

Art. "F" - BRASS BALL VALVE



DESCRIPTION

Ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

TECHNICAL FEATURES

Allowable temperatures:

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

For gas: from - 20°C up to + 60°C.

Maximum temperatures for special uses (valve all open)

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

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

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

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

PRESSURE/TEMPERATURE LIMITS' DIAGRAM

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

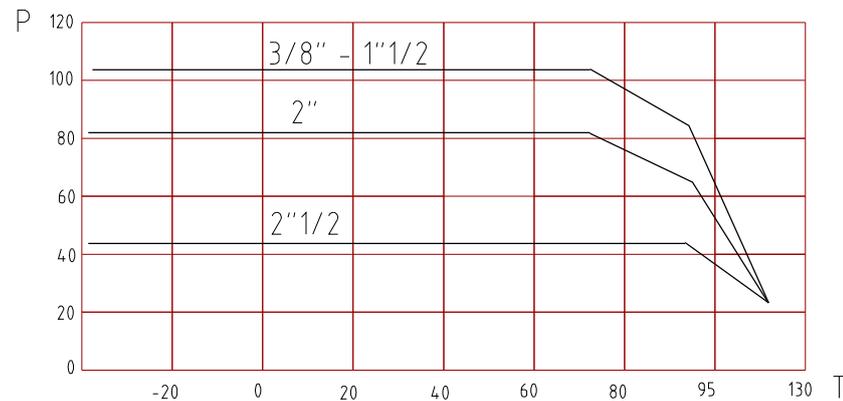


Diagram made with the following analysis:

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

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

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

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.

Single acting versions: from 6 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

On request with inner NPT connections.

Control air 1/8" GAS connections.

VERSIONS AND SIZES

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

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

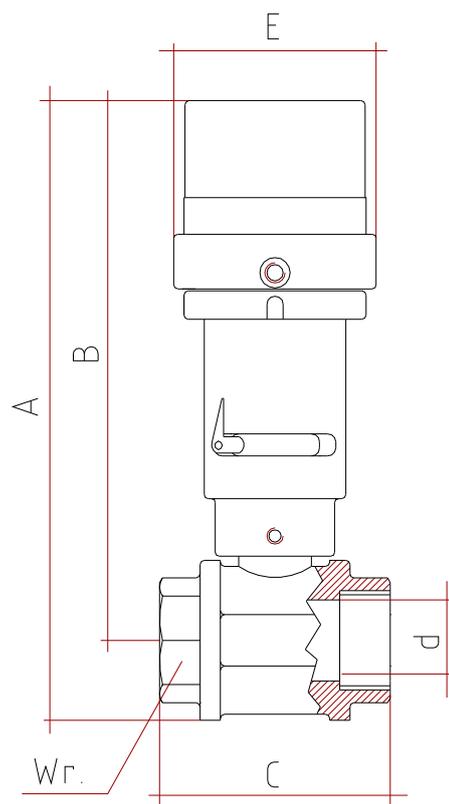
SANO: 3/8" - 1/2" - 3/4" - 1" - 1 1/4" - 1 1/2" - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM.

Art. "F" -

OVERALL DIMENSIONS



DOUBLE ACTING

DN	G	ACTUATOR	A	B	C	d	E	Wrench	Kv	Weight
mm.		type	mm.	mm.	mm.	mm.	mm.	mm.	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	A	B	C	d	E	Wrench	Kv	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.

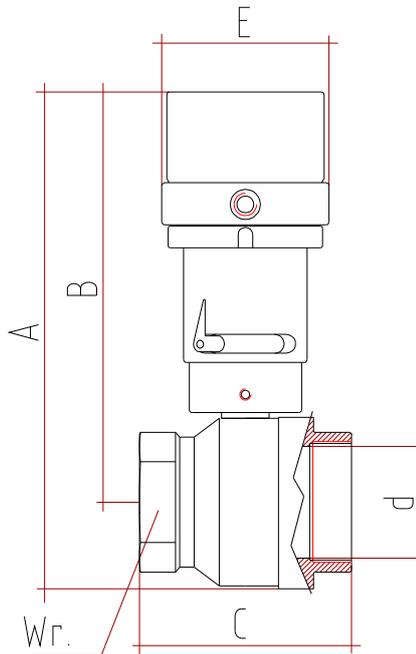
ACTUATOR PILOT PRESSURE

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**

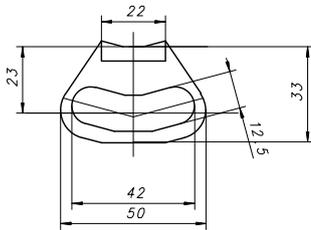
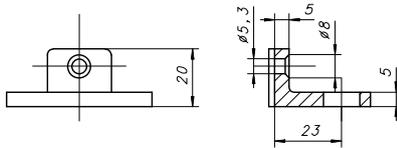


OVERALL DIMENSIONS

DOUBLE ACTING

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

MOUNTING BRACKETS KIT FOR SWITCHES - BALL AND BUTTERFLY VALVES



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

It includes:

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

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

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

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

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

PROXIMITY SWITCH IN DIRECT CURRENT (D.C)

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

ELECTROMECHANICAL SWITCH

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



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



DESCRIPTION

Ball valve with rotary actuator.

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

Valve body: brass nickel plated.

Ball: brass heavy duty chromium plated.

Ball gasket: DELRIN 500 AF.

ALLOWABLE TEMPERATURE

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

ACTUATOR PILOT PRESSURE

From 3 to 8 bar.

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

Control air 1/8" GAS connections.

VERSION AND SIZES

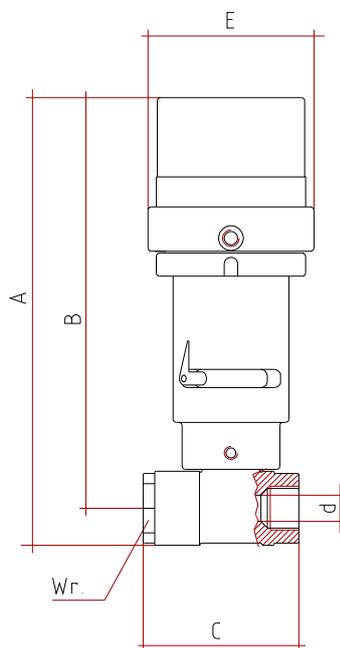
DA: 3/8" - 1/2" - 3/4" - 1"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM.

RATED PRESSURE "PN"

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



OVERALL DIMENSIONS

DOUBLE ACTING

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

Art. "F2" - FLANGED BALL VALVE



DESCRIPTION

Flanged ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

ALLOWABLE TEMPERATURES

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

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

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

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

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

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

ACTUATOR PILOT PRESSUR

Double acting versions: from 3 to 8 bar.

Single acting versions: from 6 to 8 bar.

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

Gauge between flanges according to ISO 5752 specifications.

Control air 1/8" GAS connections.

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

VERSIONS AND SIZES

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

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

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

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

RATED PRESSURE "PN"

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

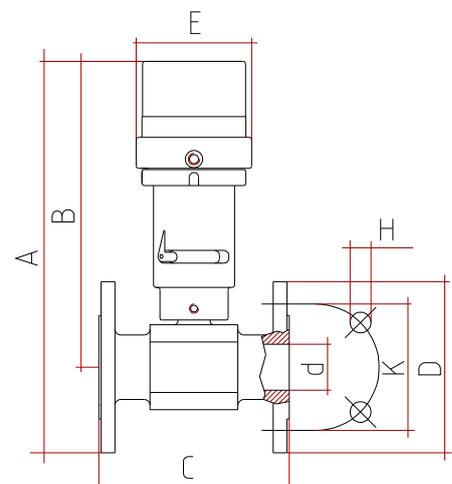
DOUBLE ACTING

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

SINGLE ACTING (NC-NO)

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

OVERALL DIMENSIONS



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



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated

Ball: brass OT 58 heavy duty chromium plated

Ball gasket: Virgin PTFE

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

ALLOWABLE TEMPERATURES

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

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

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

ACTUATOR PILOT PRESSURE

Double acting versions: from 3 to 8 bar.

Single acting versions: from 5 to 8 bar

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections

VERSIONS AND SIZES

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

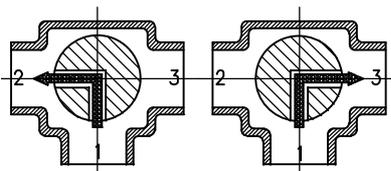
SA: 1/2" - 3/4" - 1" - 1"1/4 - 1"1/2 - 2"

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

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

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

FLUID INLET

RATED PRESSURE "PN"

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

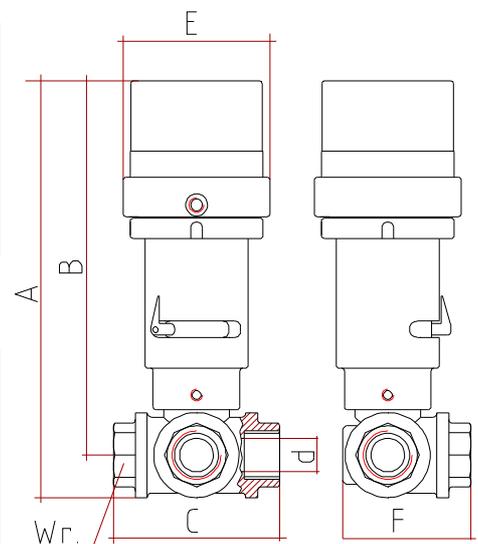
DOUBLE ACTING

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

SINGLE ACTING

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

OVERALL DIMENSIONS



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



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated.

Ball: brass OT 58 heavy duty chromium plated.

Ball gasket: Virgin PTFE.

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

ALLOWABLE TEMPERATURES

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

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

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

ACTUATOR PILOT PRESSURE

Double acting versions: from 4 to 8 bar.

Single acting versions: from 6 to 8 bar.

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections.

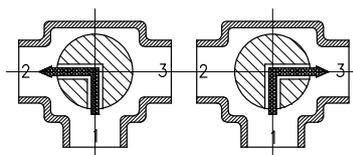
VERSIONS AND SIZES

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

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

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

L - DRILLED BALL



Left deviation 1-2 Right deviation 1-3

RATED PRESSURE "PN"

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

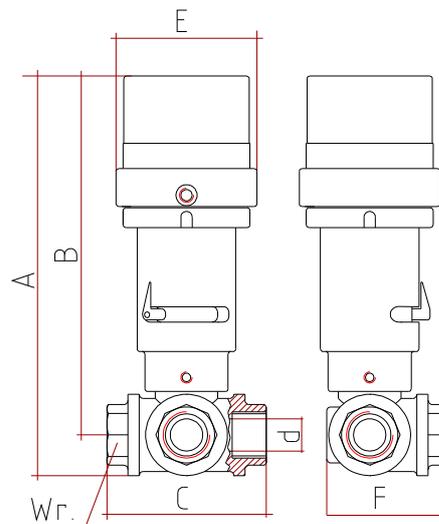
OVERALL DIMENSIONS

DOUBLE ACTING

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

SINGLE ACTING

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



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



DESCRIPTION

3-way ball valve with rotary pneumatic actuator.

Valve body: brass OT 58 nickel plated

Ball: brass OT 58 heavy duty chromium plated

Ball gasket: Virgin PTFE

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

ALLOWABLE TEMPERATURES

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

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

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

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

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

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

ACTUATOR PILOT PRESSURE

Double acting versions: from 4 to 8 bar.

Single acting versions: from 6 to 8 bar

Connections with inner GAS ISO 228 thread female-female.

Control air 1/8" GAS connections

VERSIONS AND SIZES

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

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

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

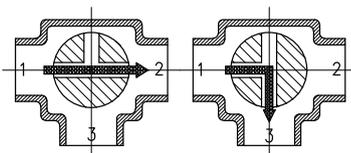
NOTE: When ordering art.F3/T in the Double Acting version, please specify: **ASSEMBLY 1-2** or **2-1**

If not specified the assembly will be 1-2 .

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

T - DRILLED BALL

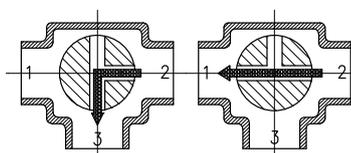
ASSEMBLY 1-2



Direct passage
1-2

Right deviation
1-3

ASSEMBLY 2-1



Left Deviation
2-3

Direct passage
1-2

RATED PRESSURE "PN"

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

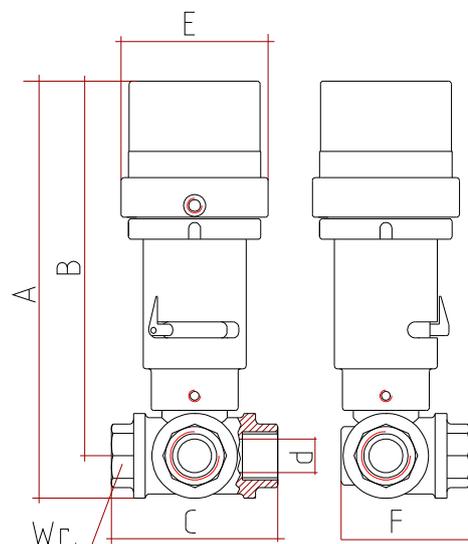
DOUBLE ACTING

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

SINGLE ACTING

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

OVERALL DIMENSIONS



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



DESCRIPTION

Butterfly valve with rotary pneumatic actuator.

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

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

Stem: Stainless steel AISI 303.

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

Disk: stainless steel **AISI 316**.

Stem: Stainless steel AISI 303.

Gasket: NBR, EPDM, FPM.

CONNECTIONS

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

Control air 1/8" GAS connections.

ALLOWABLE TEMPERATURES

Seal in NBR: from -20°C to +100°C

Seal in EPDM: from -35°C to +130°C

Seal in FPM: from -10°C to +160°C

ACTUATOR PILOT PRESSURE

From 5 to 8 bar.

VERSIONS AND SIZES

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

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

ANODIZING TREATMENT ON OUTSIDE DETAILS

MADE IN ALUMINIUM

**AVOID TO INTERCEPT
SHARP MATERIALS**

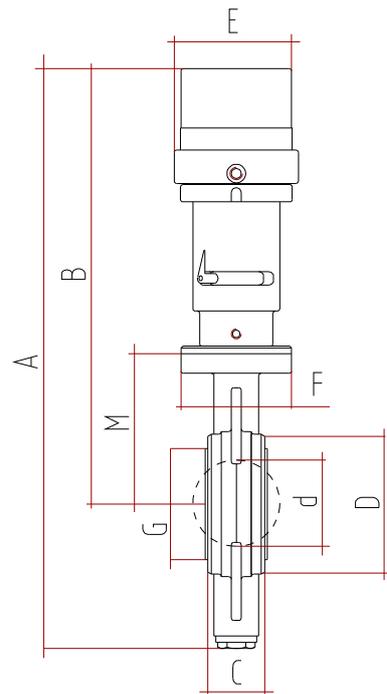
RATED PRESSURE "PN"

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

OVERALL DIMENSIONS

DOUBLE ACTING

DN	ACTUATOR	A	B	C	D	d	E	F	G	M	Kv	Weight
mm.	type	mm.	m ³ /h	gr.								
40	DE8003	410	318	34	90	46	100	90	65	98	13.5	4600
50	DE8003	427	329	44	100	56	100	90	79	110	22	4980
65	DE8003	452	342	47	122	70	100	90	91	122	4.9	5400
80	DE8003	471	351	46	140	83	100	90	107	131	7.8	6340
100	DE8003	507	374	52	162	105	100	90	133	154	30.0	7060
125	DE1004	543	393	57	202	128	119	90	160	178	63.5	10900
150	DE1004	575	409	57	224	153	119	90	190	194	84.1	12400
200	DE1004	633	440	60	274	198	119	90	240	225	119.0	14000



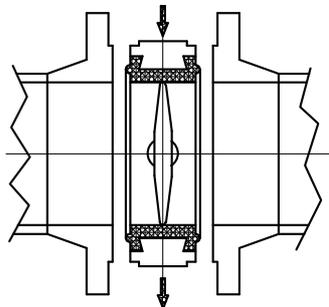
Art. "F4G" - "F4A"

ASSEMBLY FOR BUTTERFLY VALVES

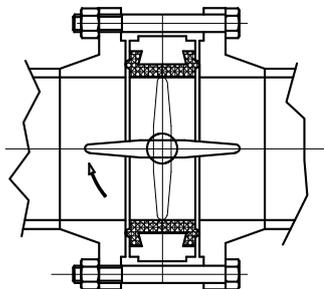
Art. F4 butterfly valves are constructed for installation between UNI, DIN or ASA flanges; they are inserted directly without any gasket.

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

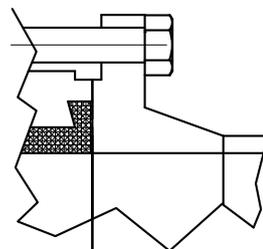
Flanges must be perfectly parallel and have well finished surfaces.



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



Open completely the valve before clamping flanges.

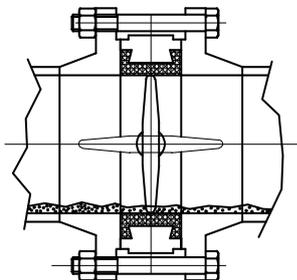


Tighten bolts till flanges are into contact with valve body.

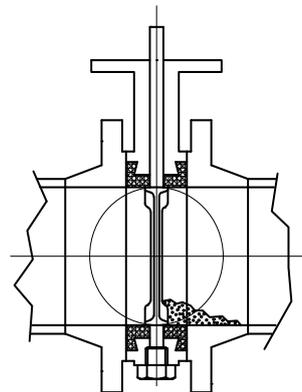
ATTENTION: spot-weld the pipes with the valve already assembled between flanges. Remove the valve before finishing the welding to avoid that heat causes packing distortion.

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

CORRECT

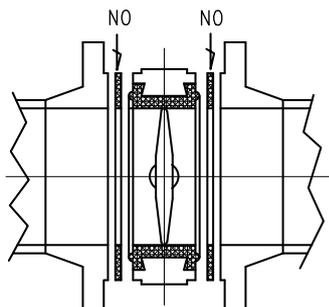


WRONG



ERRORS TO BE AVOIDED

Do not place other packing between flange and valve.



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

