRESSURE
From 5 to 8 bar.
VERSIONS AND SIZES
<b>"F4G"</b> DA: DN 65 - 80 - 100 - 125 - 150 - 200
<b>"F4A"</b> DA: DN 40 - 50 - 65 - 80 - 100 - 125 - 150 - 200
ANODIZING TREATMENT ON OUTSIDE DETAILS
MADE IN ALUMINIUM

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	А	В	C	D	d	E	F	G	М	Κv	Weight
mm.	type	MM.	MM.	MM.	mm.	MM.	MM.	mm.	mm.	mm.	m3/h	gr.
40	DE8003	4 10	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	DE1004	633	440	60	274	198	119	90	240	225	1190	14000





6-th Edition

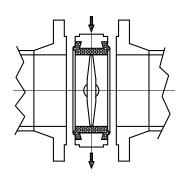
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# Art."F4G"-"F4A" ASSEMBLY FOR BUTTERFLY VALVES

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.

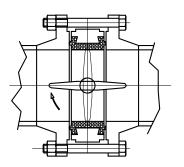
Flanges must be perfectly parallel and have well finished surfaces.



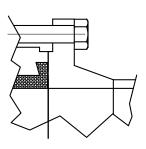
Position flanges at such a distance

that valve assembling or

disassembling is easy.

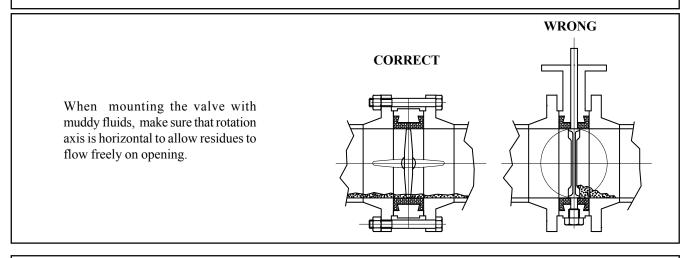


Open completly the valve before clasping flanges.



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.

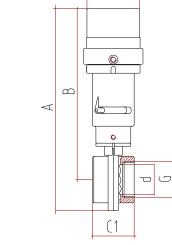


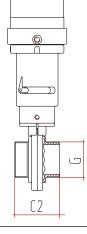
## ERRORS TO BE AVOIDED



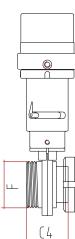
# Art. "AL4" - BUTTERFLY VALVE IN STAINLESS STEEL

	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 6 to 8 bar.         Single acting versions:         from 6 to 8 bar.         Single acting versions:         with inner GAS ISO 228 female-female connections.         - with outer GAS ISO 228 male-male connections.
$\overbrace{\textbf{RATED PRESSURE "PN"}}$ $\overbrace{\textbf{BS.P. 1" 1"1/4 1"1/2 2" 2"1/2 3" 4"}}_{PN 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6$	





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# **OVERALL DIMENSIONS**

DN	G	F	ACTUATOR	А	В	С1	С2	С3	(4	d	E	Κv	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	



# Art. "VF" - BUTTERFLY VALVE IN ALUMINIUM



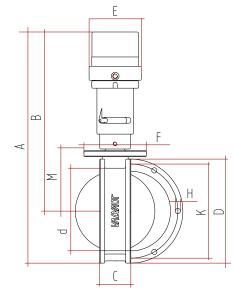
# DESCRIPTION

Butterfly valve suitable for intercepting granulates, powders, cereals and
to reduce the outlet of smokes and hot air.
It is <b>NOT</b> 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

1														
	DN	ACTUATOR	А	В	C	D	d	E	F	Н	Κ	М	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	А	В	C	D	d	Е	F	Н	К	М	Hole	Weight
mm.	type	MM.	mm.	mm.	n°	g٢.							
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

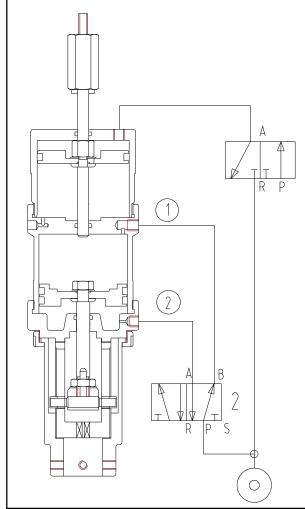
This actuator has been purposely conceived to obtain a partial and adjustable closing of the valve before its complete closing, or a partial opening of the valve before its complete opening.

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.



# **OPERATION**

 VALVE 1 ON - The upper piston goes down and positions itself according to the upper knob's adjustment.
 VALVE 2 ON - Feeding in (1), the lower piston goes up to meet the upper stem and the valve partially closes.
 VALVE 1 OFF -Taking air off the upper piston, the lower one goes up and the valve completes the closing.
 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 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.

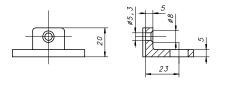
It is necessary to specify in the P/O the CODE of the valve.

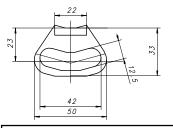


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# MOUNTING BRACKETS KIT FOR SWITCHES - BALL AND BUTTERFLY VALVES







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.

