SATURNIA - Damper Valve

Description

ON-OFF and regulating service of gas and air flow for:
– Cogeneration and incineration plants
– Steel and cement works
– Air treatment
– Thermal combustion plants
– System for energy recovery from waste
– Power plants
– Pulp and paper industry
– Chemical and petrochemical plants
– Furnaces
– Marine industry

Technical Data

Metal seal valve with controlled leakage to intercept or regulate the flow of fumes and air with working temperatures of up to 600°C (higher temperatures on request)

Leakage classes are in compliance with EN1349 and ANSI B16.104

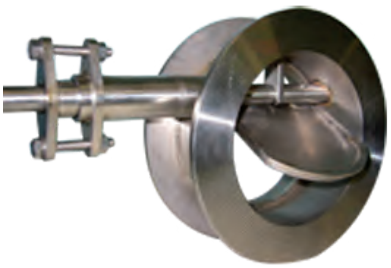
Shaft seal is garanteed by the PTFE or graphite (for use with higher temperatures) braid packing

– Max working temperature 600°C
– Max working pressure 2 bar
– WAFER or FLANGED version for flanges EN 1092-1 PN6-10-16 and ANSI B 16.5 class 150
– Standard series DN 50 – DN 2000 (others available on request)
– Max leakage class: III = 10^{-3} x nominal valve capacity (EN1349)
– Manual operation with lever or gear
– Automatic operation with pneumatic or electrical actuator
– Proportional control valve with electro-pneumatic positioner with input signal 4-20 mA

Material

Carbon steel (S275 JR, ASTM A 516, COR-TEN) with Epoxy coating and coating resistant up to 600°C, stainless steel AISI 304, 316, 321, 309 or 310

All valves are available in different versions according to the needs of our costumers.



InterApp®

Fluids under control.

Butterfly Damper Valve

Metal-to-metal seal butterfly valve with controlled leakage to intercept or regulate the flow of fumes and air with working temperatures of **up to 300°C**

Versions: wafer and flanged (double flanged)

Metal-to-metal seal butterfly valve with controlled leakage to intercept or regulate the flow of fumes and air with working temperatures of **up to 600°C**

Versions: wafer and flanged (double flanged)

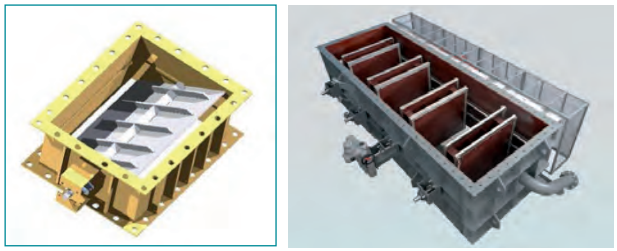
Metal-to-metal seal butterfly valve with controlled leakage to intercept or regulate the flow of fumes and air with working temperatures of **up to 1100°C**

Versions: wafer and flanged (double flanged)

Louvre Damper

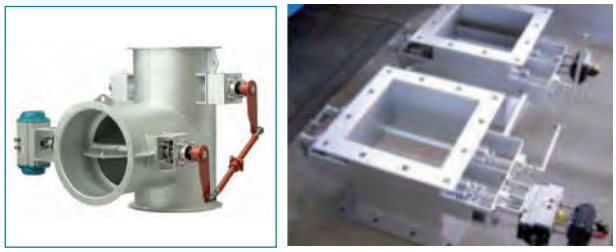
Rectangular or square section flanged damper to intercept or regulate air, fumes or gas at high temperatures (Tmax 900°C). Standard or customer's own dimensions

Single- and Multi-Louver version



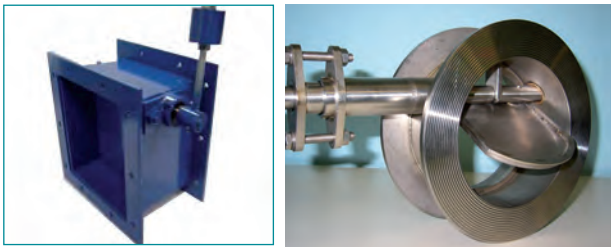
By pass system (Diverter Damper)

Diverter damper to direct fumes or gas (Tmax 800°C)
3-way valve. Takes up significantly less plant space than traditional systems.



Check Valve for air lines

Check valve for air lines with counterweight or lever rectangular section flanged connection.
Carbon steel, Cor-Ten, 304SS, 316SS. Others available on request



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Description

Centric butterfly valve with elastomer liner for liquids and gases in the industrial range, general services, water treatment, ...

Product features

• Body construction	D1 Wafer Sizes 1“ to 40“ D3 Lug Sizes 1“ to 24“ D4 U-section Sizes 6“ to 64“
• Face to face dimension	according to ISO 5752/20, EN 558-1/20
• Top flange	according to EN ISO 5211
• Max. working pressure	232 psi
• Rating	ANSI cl. 150, PN6, PN10, PN16
• Temperature range	-4°F to 284°F according to material
• Tightness test	according to EN 12266-1/P12 leakage rate A, test fluid water
CE	The butterfly valves DESPONIA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.
SIL	Butterfly valves DESPONIA are suitable to be operated in safety related systems according to IEC 61508 / 61511, Safety Integrity Level SIL 2

D1
Wafer

D3
Lug

D4
U-section

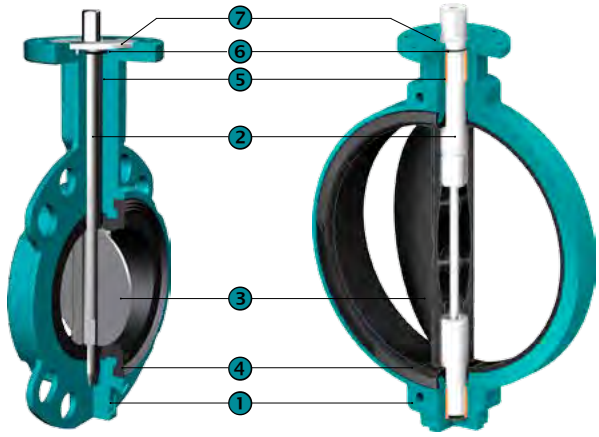
InterApp

Fluids under control.

Construction

1	Body (extended valve neck allowing insulation)
2	Blow out proof shaft with position indication
3	Disc
4	Exchangeable liner with sealing grooves on the tightening face
5	Shaft bearing (1“ to 16“ Resicoat®, 18“ to 64“ Bronze)
6	External shaft sealing
7	Retaining washer (blow out protection)

Sizes 1“ to 16“ Sizes 18“ to 28“



Sizes 30“ to 64“

Kv values m³/h

opening angle of the valve

Sizes	20°	30°	40°	50°	60°	70°	80°	90°
(1) 1 1/4		1,5	5	10	15	26	34	40
1 1/2		2,7	8,5	16	25	37	46	50
2	2	7	15	28	45	68	88	100
2 1/2	3	11	24	48	85	138	180	210
3	8	22	50	83	134	230	312	360
4	15	35	70	130	225	410	585	650
5	28	70	135	230	360	600	920	1050
6	33	95	205	320	580	980	1410	1620
8	60	175	355	580	910	1600	2450	2800
10	132	340	590	940	1480	2550	3950	4480
12	200	505	890	1450	2100	3800	5960	6800
14	280	680	1200	2050	3150	5050	8100	9200
16	365	860	1500	2490	3980	6600	10200	11700
18	465	1080	1900	3150	5050	8700	13300	15200
20	580	1200	2300	3740	6150	11000	16800	18900
24	820	1600	2780	5200	8940	14500	23500	26800
28	890	2050	3450	6050	11050	18800	31500	37100
32	1300	2550	4950	8750	14200	23500	39500	48500
36	1650	3300	6400	11800	19400	31500	52500	61300
40	2150	4250	8200	15100	23500	39400	65500	80500
48	4000	7500	12500	19800	34000	55400	98300	119200
56	5200	10120	18200	32500	51500	89500	142000	162000
64	7100	14210	26050	45000	71200	118500	196200	228500

Type code

D1	0100	.	3	3	.	2AR	.	4A	.	2AR	.	E
❶	❷		❸	❹		❺		❻		❼		❽

❶	**Type**	**D1**	Wafer			Sizes 1“-40“
		D3	Lug body			Sizes 1-24“
		D4	U-section body			Sizes 6“-64“
❷	**Nominal diameter**	**0025-1600**	mm			
❸	**Working pressure**	**0**	2,5 bar (36 psi)			
		1	6 bar (87 psi)			
		*****	10/16bar (145/232 psi), see table below			
❹	**Rating**	**	ANSI 150, PN6/10/16 see table below. Other ratings on request			
❺	**Body**	**1AE**	Cast iron EN-GJL-250, Polyurethan coated 70µm	< 284°F		Sizes 18“-56“
		2AR	Ductile iron EN-GJS-400-15, Epoxy (Resicoat®) coated 200µm	< 230°F *		Sizes 1“-16“
		2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 70µm	< 284°F		Sizes 18“-64“
		2AN	Ductile iron EN-GJS-400-15, Polyurethan coated 250µm	< 284°F		
❻	**Shaft**	**4A**	Stainless steel 1.4021, AISI420			
		4L	Stainless steel 1.4542 / 17-4PH			
❼	**Disc**	**2AR**	Ductile iron EN-GJS-400-15, Rilsan coated 250µ	< 194°F		Sizes 1“-28“
		2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 70µ	< 248°F		Sizes 32“-64“
		2AC	Ductile iron EN-GJS-400-15, Chrome coated			Sizes 1“-24“
		2AH	Ductile iron EN-GJS-400-15, Halar coated min.600µ	< 158°F		
		3OD	Carbon steel 1.0552 / GS52.3, Ultralene Coating ™ coated < 80°C, pmax. 10 ≤ DN400 / 6 bar > DN400			Sizes 3“-12“, 32“-56“
		4C0	Stainless steel 1.4408 ≈ CF8M			
		4CP	Stainless steel 1.4408 ≈ CF8M polished			Sizes 1“-24“
		4I0	Super Duplex steel 1.4573 ≈ AISI 316 Ti			
		4S0	Super austenitic steel 1.4588, Allow 926			
		5C0	Alubronze ASTM B148 C95800 / G-Cu Al 10 Ni			
		7H0	Hastelloy ASTM A494 CW-12MW			
❽	**Liner**	**E**	EPDM	< 203°F	pmax Sizes 1“-48“ = 232 psi, Sizes 56“-64“ = 145 psi	
		EE	EPDM FDA, DVGW, ACS, WRAS, EN681-1	< 176°F	pmax Sizes 1“-48“ = 232 psi, Sizes 56“-64“ = 145 psi	
		EC	EPDM High Temperature	< 266°F	pmax Sizes 1“-48“ = 232 psi, Sizes 56“-64“ = 145 psi	
		N	Nitril (NBR)	< 212°F	pmax Sizes 1“-12“ = 232 psi, Sizes 14“-64“ = 145 psi	
		H	CSM (Hypalon)	< 257°F	pmax Sizes 1“-12“ = 232 psi, Sizes 14“-64“ = 145 psi	
		V	FPM (Viton)	< 392°F	pmax Sizes 1“-12“ = 232 psi, Sizes 14“-64“ = 145 psi	
			Other materials and white liners on request			

* For higher temperature than 230°F, please use Desponia *plus*!

Other executions on request !

*** Working pressure (Code)**

Body material	DN→	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
EN-GJL-250 (1A)	6 bar																							1	
	10 bar															2									
EN-GJS-400-15 (2A)	10 bar	2																							
	16 bar	3																							

****Rating (Code)**

DESPONIA	Sizes →	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	48	56	64
 D1	PN6		3																						
	PN10	3														2									
	PN16	3																							
	ANSI150	3														A									
 D3	PN10	3									2														
	PN16	3																							
	ANSI150	A																							
 D4	PN10									3	2														
	PN16									3															
	ANSI150									A															

Max. pressure and temperature limits of application are dependent of the working conditions.

Dimensions

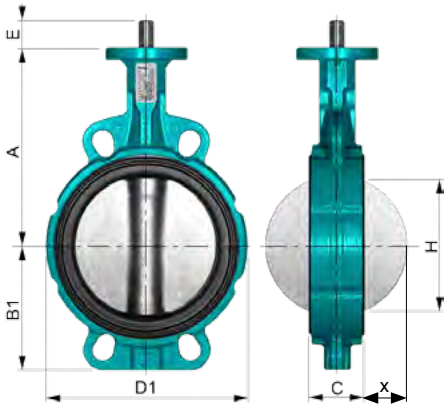
D1 Wafer, Sizes 1“ to 40“

Sizes 1“ - 1 1/4“

Sizes 1/2“ - 2“ - 2 1/2“

Sizes 3“ - 4“

Sizes 5“ - 6“ - 8“



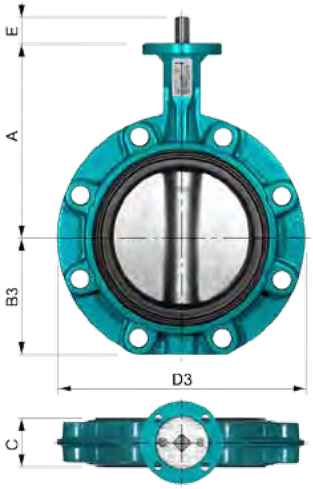
Sizes 10“ to 16“

Sizes 18“ to 36“

Inch	A	B1	C	D1	E	H*	x*	[lb]
(1) 1 1/4	4,33	2,01	1,18	3,98	0,75	0,75	0,12	3,09
1 1/2	5,12	2,13	1,30	4,25	0,75	1,10	0,24	4,41
2	5,31	2,83	1,69	4,72	0,75	1,26	0,24	6,61
2 1/2	5,91	3,23	1,81	5,43	0,75	1,97	0,43	7,94
3	6,30	3,62	1,81	5,59	0,75	2,72	0,75	8,82
4	7,09	4,02	2,05	6,38	0,75	3,46	1,02	12,13
5	7,68	4,72	2,20	7,44	0,75	4,53	1,42	16,53
6	8,27	5,24	2,20	8,43	0,75	5,55	1,89	18,96
8	9,45	6.54	2,36	10,63	0,98	7,64	2,83	28,00
10	10,98	7.91	2,68	12,76	1,26	9,45	3,58	48,94
12	12,40	9,21	3,07	14,88	1,26	11,42	4,41	67,90
14	12,99	10,55	3,15	16,73	1,57	12,99	5,12	91,49
16	14,37	11,77	4,02	18,70	1,57	14,84	5,71	126,1
18	15,63	13,98	4,45	21,18	2,56	16,73	6,46	209,4
20	17,20	15,47	4,96	23,43	2,56	18,66	7,17	275,6
24	20,55	18,27	6,02	27,36	3,15	22,40	8,58	396,8
28	22,24	19,80	6,61	31,50	3,15	25,98	10,12	617,3
32	24,69	22,72	7,48	35,75	3,15	30,47	11,97	853,2
36	27,40	25,31	8,03	39,96	3,15	33,66	13,27	1106,7
40	29,33	27,28	8,58	44,61	3,94	37,80	15,08	1565,3

*** When using plastic stubs please check dimension H/x to avoid damaging of disc**

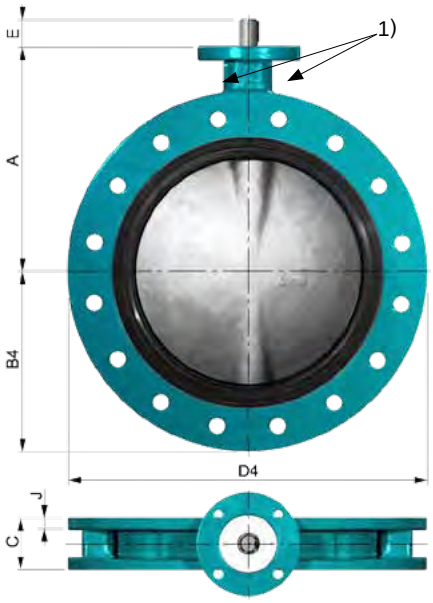
D3 Lug body, Sizes 1“ to 24“



Inch	A	B3	C	D3	E	H*	x*	[lb]
1	4,33	2,01	1,18	3,98	0,75	0,75	0,12	3,09
1 1/4	4,33	2,01	1,18	3,98	0,75	0,75	0,12	3,09
1 1/2	5,12	2,13	1,3	4,25	0,75	1,1	0,24	4,41
2	5,31	2,83	1,69	4,57	0,75	1,26	0,24	7,05
2 1/2	5,91	3,23	1,81	5,16	0,75	1,97	0,43	8,82
3	6,3	3,46	1,81	7,40	0,75	2,72	0,75	13,45
4	7,09	4,02	2,05	8,62	0,75	3,46	1,02	18,74
5	7,68	4,57	2,2	9,76	0,75	4,53	1,42	22,05
6	8,27	5,04	2,2	10,79	0,75	5,55	1,89	24,25
8	9,45	6,34	2,36	13,07	0,98	7,64	2,83	43,21
10	10,98	7,83	2,68	15,83	1,26	9,45	3,58	63,27
12	12,4	9,21	3,07	18,58	1,26	11,42	4,41	90,83
14	12,99	10,16	3,15	20,47	1,57	12,99	5,12	121,3
16	14,37	11,42	4,02	22,99	1,57	14,84	5,71	165,3
18	15,65	13,98	4,45	25,79	2,56	16,73	6,46	330,7
20	17,2	15,47	4,96	28,03	1,56	18,66	7,17	374,8
24	20,55	18,27	6,02	32,64	3,15	22,4	8,58	529,1

Dimensions

D4 U-section body, Sizes 6“-64“

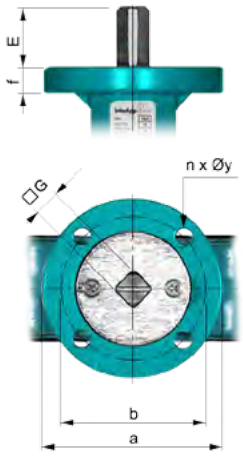


Inch	A	B4	C	D4	H*	x*	J	E	[lb]
6	8,27	5,63	2,20	11,22	5,55	1,89	0,39	0,75	33,07
8	9,45	6,69	2,36	13,39	7,64	2,83	0,49	0,98	42,99
10	10,98	7,87	2,68	15,98	9,45	3,58	0,59	1,26	67,24
12	12,4	9,41	3,07	18,98	11,42	4,41	0,59	1,26	97,00
14	12,99	10,43	3,15	20,98	12,99	5,12	0,71	1,57	130,1
16	14,37	11,65	4,02	23,50	14,84	5,71	0,79	1,57	180,8
18	15,63	13,98	4,45	25,20	16,73	6,46	0,94	2,56	260,1
20	17,20	15,47	4,96	28,15	18,66	7,17	1,02	2,56	385,8
24	20,55	18,27	6,02	33,07	22,40	8,58	1,12	3,15	573,2
28	22,24	19,8	6,61	36,50	25,98	10,12	1,24	3,15	760,6
30	23,23	21,3	6,69	38,78	0,00	0,00	1,34	3,15	959,0
32	24,69	22,72	7,48	41,73	30,47	11,97	1,44	3,15	1124,4
36	27,40	25,31	8,03	46,06	33,66	13,27	1,50	3,94	1455,0
40	29,33	27,28	8,58	49,41	37,80	15,08	1,73	3,94	1741,6
44	32,28	29,06	8,58	54,92	41,50	16,89	1,73	3,94	1873,9
48	34,69	31,73	10,00	58,46	45,24	18,19	1,85	4,72	2601,5
56	38,98	35,75	11,02	68,74	52,60	21,38	1,57	4,72	3747,9
64	43,98	41,26	12,52	75,75	61,14	24,96	1,97	6,10	5732,0

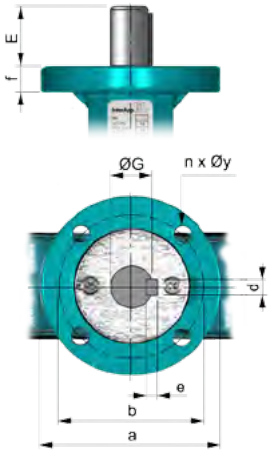
1) DN 450 - 1600, 2 x threads on valve neck and bottom

Top flange according to ISO 5211

Sizes 1“-16“



Sizes 18“-64“



Inch	E	G	d	e	f	ISO	a	b	n x øy
1 - 1 1/2	0,75	□ 0.31	-	-	0,47	F07	3,54	2,76	4 x 0.35
2 - 4	0,75	□ 0.43	-	-	0,47	F07	3,54	2,76	4 x 0.35
5 - 6	0,75	□ 0.55	-	-	0,47	F07	3,54	2,76	4 x 0.35
8	0,98	□ 0.67	-	-	0,47	F07	3,54	2,76	4 x 0.35
10 - 12	1,26	□ 0.87	-	-	0,71	F10/F12	6,1	4.08/4.92	4 x 0.43/4 x 0.51
14	1,57	□ 0.87	-	-	0,71	F12	6,1	4,92	4 x 0.51
16	1,57	□ 1.06	-	-	0,71	F12	6,1	4,92	4 x 0.51
18 - 20	2,56	Ø 1.77	0,55	0,35	0,98	F14	6,89	5,51	4 x 0.71
24	3,15	Ø 2.76	0,79	0,47	0,98	F16	8,66	6,50	4 x 0.87
28	3,15	Ø 2.76	0,79	0,47	0,98	F25	11,81	10,00	8 x 0.71
30	3,15	Ø 2.76	0,79	0,47	1,18	F25	11,81	10,00	8 x 0.71
32	3,15	Ø 2.76	0,79	0,47	1,18	F25	11,81	10,00	8 x 0.71
36	3,94	Ø 3.15	0,87	0,55	1,18	F30	13,78	11,73	8 x 0.87
40	3,94	Ø 3.15	0,87	0,55	1,18	F30	13,78	11,73	8 x 0.87
44	3,94	Ø 3.15	0,87	0,55	1,18	F30	13,78	11,73	8 x 0.87
48	4,72	Ø 3.94	1,1	0,63	1,18	F30	13,78	11,73	8 x 0.87
56	4,72	Ø 4.72	1,26	0,71	1,38	F30	13,78	11,73	8 x 0.87
64	6,1	Ø 5.12	1,26	0,71	1,57	F35	16,46	14,02	8 x 1.32

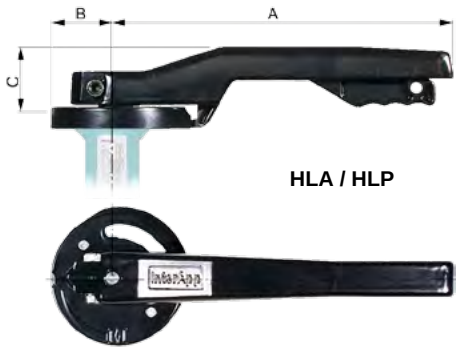
When mounting the valve at the end of a line please note:

- Body type	**D3** possible without counter flange
	D4 only with counter flange
- Body material	**2A** (ductile iron EN-GJS-400-15)
- Medium	only for liquids, 50 to 86°F
- Max. working pressure (with 232 psi disc)	Sizes 1“-8“ 145 psi
	Sizes 10“-24“ 87 psi
	Sizes 28“-64“ 36 psi
- no water hammer !!!	

please consult our document “Flanges”

Dimensions

Handlever (Sizes 1“-12“)



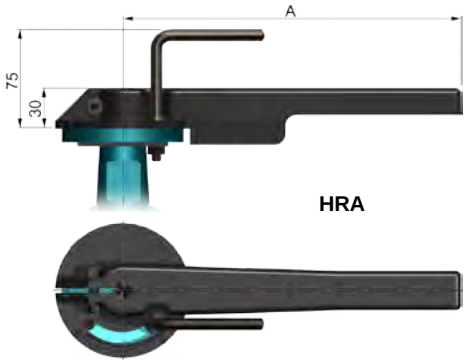
HLA / HLP

Aluminium, Epoxy coated

Inch		A	B	C	[lb]
1 - 1 1/2	**HLA.F0708.180**	7,09	1,79	1,61	0,88
2 - 2 1/2	**HLA.F0711.180**	7,09	1,79	1,61	0,88
3 - 4	**HLA.F0711.240**	9,57	1,79	1,69	1,10
5 - 6	**HLA.F0714.340**	13,39	1,79	2,01	1,32
8	**HLA.F0717.340**	13,39	1,79	2,01	1,32
10 - 12	**HLA.F1222.500**	19,69	3,05	1,57	4,85

Polyamide PA 6, 30% glass fibers reinforced

Inch		A	B	C	[lb]
1 - 1 1/2	**HLP.F0708.240**	9,57	1,79	1,61	0,66
2 - 2 1/2	**HLP.F0711.240**	9,57	1,79	1,61	0,66
3 - 4	**HLP.F0711.240**	9,57	1,79	1,69	0,66
5 - 6	**HLP.F0714.340**	13,39	1,79	2,01	1,10
8	**HLP.F0717.340**	13,39	1,79	2,01	1,10

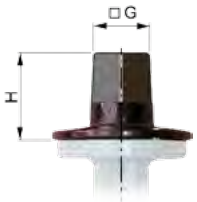


HRA

Aluminium, Epoxy coated

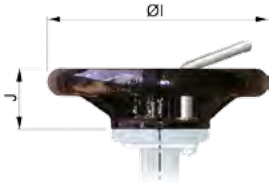
Inch		A	[lb]
1 - 1 1/2	**HRA.F0708.180**	7,09	0,02
2 - 2 1/2	**HRA.F0711.180**	7,09	0,02
3 - 4	**HRA.F0711.250**	9,84	0,02
5 - 6	**HRA.F0714.340**	13,39	0,02
8	**HRA.F0717.340**	13,39	0,02

Plumber square (Sizes 1“-8“)



Inch		G	H
1 - 1 1/2	**PO.F0708.30**	1,18	2,56
2 - 4	**PO.F0711.30**	1,18	2,56
5 - 6	**PO.F0714.30**	1,18	2,56
8	**PO.F0717.30**	1,18	2,56

Handwheel (Sizes 1“-6“)

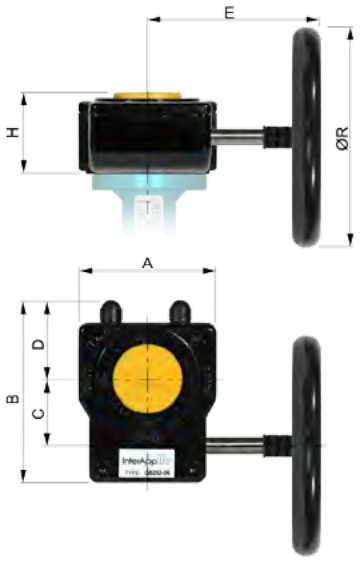


Inch		I	J
1 - 1 1/2	**HW.F0708.200**	7,87	2,05
2 - 4	**HW.F0711.200**	7,87	2,05
5 - 6	**HW.F0714.250**	9,84	2,05

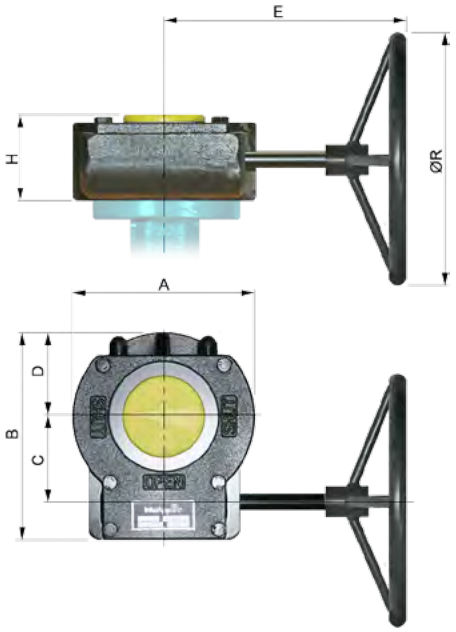
Dimensions

Gearbox

GB 232



GB1250-6800



For liquids 68ºF - 176ºF , p_{max} sizes 1“-12“... 232 psi, sizes 14“-64“ ... 145 psi (normal conditions)

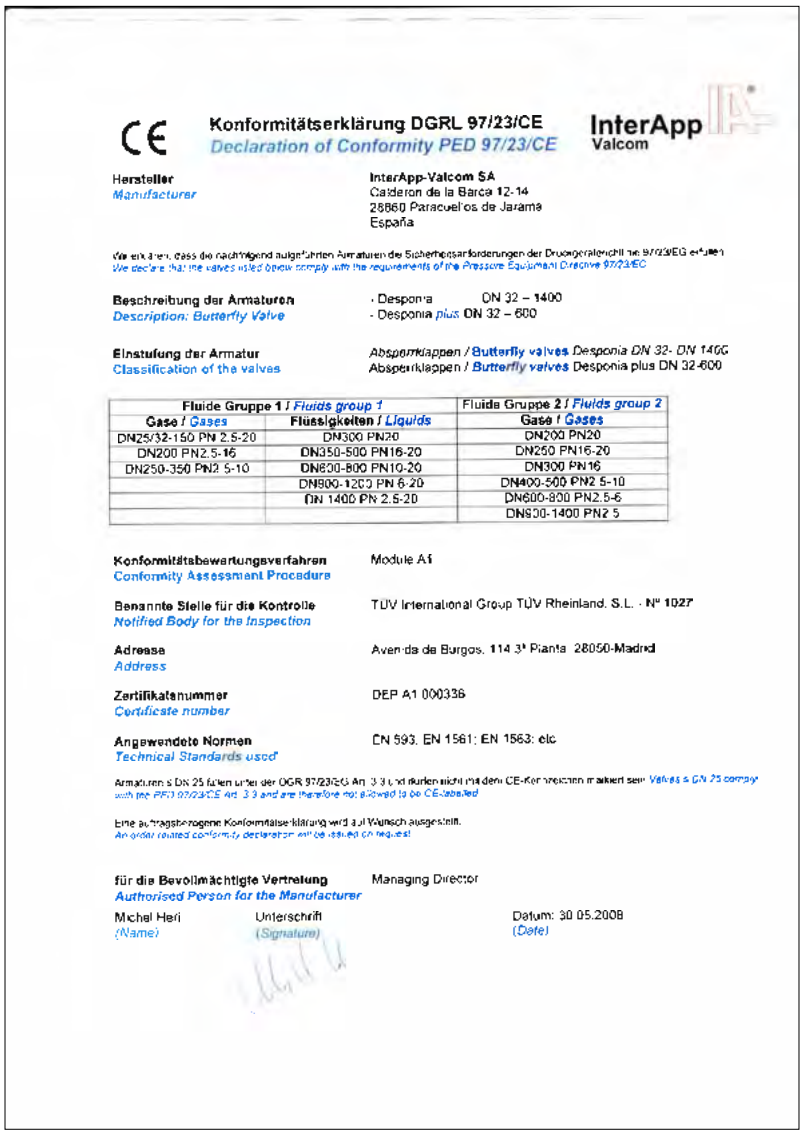
Inch		A	B	C	D	E	H	ØR	n*	[lb]
1 - 1 1/2	**GB232-05.F05-F0711.100(R08)**	3,15	4,49	1,67	1,89	4,76	2,09	3,94	10	1,76
2 - 4	**GB232-05.F05-F0711.100**	3,15	4,49	1,67	1,89	4,76	2,09	3,94	10	1,76
5 - 6	**GB232-05.F05-F0714.100**	3,15	4,49	1,67	1,89	4,76	2,09	3,94	10	1,76
8	**GB232-06.F05-F0717.160**	3,15	4,49	1,67	1,89	7,09	2,32	6,30	10	1,98
10 - 12	**GB232-08.F07-F1022.250**	3,94	5,16	1,97	2,2	8,50	2,64	9,84	9,25	3,42
14	**GB232-13.F10-F1222.300**	6,89	8,23	3,15	3,27	14,21	3,31	11,81	10	11,90
16	**GB232-13.F10-F1227.500**	6,89	8,23	3,15	3,27	15,59	3,31	19,69	10	11,90
18	**GB232-14.F1445.600**	6,89	8,23	3,15	3,27	15,59	3,31	23,62	10	11,90
20	**GB1250N.F1445.500**	8,66	10,16	4,13	4,33	13,66	3,94	19,69	13,75	48,50
24	**GB1250N.F1665.700-SH100**	8,66	10,16	4,13	4,33	17,60	3,94	27,56	13,75	48,50
28	**GB1950N/HR.F2570.600**	11,22	15,85	8,31	5,61	15,24	6,10	23,62	21	70,55
30	**GB1950N/HR.F2570.700-SH100**	11,22	15,85	8,31	5,61	19,17	6,10	23,62	21	70,55
32	**GB1950N/HR.F2570.700-SH100**	11,22	15,85	8,31	5,61	19,17	6,10	27,56	21	70,55
36	**GB6800N/SP4.F3080.500**	14,57	18,98	10,35	6,69	19,69	6,30	19,69	79,25	154,3
40	**GB6800N/SP4.F3080.500**	14,57	18,98	10,35	6,69	19,69	6,30	19,69	79,25	154,3
44	**GB6800N/SP4.F3080.500**	14,57	18,98	10,35	6,69	19,69	6,30	19,69	79,25	154,3
48	**GB6800N/SP4.F30100.500**	14,57	18,98	10,35	6,69	19,69	6,30	19,69	79,25	154,3
56	**GBA250G/SP9.F30120.800**	20,08	28,54	16,97	9,25	24,76	6,65	31,50	176	496,0
64	**GBA250G/SP9.F35130.800**	20,08	28,54	16,97	9,25	24,76	6,65	31,50	176	496,0

* n = Handwheel turns ON/OFF

Material:
GB232 : Aluminium, Polyurethan coated
GB880-GB6800 : Cast iron, Polyurethan coated

Further documentation

Pneumatic actuators, Electric actuators, Accessories according separate data sheets.
Installation guide, Maintenance guide, Flanges: Please consult these guides for the installation and maintenance of our butterfly valves.



CE **Konformitätserklärung DGRL 97/23/CE**
Declaration of Conformity PED 97/23/CE
InterApp Valcom

Hersteller / *Manufacturer*
InterApp-Valcom SA
Calderon de la Barca 12-14
28860 Paracuellos de Jarama
España

Wir erklären, dass die nachfolgend aufgeführten Armaturen der Sicherheitsanforderungen der Druckgeräterichtlinie 97/23/EG erfüllen
We declare that the valves listed below comply with the requirements of the Pressure Equipment Directive 97/23/EC

Beschreibung der Armaturen / *Description: Butterfly Valve*
- Desponia DN 32 – 1400
- Desponia *plus* DN 32 – 600

Einstufung der Armatur / *Classification of the valves*
Absperrklappen / Butterfly valves Desponia DN 32- DN 1400
Absperrklappen / *Butterfly valves* Desponia plus DN 32-600

Fluide Gruppe 1 / *Fluids group 1*		Fluide Gruppe 2 / *Fluids group 2*
Gase / *Gases*	**Flüssigkeiten** / *Liquids*	**Gase** / *Gases*
DN25/32-150 PN 2.5-20	DN300 PN20	DN200 PN20
DN200 PN2.5-16	DN350-500 PN16-20	DN250 PN16-20
DN250-350 PN2.5-10	DN600-800 PN10-20	DN300 PN16
	DN900-1200 PN 6-20	DN400-500 PN2.5-10
	DN 1400 PN 2.5-20	DN600-800 PN2.5-6
		DN900-1400 PN2.5

Konformitätsbewertungsverfahren / *Conformity Assessment Procedure*: Module A1

Benannte Stelle für die Kontrolle / *Notified Body for the Inspection*: TÜV International Group TÜV Rheinland, S.L. - Nº 1027

Adresse / *Address*: Avenida de Burgos, 114 3ª Planta 28050-Madrid

Zertifikatsnummer / *Certificate number*: DEP A1 000336

Angewendete Normen / *Technical Standards used*: EN 593, EN 1561; EN 1563; etc

Armaturen s DN 25 fallen unter der DGR 97/23/EG Art. 3.3 und dürfen nicht mit dem CE-Kennzeichen markiert sein. *Valves ≤ DN 25 comply with the PED 97/23/CE Art. 3.3 and are therefore not allowed to be CE-labelled*

Eine auftragsbezogene Konformitäts-klärung wird auf Wunsch ausgestellt.
An order related conformity declaration will be issued on request

für die Bevollmächtigte Vertretung / *Authorised Person for the Manufacturer*: Managing Director

Michel Heri (*Name*) Unterschrift (*Signature*) Datum: 30.05.2008 (*Date*)

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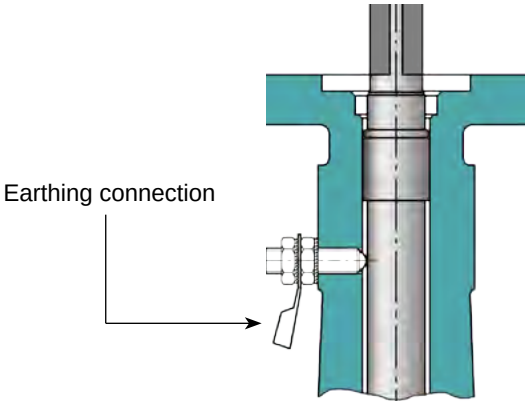
The special versions of the Bianca valves suitable for the use in explosive atmospheres are as described below. If you need assistance to choose the right version suitable to your specific application, contact our technical department. For this, we absolutely need to know the group and the category of equipment, the atmosphere outside the valve and the kind of fluid and its condition inside the valve.

Special code	ATEX-marking	Version	Comments
106	Ex II 2G(i)/2GD(o) c IIC X	• Earthing connection • Type label with ATEX marking (see left)	Declaration of conformity
107	Ex II 1G(i)/2GD(o) c IIC X	• Earthing connection • Type label with ATEX marking	EC type-examination by notified body
108	Ex II 1GD(i)/2GD(o) c IIC X	• Earthing connection • Conductive liner (Code TSA) • Disc - conductive PFA (Code 4GA/3BA) or - Stainless steel (Code 4G0) • Type label with ATEX marking	EC type-examination by notified body

The table below shows where which version of the Bianca can be used. The operator of the installation is responsible for the definition of the group and the category of equipment, the atmosphere outside the valve and the kind of fluid and its condition inside the valve.

Application of Bianca versions according to ATEX - Group II
Equipment group II - not for Mining

Atmosphere inside the valve				Atmosphere around the valve outside: non explosive atmosphere outside	Atmosphere around the valve outside: explosive atmosphere max. zone 1/21, gas and dust outside
non explosive atmosphere inside	Liquid with low conductivity and inflammable liquids		no zone	Standard version without ATEX conformity	Ex II 2G(i)/2GD(o) c IIC X Code 106
	non inflammable dusts				
	Gases; as well inflammable but non explosive mixtures				
explosive atmosphere inside	Gas	Dry and particle free gases respectively gas mixtures	Zone 1 or 2 (not zone 0)	Ex II 2G(i)/2GD(o) c IIC X Code 106	Ex II 2G(i)/2GD(o) c IIC X Code 106
			Zone 0 (as well applicable for Zone 1 or 2)	Ex II 1G(i)/2GD(o) c IIC X Code 107	Ex II 1G(i)/2GD(o) c IIC X Code 107
		Drops (vaporous and mist), vapours of inflammable liquids	Zone 0, 1 or 2	Ex II 1GD(i)/2GD(o) c IIC X Code 108	Ex II 1GD(i)/2GD(o) c IIC X Code 108
	Dust		Zone 20, 21 or 22		



Example how to order:
B1 0150.33-2BE.4GA.TSA-108

Description of keycode see
BIANCA documentation page 5

InterApp

Fluids under control.

Special versions of the Bianca valves may be used in explosive atmospheres when the following rules are observed.

1. Concerning safety regulations

a. Valves can only be used when the materials according to the respective working conditions are resistant against mechanical and/or chemical influence respectively corrosion, so that the explosion protection is remaining.
b. All metallic parts – as well those add by the operator of the installation – must be electrically connected to each other and put to ground.
c. Accessories of the valve must have at least the same explosion protection requirement as those mentioned on the label of the valve, according to the ATEX 94/9/EC.
d. The operator of the installation is responsible to assure that the allowed temperatures according to:
    i. the conveyed fluid and the zone classification in the inner hazardous atmosphere as well as
    ii. the substances appearing at the external hazardous atmosphere are not exceeded.
e. For valves with the marking 2G(i) – special code 106 – or 1G(i) – special code 107–
    i. The operator of the installation must assure that the conveyed hazardous gaseous atmosphere is free of particles (means dry and dust free).

2. Important notice concerning installation

a. By use in explosive location, the earthing terminal of the valve must be connected to the ground. The volume resistance must be tested and must be < 10^6 Ohm.
b. The volume resistance must be tested regularly by the operator of the installation, at least once per year.
c. Before removing valves from piping systems conveying inflammable or explosive fluids, the piping system must be rinsed or made inert, so that no inflammable or explosive gases remain at the work place.
d. The operator of the installation is responsible to assure that the allowed temperatures according to:
    a. the conveyed fluid and the location classification in inner explosive atmosphere
    b. the substances appearing at the external explosive atmosphere are observed.

3. Important notice concerning maintenance

a. The volume resistance must be tested frequently by the operator of the installation, at least once per year (< 10^6 Ohm).

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avk@avkvalvulas.com

Válvulas de mariposa Desponia con Ultralene Coating™

Un gran avance en rendimiento, resistencia y durabilidad.

InterApp

Fluids under control.

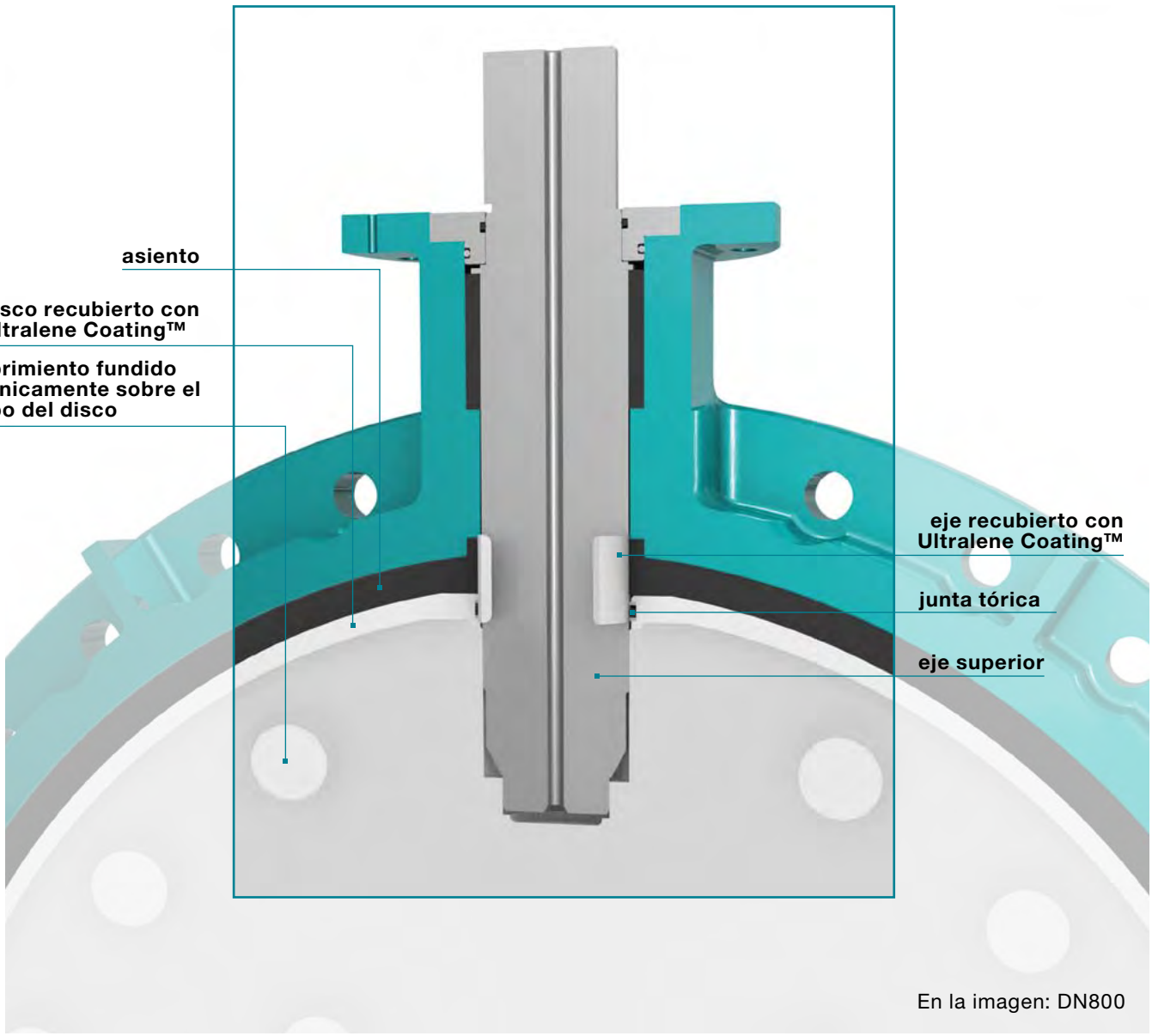
Válvula de mariposa Desponia con Ultralene Coating™ — a mayor rendimiento, mayor rentabilidad.

La Desponia con Ultralene Coating™ es la última ampliación de la gama de productos de InterApp, diseñada y creada para un uso duradero en medios muy exigentes. La probada tecnología de la válvula de InterApp, combinada con un disco de revestimiento termoplástico, ofrece válvulas muy resistentes y con grandes ventajas tecnológicas y económicas.

Ultralene Coating™ combinado con la probada tecnología de InterApp

El Ultralene Coating™ es un plástico técnico con unas cadenas moleculares extremadamente largas que dan lugar a un material muy duro y con la mayor resistencia de impacto que cualquier otro termoplástico. Es altamente resistente a compuestos químicos corrosivos y cuenta con una absorción de humedad extremadamente baja, por lo que presenta un coeficiente de fricción muy bajo.

Características del material de gran calidad
- Excelente resistencia al desgaste/abrasión.
- La más alta resistencia de impacto
- Excelente resistencia química
- Antiadherencia y autolubricación



En la imagen: DN800

La superioridad técnica implica beneficios económicos a largo plazo

Inversión y costes de mantenimiento

No son solamente las características técnicas y las propiedades físicas las que hacen de Desponia con Ultralene Coating™ un producto de primera calidad. Se trata además, de una inversión inteligente. A pesar de que la inversión inicial es mayor en un comienzo, los beneficios financieros a largo plazo derivados de un inferior coste de mantenimiento, debido a un reducido el número de paradas por reparación y una vida útil más larga, están muy por encima de lo que es solo un período de funcionamiento más largo.

Ultralene Coating™
convencional

Una completa gama con excelentes propiedades técnicas

Las válvulas de mariposa Desponia con recubrimiento Ultralene™ están disponibles en diversos diámetros nominales. La gama pequeña de Desponia abarca desde DN 80 a DN 300 y la grande, desde DN 800 a DN 1400.

La presión de trabajo para válvulas con un diámetro nominal de hasta DN 300 es de 10 bar, y de 6 bar para diámetros desde DN 800. La temperatura máxima de trabajo para las válvulas Desponia con Ultralene Coating™ es de 80°C. Para encontrar su solución ideal, póngase en contacto con su comercial o representante de InterApp.

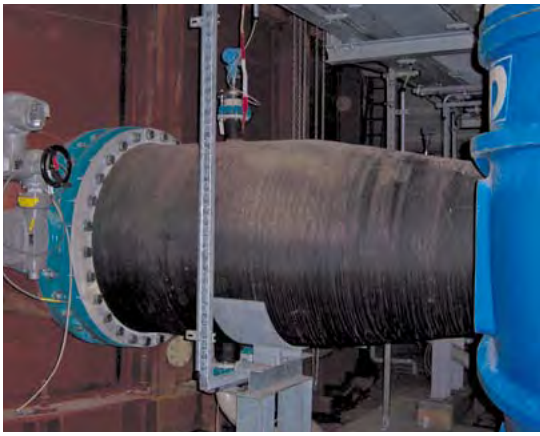
Diseñada y creada teniendo en cuenta las aplicaciones más exigentes.

Alta resistencia a la abrasión

Cuando se trata de aplicaciones con un alto nivel de abrasión, las válvulas Desponia con recubrimiento Ultralene Coating™ superan tiempos de operación sustancialmente más prolongados con un coste de mantenimiento reducido en comparación con las válvulas de mariposa convencionales. Con una excelente resistencia al desgaste y al impacto, el recubrimiento Ultralene Coating™, combinado con asientos Flucast® es la protección de disco ideal para la aplicación en lodos líquidos, el transporte neumático de cemento y polvo así como para la industria minera en general.

Adherencia extremadamente baja

Por su extremadamente bajo coeficiente de fricción, los discos con Ultralene Coating™ son ideales cuando se requiere una adherencia baja. Combinada con una gran resistencia a la abrasión y a la corrosión, la válvula Desponia con el Ultralene Coating™ es la solución perfecta para la limpieza de salidas de gas. Una selección adecuada de discos a un precio asequible es la respuesta ideal para el exigente entorno de la desulfurización en las salidas de gas.



Alta resistencia a la corrosión

El disco recubierto con Ultralene Coating™ es resistente a todo tipo de procesos de desalación, incluso a las mayores concentraciones de cloruro. En comparación con otros recubrimientos y materiales, el Ultralene Coating™ es totalmente resistente a las grietas y a la corrosión (pit), al igual que a los daños mecánicos y al desgaste. Al introducir válvulas con discos recubiertos con Ultralene Coating™ en aplicaciones de desalación, alargamos considerablemente la vida útil de las válvulas y al mismo tiempo, reducimos los costes de mantenimiento.

Con sede central en Suiza, y formando parte del grupo AVK, InterApp desarrolla, fabrica y comercializa válvulas y accesorios afines. Como empresa tecnológica enfocada al cliente, ofrecemos soluciones globales de control de fluidos a las industrias más exigentes en todo el mundo.

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InterApp®

A Company of the AVK Group AVK

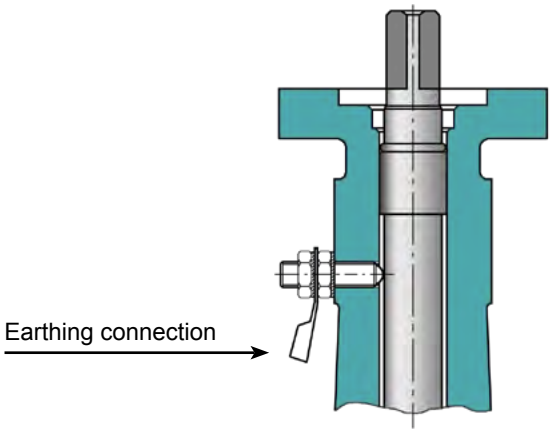
The special versions of the DESPONIA and DESPONIA*plus* valves suitable for the use in explosive atmospheres **only outside** the valve are as described below. For applications with explosive atmosphere inside, please choose our butterfly valve type Bianca.
If you need assistance to choose the right version suitable to your specific application, contact our technical department. For this, we absolutely need to know the group and the category of equipment, the atmosphere outside the valve and the kind of fluid and its condition inside the valve.

Special code	ATEX-marking	Version	Comments
DESPONIA 135	Ex II 2GD(o) c IIB X	• Earthing connection • Type label with ATEX marking (see left)	Declaration of conformity
DESPONIA*plus* 112	Ex II 2GD(o) c IIC X		

The table below shows where which version of the DESPONIA can be used. The operator of the installation is responsible for the definition of the group and the category of equipment, the atmosphere outside the valve and the kind of fluid and its condition inside the valve.

Application of DESPONIA + DESPONIA*plus* versions according to ATEX Group II, Equipment group II - not for Mining

Atmosphere inside the valve				Atmosphere around the valve outside: non explosive atmosphere outside	Atmosphere around the valve outside: explosive atmosphere max. zone 1/21, gas and dust outside
non explosive atmosphere inside	Liquid with low conductivity and inflammable liquids		no zone	**Standard version without ATEX conformity**	**DESPONIA Ex II 2GD(o) c IIB X Code 135** **DESPONIA*plus* Ex II 2GD(o) c IIC X Code 112**
	non inflammable dusts				
	Gases; as well inflammable but non explosive mixtures				
explosive atmosphere inside	Gas	Dry and particle free gases respectively gas mixtures	Zone 1 or 2 (not zone 0)	**not available**	**not available**
			Zone 0 (as well applicable for Zone 1 or 2)	**not available**	**not available**
		Drops (vaporous and mist), vapours of inflammable liquids	Zone 0, 1 or 2	**not available**	**not available**
	Dust		Zone 20, 21 or 22		



Example how to order:

DESPONIA
D1 0150.33-2AR.4A.4C0.E-**135**

DESPONIA*plus*
DP1 150.33-2AE.4A.4C0.E-1**12**

Description of keycode see
DESPONIA, DESPONIA*plus* documentation

InterApp

Fluids under control.

Special versions of the DESPONIA and DESPONIA*plus* valves may be used in explosive atmospheres when the following rules are observed.

1. Concerning safety regulations

a. Valves can only be used when the materials according to the respective working conditions are resistant against mechanical and/or chemical influence respectively corrosion, so that the explosion protection is remaining.
b. All metallic parts – as well those add by the operator of the installation – must be electrically connected to each other and put to ground.
c. Accessories of the valve must have at least the same explosion protection requirement as those mentioned on the label of the valve, according to the ATEX 94/9/EC.
d. The operator of the installation is responsible to assure that the allowed temperatures according to the substances appearing at the external hazardous atmosphere are not exceeded.

2. Important notice concerning installation

a. By use in explosive location, the earthing terminal of the valve must be connected to the ground. The volume resistance must be tested and must be < 10^6 Ohm.
b. The volume resistance must be tested regularly by the operator of the installation, at least once per year.
c. The operator of the installation is responsible to assure that the allowed temperatures according to the substances appearing at the external explosive atmosphere are observed.

3. Important notice concerning maintenance

a. The volume resistance must be tested frequently by the operator of the installation, at least once per year (< 10^6 Ohm).

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AVK DOUBLE ECCENTRIC BUTTERFLY VALVE, PN 10/16, INTEGRAL SEAT, IP 67 GEARBOX WITH HANDWHEEL

756/100
019

Double eccentric butterfly valve, for water to max. 70° C, designed according to EN 593,
Face to face according to EN 558 table 2 basic series 14.
Standard flange drilling to EN1092-2 (ISO 7005-2)
Hydraulic test according to EN 1074-1 and 2 / EN 12266.
Approved according to DIN-DVGW Certificate NW-6201BR0451.

Designed according to EN 593. Double flanged butterfly valve with plate disc, integral seat and IP 67 gearbox with handwheel. Soft seated with NF approved EPDM sealing. Seal retaining ring of stainless steel AISI 420. Body and disc of ductile iron GJS-450-10 with epoxy coating to DIN 30677-2 and GSK guidelines - internally and externally. Shaft of stainless steel AISI 431 with double O-rings and alubronze bearings and bushings, and stainless steel screws for fixing the keys.

Accessories: Extension spindle AVK series 756, street covers AVK series 04 and 80, handwheel AVK series 756, stem cap for rod #25 mm AVK series 756, adaptor gearside AVK series 756, post indicator AVK series 34, dismantling joint AVK series 265, combi-flange AVK series 05, flange adaptors AVK series 603, 623 and 260, different types of gearboxes and electric actuators

For further details see section "Technical Information".
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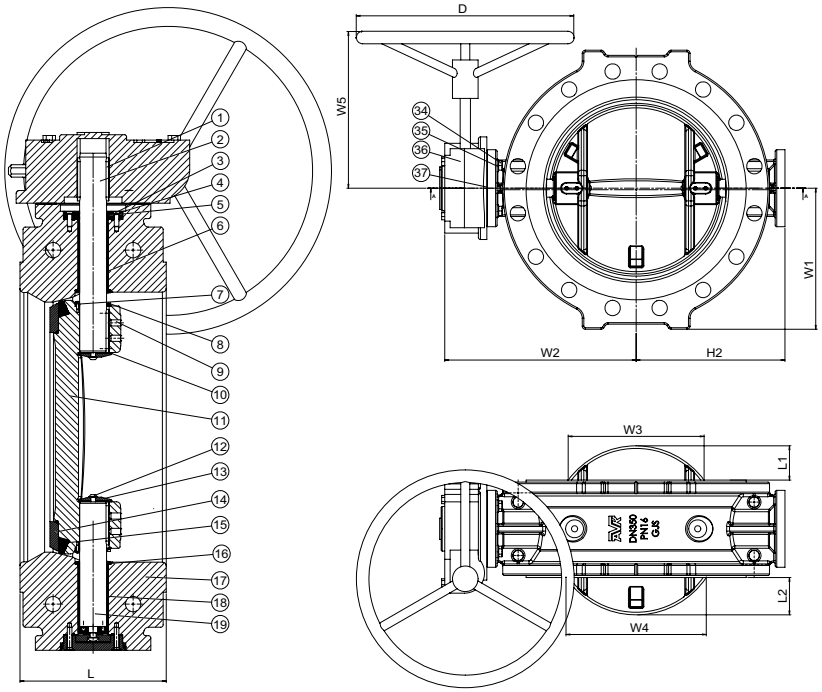
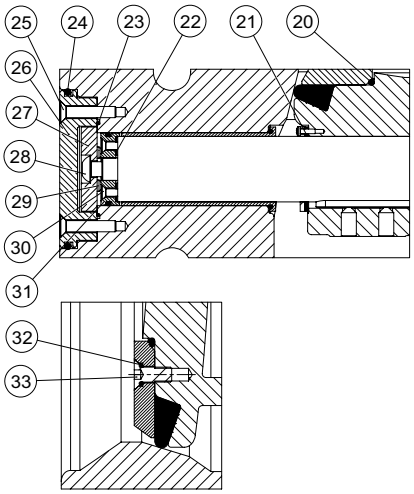


Double eccentric design
The double eccentric design gives minimal wear of the disc seal, as the disc swings open/close like a door relieving the stress on the seal just after a few degrees of opening. The seal is fully compressed in closed position which gives 100% drip-tight closure. The disc and seat are designed to give the lowest possible operating torque in opening and closing direction at full differential pressure.

Disc and seat design
The slim and streamlined disc design ensures low pressure loss across the valve, and the disc enables bi-directional flow. The seat is casted in the valve body, which is epoxy coated to avoid corrosion. The disc seals are mounted in a stainless steel retainer ring, and are exchangeable independent of flow direction. The disc is fixed by means of a keyway and set screws protecting against flutter between shaft and disc.

Shaft sealing
Encapsulated O-rings, self-lubricating bearings and bronze bushings protect against galvanic corrosion.



Component list

1. Key	14. Seal rtg. ring	27. Thrust plate
2. Drive shaft	15. Seal ring	28. Screw
3. Screw	16. O-ring	29. Screw
4. Spacer	17. Body	30. Screw
5. O-ring	18. Headed bush	31. Ring
6. Headed bush	19. Non-drive shaft	32. O-ring
7. Socket screw	20. O-ring	33. Screw
8. Cover	21. Gasket	34. Hex bolt
9. Set screw	22. Gasket	35. Washer
10. Gasket	23. O-ring	36. Gearbox
11. Disc	24. O-ring	37. Gasket
12. Screw	25. Screw	
13. End cover	26. End cover	

Reference nos. and dimensions

AVK ref. nos.	DN mm	PN drilling	D mm	L mm	L1 mm	L2 mm	H2 mm	W1 mm	W2 mm	W3 mm	W4 mm	W5 mm	Theoretical weight kg
756-0200-1-06	200	10	250	230	-	-	200	182	279	-	-	276	51
756-0200-1-16	200	16	250	230	-	-	200	182	279	-	-	276	51
756-0250-1-06	250	10	250	250	-	1	234	215	313	-	6	276	71
756-0250-1-16	250	16	250	250	-	1	234	215	313	-	6	276	71
756-0300-1-06	300	10	250	270	1	12	264	242	343	6	104	276	100
756-0300-1-16	300	16	400	270	1	12	264	242	343	6	104	306	106
756-0350-1-06	350	10	250	290	20	26	290	272	369	151	173	276	128
756-0350-1-16	350	16	400	290	20	26	290	272	369	151	173	306	134
756-0400-1-06	400	10	400	310	35	41	321	302	403	215	232	306	166
756-0400-1-16	400	16	400	310	35	41	321	302	403	215	232	306	166
756-0450-1-06	450	10	400	330	48	55	358	332	440	267	284	306	211
756-0450-1-16	450	16	500	330	48	55	358	332	440	267	284	416	219
756-0500-1-06	500	10	400	350	63	69	386	338	468	322	335	306	206
756-0500-1-16	500	16	500	350	63	69	395	370	477	322	335	416	282
756-0600-1-06	600	10	500	390	94	100	445	393	536	426	437	416	285
756-0600-1-16	600	16	600	390	94	100	467	435	556	426	437	456	425

AVK DOUBLE ECCENTRIC BUTTERFLY VALVE, PN16, INTEGRAL SEAT, GEARBOX WITH HANDWHEEL IP67

756/1
005

Double eccentric butterfly valve, for water to max. 70° C, designed according to EN 593, Face to face according to EN 558 table 2 basic series 14.
Standard flange drilling to EN1092-2 (ISO 7005-2)
Hydraulic test according to EN 1074-1 and 2 / EN 12266.
Approved for drinking water.

Designed according to EN 593. Double flanged long type with plate disc, integral seat and IP67 gearbox with handwheel. Fasteners of stainless steel grade A2.
Soft seated with WRAS approved sealing and seal retaining ring of stainless steel AISI 420/304. Body and disc of ductile iron GJS-500-7, ref EN1563. Shaft of stainless steel AISI 431 with double O-rings, self-lubricating bearings, bronze bushings, and four stainless steel drive dowels connecting the shaft to the disc. Extra key mounted as backup.
Epoxy coating: Fusion bonded epoxy to DIN 30677-2 and GSK guidelines RAL5017, internally and externally, according to WRAS-DVGW/W270/UBA, 250 microns

Accessories: Self-locking device AVK series 756, extension spindle AVK series 756, street covers AVK series 04 and 80, handwheel AVK series 756, stem cap for rod #25 mm AVK series 756, adaptor gear side AVK series 756, post indicator AVK series 34, dismantling joint AVK series 265, flange adaptors AVK series 260, different types of gearboxes and electric actuators

For further details see section "Technical Information".
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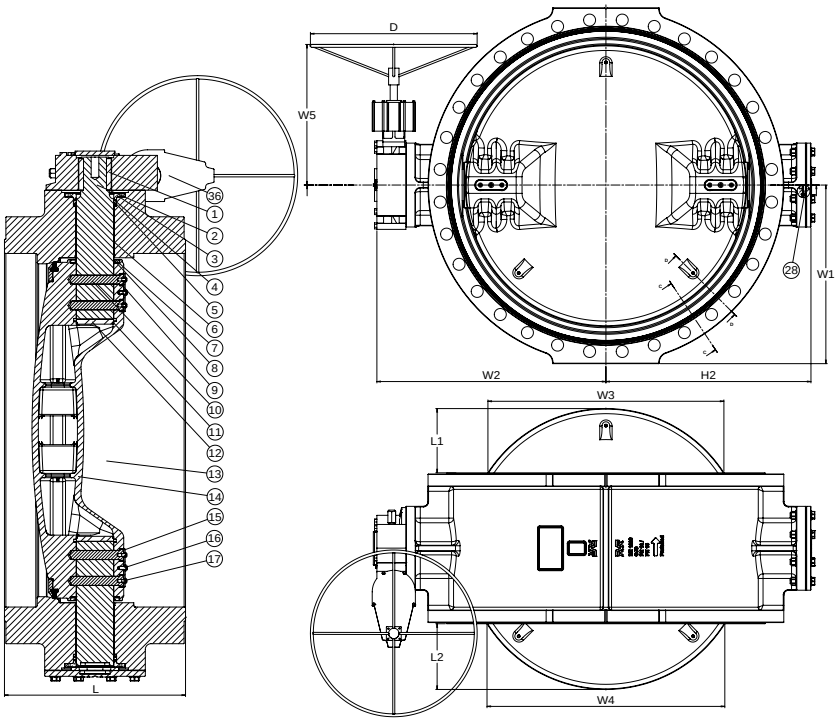
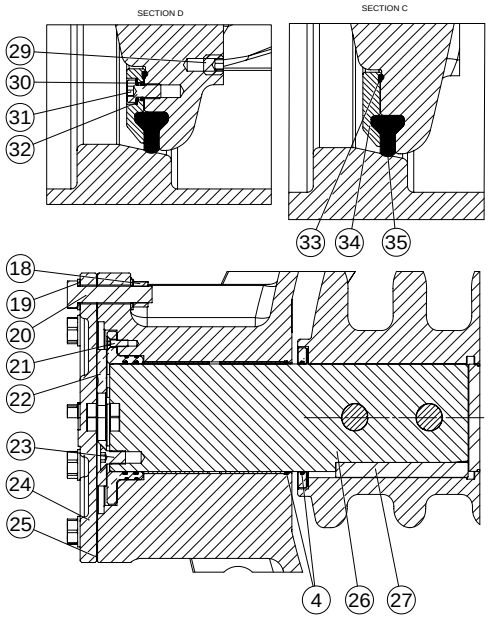


Double eccentric design
The double eccentric design gives minimal wear of the disc seal, as the disc swings open/close like a door relieving the stress on the seal just after a few degrees of opening. The seal is fully compressed in closed position which gives 100% drip-tight closure. The disc and seat are designed to give the lowest possible operating torque in opening and closing direction at full differential pressure.

Disc and seat design
The slim and streamlined disc design ensures low pressure loss across the valve, and the valves are suitable for bi-directional application as standard. The seat is cast in the valve body, which is epoxy coated to avoid corrosion. The disc seals are mounted in a stainless steel retainer ring, and are replaceable independent of flow direction. The disc is fixed by means of dowels with key and keyway as backup.

Shaft sealing
Encapsulated O-rings, self-lubricating bearings and bronze bushings protect against galvanic corrosion.



Component list

1. Key	13. Body	25. Gasket
2. Valve shaft	14. Disc	26. Stub shaft
3. Seal housing	15. Security plate	27. Safety key
4. O-ring	16. Screw	28. Screw
5. O-ring	17. Screw	29. Screw
6. Self-lubricating bearing	18. Nut	30. O-ring
7. Disc cover	19. Washer	31. Bolt
8. Disc cover gasket	20. Screw	32. Washer
9. O-ring	21. Screw	33. O-ring
10. Drive pin	22. Axial bearing	34. Seal retaining ring
11. O-ring	23. Screw	35. Disc seal
12. Plug	24. End plate	36. Gearbox with handwheel

Reference nos. and dimensions

AVK ref. nos.	DN mm	D mm	L mm	L1 mm	L2 mm	H2 mm	W1 mm	W2 mm	W3 mm	W4 mm	W5 mm	Theoretical weight kg
756-0700-1-14	700	700	430	127	133	550	455	641	533	543	449	523
756-0800-1-14	800	700	470	156	162	620	513	711	627	636	449	669
756-0900-1-14	900	700	510	186	192	690	563	791	722	730	499	881
756-1000-1-14	1000	700	550	216	222	770	628	871	816	824	499	1120
756-1200-1-14	1200	700	630	269	275	855	743	956	986	993	581	1683

AVK DOUBLE ECCENTRIC BUTTERFLY VALVE, PN10, INTEGRAL SEAT, GEARBOX WITH HANDWHEEL IP67

756/1
003

Double eccentric butterfly valve, for water to max. 70° C, designed according to EN 593, Face to face according to EN 558 table 2 basic series 14.
Standard flange drilling to EN1092-2 (ISO 7005-2)
Hydraulic test according to EN 1074-1 and 2 / EN 12266.
Approved for drinking water.

Designed according to EN 593. Double flanged long type with plate disc, integral seat and IP67 gearbox with handwheel. Fasteners of stainless steel grade A2.
Soft seated with WRAS approved sealing and seal retaining ring of stainless steel AISI 420/304. Body and disc of ductile iron GJS-500-7, ref EN1563. Shaft of stainless steel AISI 431 with double O-rings, self-lubricating bearings, bronze bushings, and four stainless steel drive dowels connecting the shaft to the disc. Extra key mounted as backup.
Epoxy coating: Fusion bonded epoxy to DIN 30677-2 and GSK guidelines RAL5017, internally and externally, according to WRAS-DVGW/W270/UBA, 250 microns

Accessories: Self-locking device AVK series 756, extension spindle AVK series 756, street covers AVK series 04 and 80, handwheel AVK series 756, stem cap for rod #25 mm AVK series 756, adaptor gear side AVK series 756, post indicator AVK series 34, dismantling joint AVK series 265, flange adaptors AVK series 260, different types of gearboxes and electric actuators

For further details see section "Technical Information".
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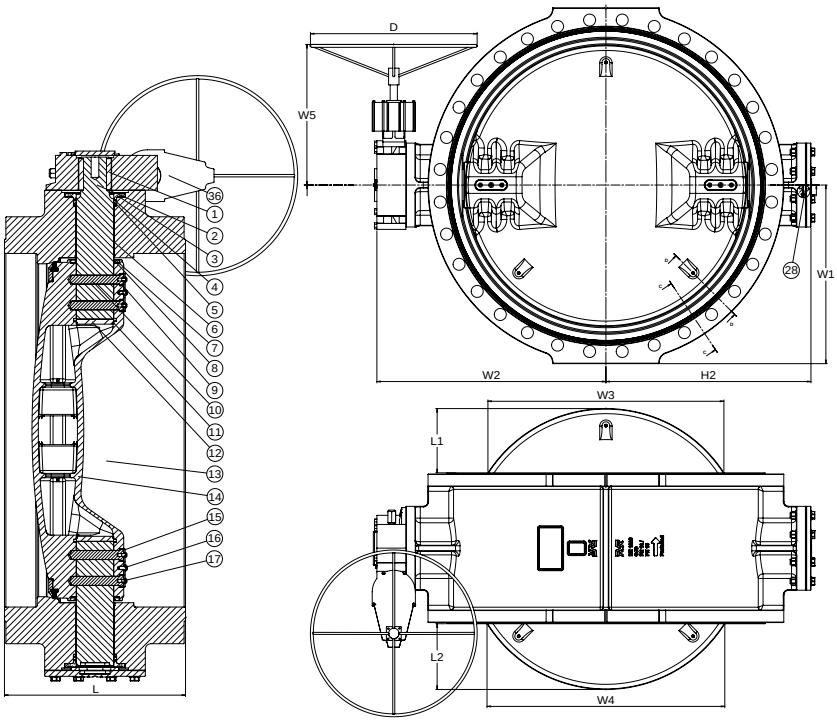
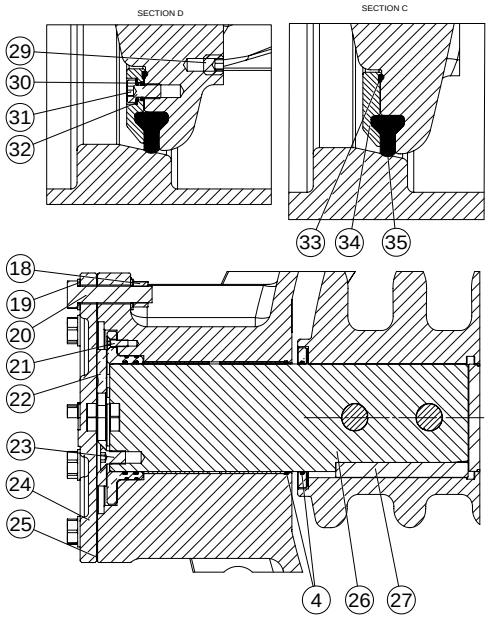


Double eccentric design
The double eccentric design gives minimal wear of the disc seal, as the disc swings open/close like a door relieving the stress on the seal just after a few degrees of opening. The seal is fully compressed in closed position which gives 100% drip-tight closure. The disc and seat are designed to give the lowest possible operating torque in opening and closing direction at full differential pressure.

Disc and seat design
The slim and streamlined disc design ensures low pressure loss across the valve, and the valves are suitable for bi-directional application as standard. The seat is cast in the valve body, which is epoxy coated to avoid corrosion. The disc seals are mounted in a stainless steel retainer ring, and are replaceable independent of flow direction. The disc is fixed by means of dowels with key and keyway as backup.

Shaft sealing
Encapsulated O-rings, self-lubricating bearings and bronze bushings protect against galvanic corrosion.



Component list

1. Key	13. Body	25. Gasket
2. Valve shaft	14. Disc	26. Stub shaft
3. Seal housing	15. Security plate	27. Safety key
4. O-ring	16. Screw	28. Screw
5. O-ring	17. Screw	29. Screw
6. Self-lubricating bearing	18. Nut	30. O-ring
7. Disc cover	19. Washer	31. Bolt
8. Disc cover gasket	20. Screw	32. Washer
9. O-ring	21. Screw	33. O-ring
10. Drive pin	22. Axial bearing	34. Seal retaining ring
11. O-ring	23. Screw	35. Disc seal
12. Plug	24. End plate	36. Gearbox with handwheel

Reference nos. and dimensions

AVK ref. nos.	DN mm	D mm	L mm	L1 mm	L2 mm	H2 mm	W1 mm	W2 mm	W3 mm	W4 mm	W5 mm	Theoretical weight kg
756-0700-1-04	700	700	430	127	133	550	448	641	533	543	449	444
756-0800-1-04	800	700	470	156	162	620	508	711	627	636	449	592
756-0900-1-04	900	700	510	186	192	690	558	791	722	730	499	751
756-1000-1-04	1000	700	550	216	222	770	615	871	816	824	499	995
756-1200-1-04	1200	700	630	269	275	855	728	956	986	993	581	1449

AVK DOUBLE ECCENTRIC BUTTERFLY VALVE, PN10, INTEGRAL SEAT, GEARBOX WITH HANDWHEEL IP67

756/1
004

Double eccentric butterfly valve, for water to max. 70° C, designed according to EN 593, Face to face according to EN 558 table 2 basic series 14.
Standard flange drilling to EN1092-2 (ISO 7005-2)
Hydraulic test according to EN 1074-1 and 2 / EN 12266.
Approved for drinking water.

Designed according to EN 593. Double flanged long type with plate disc, integral seat and IP67 gearbox with handwheel. Fasteners of stainless steel grade A2.
Soft seated with WRAS approved sealing and seal retaining ring of stainless steel AISI 420/304. Body and disc of ductile iron GJS-500-7, ref EN1563. Shaft of stainless steel AISI 431 with double O-rings, self-lubricating bearings, bronze bushings, and four stainless steel drive dowels connecting the shaft to the disc. Extra key mounted as backup.
Epoxy coating: Two pack epoxy RAL 5017 externally and ribbon blue code BS-18-E-50 to BS 4800 internally according to WRAS, 250 microns

Accessories: Self-locking device AVK series 756, extension spindle AVK series 756, street covers AVK series 04 and 80, handwheel AVK series 756, stem cap for rod #25 mm AVK series 756, adaptor gear side AVK series 756, post indicator AVK series 34, dismantling joint AVK series 265, flange adaptors AVK series 260, different types of gearboxes and electric actuators

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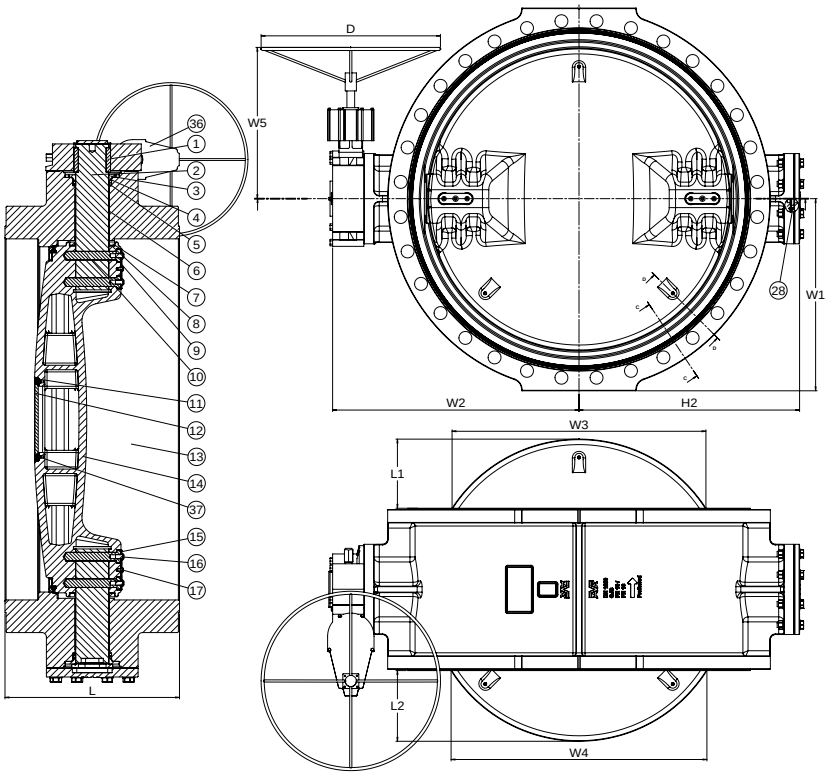
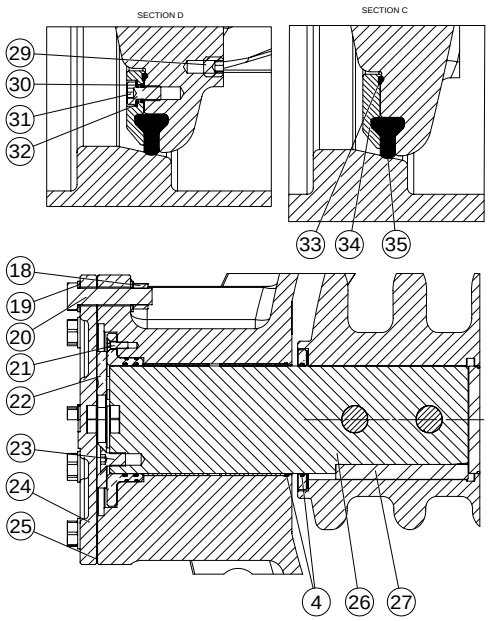


Double eccentric design
The double eccentric design gives minimal wear of the disc seal, as the disc swings open/close like a door relieving the stress on the seal just after a few degrees of opening. The seal is fully compressed in closed position which gives 100% drip-tight closure. The disc and seat are designed to give the lowest possible operating torque in opening and closing direction at full differential pressure.

Disc and seat design
The slim and streamlined disc design ensures low pressure loss across the valve, and the valves are suitable for bi-directional application as standard. The seat is cast in the valve body, which is epoxy coated to avoid corrosion. The disc seals are mounted in a stainless steel retainer ring, and are replaceable independent of flow direction. The disc is fixed by means of dowels with key and keyway as backup.

Shaft sealing
Encapsulated O-rings, self-lubricating bearings and bronze bushings protect against galvanic corrosion.



Component list

1. Key	14. Disc	27. Safety key
2. Valve shaft	15. Security plate	28. Screw
3. Seal housing	16. Screw	29. Screw
4. O-ring	17. Screw	30. O-ring
5. O-ring	18. Nut	31. Bolt
6. Self-lubricating bearing	19. Washer	32. Washer
7. Disc cover	20. Screw	33. O-ring
8. Disc cover gasket	21. Screw	34. Seal retaining ring
9. O-ring	22. Axial bearing	35. Disc seal
10. Drive pin	23. Screw	36. Gearbox with handwheel
11. O-ring	24. End plate	37. Screw
12. Blanking flange	25. Gasket	
13. Body	26. Stub shaft	

Reference nos. and dimensions

AVK ref. nos.	DN mm	D mm	L mm	L1 mm	L2 mm	H2 mm	W1 mm	W2 mm	W3 mm	W4 mm	W5 mm	Theoretical weight kg
756-1400-1-04	1400	700	710	333	339	970	838	1071	1182	1189	581	2166
756-1500-1-04	1500	700	750	363	369	1070	893	1171	1274	1281	581	2622
756-1600-1-04	1600	700	790	390	396	1145	958	1294	1359	1366	606	3192
756-1800-1-04	1800	700	870	448	454	1220	1058	1369	1540	1547	606	3799
756-2000-1-04	2000	700	950	521	527	1382	1180	1547	1753	1760	766	5287
756-2200-1-04	2200	700	1030	576	582	1472	1275	1650	1926	1932	866	6534

AVK DOUBLE ECCENTRIC BUTTERFLY VALVE, PN16, INTEGRAL SEAT, GEARBOX WITH HANDWHEEL IP67

756/1
006

Double eccentric butterfly valve, for water to max. 70° C, designed according to EN 593, Face to face according to EN 558 table 2 basic series 14.
Standard flange drilling to EN1092-2 (ISO 7005-2)
Hydraulic test according to EN 1074-1 and 2 / EN 12266.
Approved for drinking water.

Designed according to EN 593. Double flanged long type with plate disc, integral seat and IP67 gearbox with handwheel. Fasteners of stainless steel grade A2.
Soft seated with WRAS approved sealing and seal retaining ring of stainless steel AISI 420/304. Body and disc of ductile iron GJS-500-7, ref EN1563. Shaft of stainless steel AISI 431 with double O-rings, self-lubricating bearings, bronze bushings, and four stainless steel drive dowels connecting the shaft to the disc. Extra key mounted as backup.
Epoxy coating: Two pack epoxy RAL 5017 externally and ribbon blue code BS-18-E-50 to BS 4800 internally according to WRAS, 250 microns

Accessories: Self-locking device AVK series 756, extension spindle AVK series 756, street covers AVK series 04 and 80, handwheel AVK series 756, stem cap for rod #25 mm AVK series 756, adaptor gear side AVK series 756, post indicator AVK series 34, dismantling joint AVK series 265, flange adaptors AVK series 260, different types of gearboxes and electric actuators

For further details see section "Technical Information".
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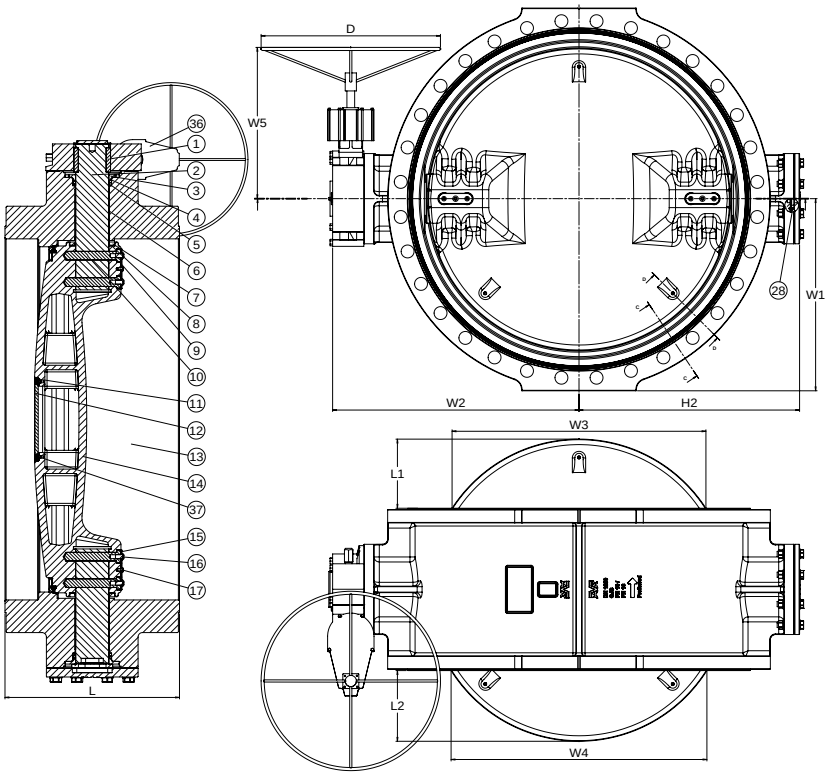
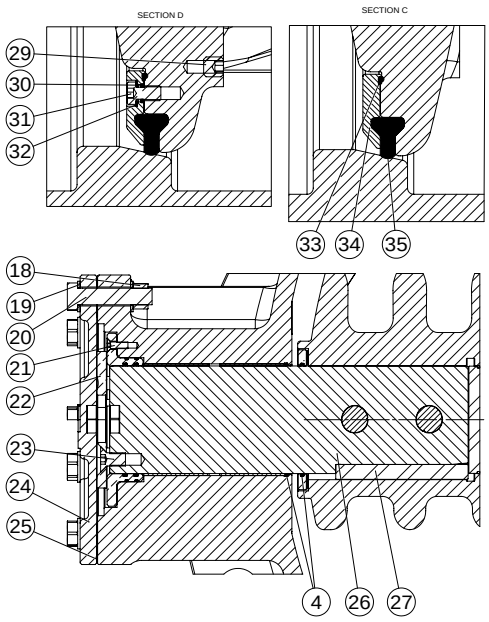


Double eccentric design
The double eccentric design gives minimal wear of the disc seal, as the disc swings open/close like a door relieving the stress on the seal just after a few degrees of opening. The seal is fully compressed in closed position which gives 100% drip-tight closure. The disc and seat are designed to give the lowest possible operating torque in opening and closing direction at full differential pressure.

Disc and seat design
The slim and streamlined disc design ensures low pressure loss across the valve, and the valves are suitable for bi-directional application as standard. The seat is cast in the valve body, which is epoxy coated to avoid corrosion. The disc seals are mounted in a stainless steel retainer ring, and are replaceable independent of flow direction. The disc is fixed by means of dowels with key and keyway as backup.

Shaft sealing
Encapsulated O-rings, self-lubricating bearings and bronze bushings protect against galvanic corrosion.



Component list

1. Key	14. Disc	27. Safety key
2. Valve shaft	15. Security plate	28. Screw
3. Seal housing	16. Screw	29. Screw
4. O-ring	17. Screw	30. O-ring
5. O-ring	18. Nut	31. Bolt
6. Self-lubricating bearing	19. Washer	32. Washer
7. Disc cover	20. Screw	33. O-ring
8. Disc cover gasket	21. Screw	34. Seal retaining ring
9. O-ring	22. Axial bearing	35. Disc seal
10. Drive pin	23. Screw	36. Gearbox with handwheel
11. O-ring	24. End plate	37. Screw
12. Blanking flange	25. Gasket	
13. Body	26. Stub shaft	

Reference nos. and dimensions

AVK ref. nos.	DN mm	D mm	L mm	L1 mm	L2 mm	H2 mm	W1 mm	W2 mm	W3 mm	W4 mm	W5 mm	Theoretical weight kg
756-1400-1-14	1400	700	710	333	339	970	843	1119	1182	1189	606	2477
756-1500-1-14	1500	700	750	363	369	1070	913	1219	1274	1281	606	3006
756-1600-1-14	1600	700	790	390	396	1145	965	1294	1359	1366	606	3473
756-1800-1-14	1800	700	870	448	454	1220	1065	1398	1540	1547	831	4217
756-2000-1-14	2000	700	950	521	527	1382	1180	1560	1753	1760	866	5755

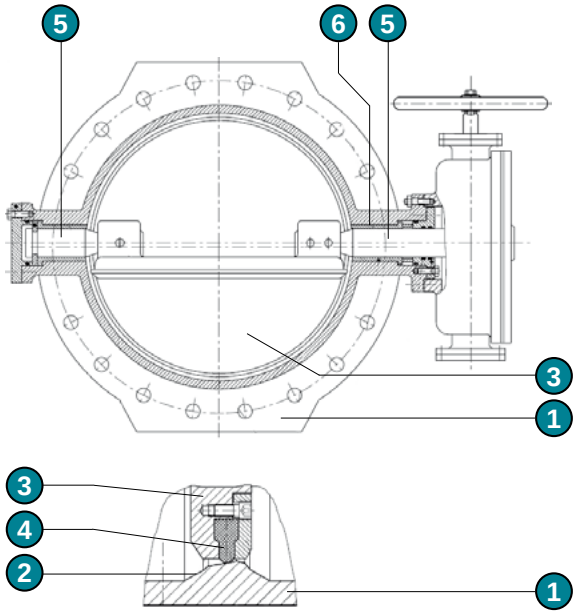
LYSITHEA - Double eccentric butterfly valve DN400-2200 (3000)

Description

The LYSITHEA is a double eccentric butterfly valve for all kind of water and other non aggressive fluids.
It is available with gear or electric actuator.

Product features

	PN10/16	PN25	PN40
• Diameters	DN 400 - 2200 (DN 2400 - 3000 on request)	DN400-800 (DN 900 - 1200 on request)	DN400-800
• Face to face dimension	acc. to ISO 5752 series 14 (EN 558-1 series 14, DIN 3202 F4)	acc. to ISO 5752 series 14 (EN 558-1 series 14, DIN 3202 F4)	acc. to ISO 5752 series 15 (EN 558-1 series 15, DIN 3202 F5)
• Max. working pressure	10/16 bar	25 bar <70°C 16 bar <200°C	40 bar <70°C 25 bar <200°C
• Rating	PN10, PN16, ANSI cl.150	PN25, ANSI cl.300	PN40, ANSI cl.300
• Top flange	according to EN ISO 5211		
• Temperature range	90°C (EPDM), 200°C (FPM)		



Material specification

Item	Description	Material	
1+3	Body + Disc	PN10/16/25	EN-GJS-400-15, GGG40
		PN40	S235JR, St37.2
2	Body seat surface	CrNi-Plasma	
4	Seat	EPDM, FPM	
5	Shaft	X20Cr13, 1.4021	
6	Bearing bush	CC480K, CuSn10	

Torques [Nm]

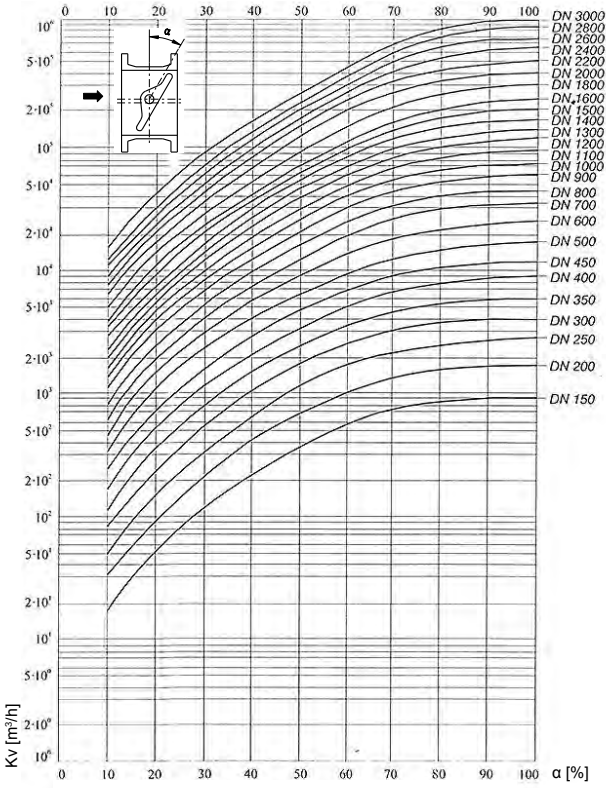
DN ->	400	450	500	600	700	800	900	1000	1100	1200	1400	1600	1800	2000	2200
PN10	1471	1872	2593	3907	5498	7926	10148	13467	17274	21797	32306	46829	64084	87231	112637
PN16	2148	2736	3800	5734	8054	11680	14939	19876	26935	32159	47681	69017	106340	140397	181990
PN25	3200	4600	5800	9500	14400	24000									
PN40	4950	6710	9240	15730	23980	38170									

InterApp®

Fluids under control.

Kv values [m³/h]

DN	PN10	PN16	PN25	PN40
400	12000	10700	8320	6240
450	16000	13500	10500	8060
500	20600	16700	13000	9950
600	29700	24100	18700	14300
700	40400	32800	25500	20600
800	52800	42800	33300	27600
900	66900	55000		
1000	82500	67900		
1100	99900	86300		
1200	119000	103500		
1400	162000	140300		
1600	211000	183500		
1800	280000	246600		
2000	354000	308000		
2200	440000	383000		



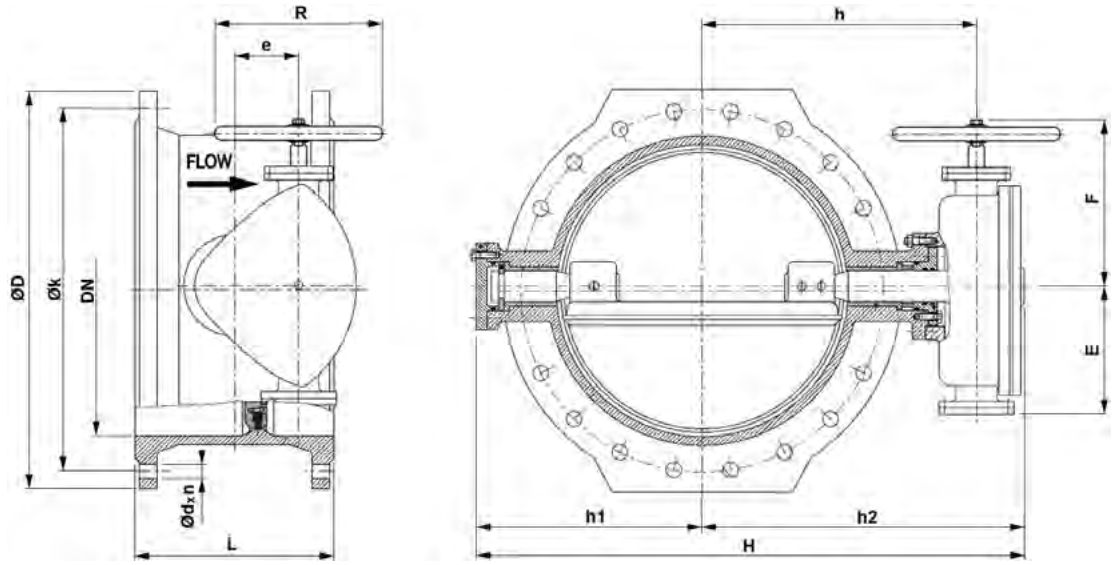
Type code

L6M	1000	.	3	3	-	2AR	.	4A	.	2AR	.	E
❶	❷		❸	❹		❺		❻		❼		❽

❶	Type	L6M	Double eccentric butterfly valve LYSITHEA	
❷	Nominal diameter	0400 - 2200	mm	
❸	Working pressure	2	10 bar	DN400-2200
		3	16 bar	DN400-2200
		5	25 bar	DN400-800
		6	40 bar	DN400-800
❹	Rating	2	PN10	DN400-2200
		3	PN16	DN400-2200
		5	PN25	DN400-800
		6	PN40	DN400-800
❺	Body material	2AR	GGG40 / EN-GJS-400-15 (Resicoat 250 µm)	PN10/16/25
		2AV	GGG40 / EN-GJS-400-15 / EPDM lined (with WRAS approval)	PN10/16/25
		3CR	S235JR, St37.2, 1.0037 (Resicoat 250 µm)	PN40
❻	Shaft	4A	X20Cr13 / 1.4021 / AISI 420	
❼	Disc	2AR	GGG40 / EN-GJS-400-15 / GGG 40 (Resicoat 250 µm)	PN10/16/25
		2AV	GGG40 / EN-GJS-400-15 / GGG 40 EPDM lined (with ACS approval)	PN10/16/25
		3CR	S235JR, St37.2, 1.0037 (Resicoat 250 µm)	PN40
		4C0	Stainless steel 1.4408 / AISI 316	PN10/16/25
❽	Seat	E	EPDM (with WRAS approval)	
		V	FPM	

Other executions on request (DN2400-3000, other materials for body, disc and seat)

Dimensions PN10/16/25



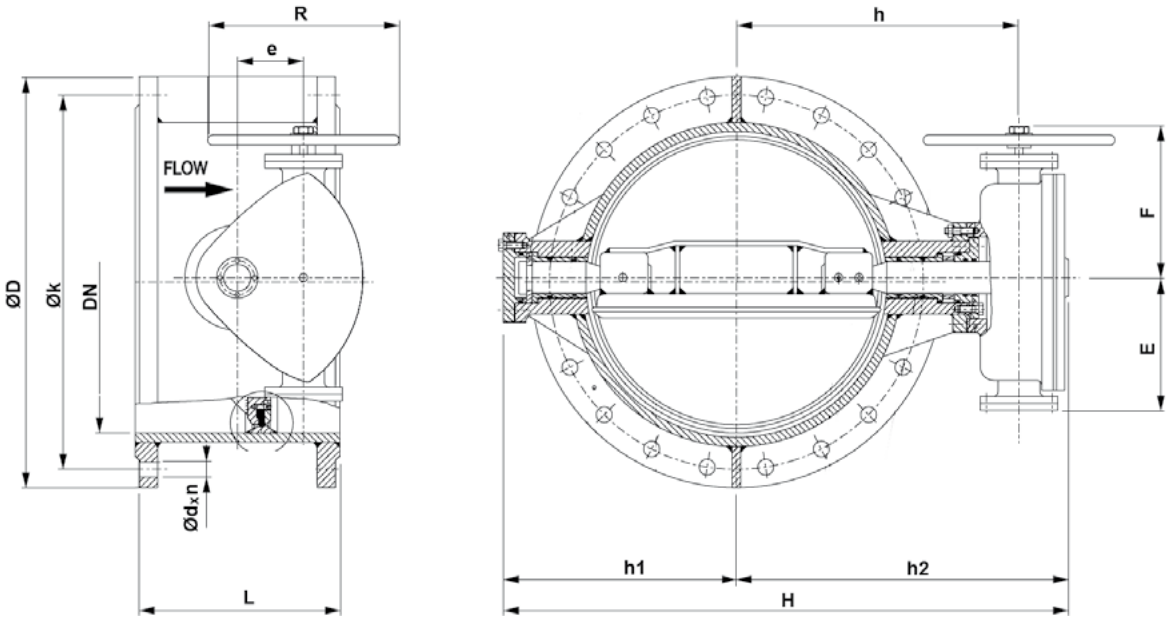
	DN	L	D PN10	k x n x d PN10	E	F	e	h	h_1	h_2	H	R	ISO 5211	n *	kg PN10
PN10	400	310	565	515x16x28	200	250	85	433	345	550	895	320	F12	28	228
	450	330	615	565x20x28	200	250	85	458	375	560	935	320	F14	28	285
	500	350	670	620x20x28	295	390	145	537	445	680	1125	500	F14	36	415
	600	390	780	725x20x31	295	390	145	597	515	745	1260	500	F16	36	566
	700	430	895	840x24x31	430	540	230	632	525	807	1332	640	F25	50	730
	800	470	1015	950x24x34	430	540	230	750	655	937	1592	640	F25	50	1020
	900	510	1115	1050x28x34	430	540	230	799	710	987	1697	640	F30	50	1350
	1000	550	1230	1160x28x37	430	540	230	865	760	1052	1812	640	F30	50	1790
	1100	590	1340	1270x32x37	430	540	230	765	810	1100	1910	640	F30	50	1920
	1200	630	1455	1380x32x41	430	540	230	810	855	1142	1997	640	F30	50	2070
	1400	710	1675	1590x36x44	375	830	400	983	975	1252	2227	640	F30	268	3600
	1600	790	1915	1820x40x50	375	830	400	1280	1100	1392	2492	640	F35	268	4700
	1800	870	2115	2020x44x50	375	830	400	1490	1280	1572	2852	640	F40	268	5600
	2000	950	2325	2230x48x50	330	785	440	1590	1390	1750	3140	640	F48	300	9200
	2200	1030	2550	2440x52x56	330	785	440	1700	1490	1850	3340	640	F60	300	11500

	DN	L	D PN16	k x n x d PN16	E	F	e	h	h_1	h_2	H	R	ISO 5211	n *	kg PN16
PN16	400	310	580	525x16x31	200	250	85	433	345	550	895	320	F12	28	251
	450	330	640	585x20x31	200	250	85	458	375	560	935	320	F14	28	314
	500	350	715	650x20x34	295	390	145	537	445	680	1125	500	F14	36	457
	600	390	840	770x20x37	295	390	145	597	515	745	1260	500	F16	36	623
	700	430	910	840x24x37	430	540	230	632	525	807	1332	640	F25	50	803
	800	470	1025	940x24x41	430	540	230	750	655	937	1592	640	F25	50	1122
	900	510	1125	1050x28x41	430	540	230	799	710	987	1697	640	F30	50	1485
	1000	550	1255	1170x28x44	430	540	230	865	760	1052	1812	640	F30	50	1969
	1100	590	1355	1270x32x44	430	540	230	765	810	1100	1910	640	F30	50	2112
	1200	630	1485	1390x32x50	430	540	230	810	855	1142	1997	640	F30	50	2277
	1400	710	1685	1590x36x50	375	830	400	983	975	1252	2227	640	F30	268	3960
	1600	790	1930	1820x40x57	375	830	400	1280	1100	1392	2492	640	F35	268	5170
	1800	870	2130	2020x44x57	375	830	400	1490	1280	1572	2852	640	F40	268	6160
	2000	950	2345	2230x48x62	330	785	440	1590	1390	1750	3140	640	F48	300	10120
	2200	1030	2555	2440x52x62	330	785	440	1700	1490	1850	3340	640	F60	300	12650

	DN	L	D PN25	k x n x d PN25	E	F	e	h	h_1	h_2	H	R	ISO 5211	n *	kg PN25
PN25	400	310	620	550x16x37	200	250	85	433	345	550	895	320	F12	28	228
	450	330	685	600x20x37	200	250	85	458	375	560	935	320	F14	28	285
	500	350	730	660x20x37	295	390	145	537	445	680	1125	500	F14	36	415
	600	390	845	770x20x41	295	390	145	597	515	745	1260	500	F16	36	566
	700	430	960	875x24x44	430	540	230	632	525	807	1332	640	F25	50	730
	800	470	1085	990x24x50	430	540	230	750	655	937	1592	640	F25	50	1020

* n = Handwheel turns ON/OFF

Dimensions PN40



	DN	L	D PN40	k x n x d PN40	E	F	e	h	h_1	h_2	H	R	ISO 5211	n *	kg PN25
PN40	400	600	660	585x16x41	200	250	85	433	345	550	895	320	F12	36	600
	450	650	685	610x20x41	200	250	85	458	375	560	935	320	F14	36	680
	500	700	755	670x20x45	295	390	145	537	445	680	1125	500	F14	50	790
	600	800	890	795x20x50	295	390	145	597	515	745	1260	500	F16	50	1210
	700	900	995	900x24x50	430	540	230	632	525	807	1332	640	F25	50	1680
	800	1000	1140	1030x24x57	430	540	230	750	655	937	1592	640	F25	50	2340

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ELARA - Válvula de mariposa DN50-800

Descripción

Válvula de doble excentricidad con 3 tipos de asiento
• **TG** asiento PTFE + 25% fibra
• **TI** anti fuego
• **IN** asiento metal
Campo de aplicación: industria y petroquímicas

Características

• Tipos de cuerpo	E1 Tipo Wafer, E3 Tipo Lug
• Ancho del cuerpo	Según ISO 5752/20, EN558-1/5, BS 5155/4
• Brida superior	Según EN ISO 5211
• Tipos de bridas	PN10/16/25/40, ANSI cl. 150 ANSI cl. 300 (DN50-300)
• Prueba de estanquiedad	**TG/TI**: Estanqueidad para gas según EN 12266-1/P12 Ratio de perdida A / API 598 **IN**: Estanqueidad para gas según API 598
• ATEX opcional	Según ATEX 94/9/EU, Zone 1 & 21 – Gr II, Kat. 2 G/D
CE	Las válvulas de mariposa cumplen los requisitos de seguridad del anexo en la directiva europea para equipos de presión 97/23/EG para fluidos grupo 1 y 2.

E1

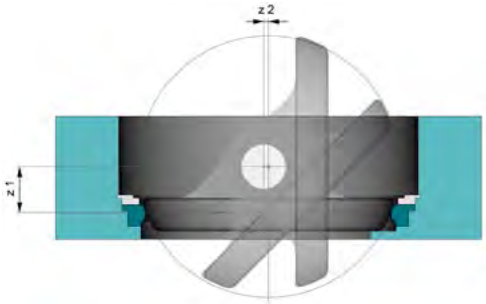
E3

Función de doble excentricidad:

Elara es una válvula de doble excentricidad que se logra con:

- desplazamiento del disco respecto al eje (z1) y
- desplazamiento del centro de la válvula con respecto al eje. (z2)

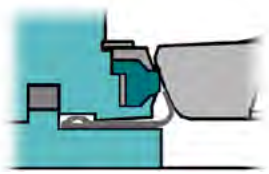
Con ello aseguramos que el disco al abrirse se separe inmediatamente del asiento, reduciendo la fricción y el par al mínimo.



Ejecución anti fuego:

Según BS 6755 parte 2
(Bureau Veritas-Certificado Nº AIX3P00.0620J.3A)

1 En aplicación normal el **asiento PTFE** asume la función de estanqueidad.
2 En caso de incendio, el asiento es destruido, mientras que el **asiento de Inconel** garantiza la estanqueidad.



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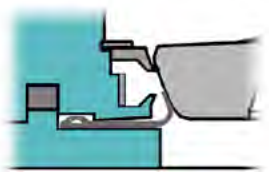


2

InterApp

Fluids under control.

Características

Presión máxima:

DN	10 bar	16 bar	20 bar	25 bar	40 bar	50 bar
50						
65						
80						
100						
125						
150						
200						
250						
300						
350						
400						
450						
500						
600						
700						
800						

Pares [Nm]:

TG con la junta de PTFE

DN	10 bar	16 bar	20 bar	25 bar	40 bar	50 bar
50		25		30		35
65		35		40		45
80		40		45		60
100		55		65		85
125		110		120	150	
150		140		160	225	
200		220		260	376	
250		470		650		
300		650		900		
350		850		1150		
400		1000		1400		
450		1650		2200		
500		2100		2800		
600		3250	4300			
700		4700	6100			
800		6500				

Pares [Nm]:

TI anti fuego **IN** con el asiento de metal

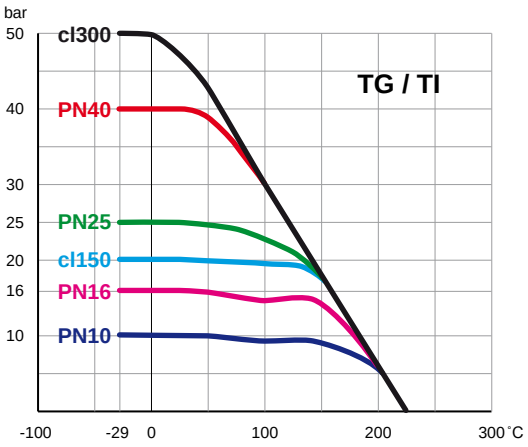
DN	10 bar	16 bar	20 bar	25 bar	40 bar	50 bar
50				50		65
65				70		90
80				100		130
100				150		200
125				220	280	
150		210		290	400	
200		330		450	650	
250		776		1145		
300		1215		1825		
350		1686		2540		
400		2793		4249		
450		2679		4051		
500		4063		6142		
600	3614		7192			
700	5625		11275			
800	10525	16954				

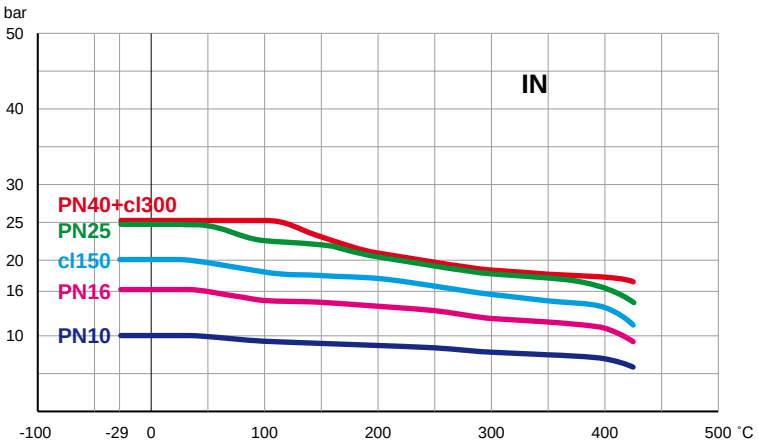
Valores de caudal k_v [m³/h]:

DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800
kv	87	148	320	456	750	1125	1950	2940	4270	5550	7870	9419	11674	16914	23115	30283

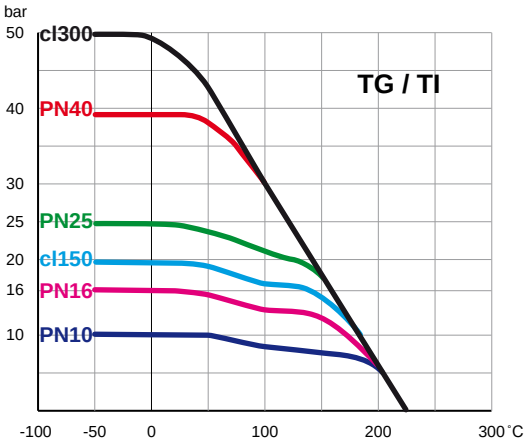
Presión / Temperatura:

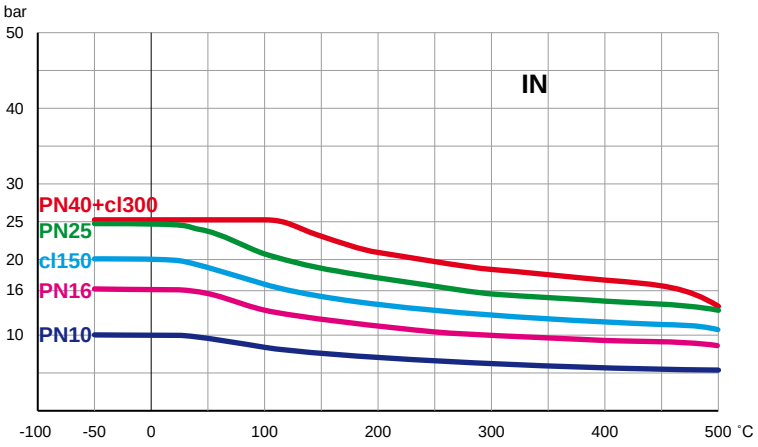
Cuerpo de acero (3HD)





Cuerpo de acero inox (4C0)





Designación de la válvula

E1C	0150	.	6	B	.	3HD	.	4A	.	4A0	.	TG	-	ATEX
❶	❷		❸	❹		❺		❻		❼		❽		❾

❶	**Tipo de cuerpo**	E1C	Wafer	DN50-800
		E3C	Lug	DN50-800
❷	**Díametro nominal**	050-800	mm	
❸		3	16 bar	DN50-800
		4	20 bar	DN50-700
		5	25 bar	DN50-500
		6	40 bar	DN50-200
		7	50 bar	DN50-100
❹	**Norma de bridas**	**para E1C (Wafer)**		
		5	PN 10 / 16 / 25 / ANSI cl.150	DN 450-800
		6	PN 10 / 16 / 25 / 40 / ANSI cl.150	DN 350-400
		B	PN 10 / 16 / 25 / 40 / ANSI cl.150 / 300	DN 50-300
		para E3C (Lug)		
		2	PN 10	DN 200-800
		3	PN 10 / 16	DN 50-150
			PN 16	DN 200-800
		A	ANSI cl.150	DN 50-800
		5	PN 25	DN 200-800
		6	PN 25 / 40	DN 50-150
			PN 40	DN 200-400
		B	ANSI cl.300 (~50bar)	DN 50-300
❺	**Cuerpo**	3HD	Acero, A216WCB, recubierto SODOX	
		4C0	Acero inox 1.4408, A351CF8M	
❻	**Eje**	4A	Acero inox 1.4021 (con cuerpo en acero 3HD)	
		4T	Acero inox 1.4462 (con cuerpo en inox 4C0)	
❼	**Disco**	4C0	Acero inox 1.4408, A351CF8M (con cuerpo 3HD + 4C0)	DN 50-125
			Acero inox 1.4408, A351CF8M (con cuerpo en inox 4C0)	DN 150-800
		4A0	Acero inox 1.4021 (con cuerpo en acero 3HD)	DN 150-800
❽	**Asiento**	TG	PTFE con 25% de fibra	DN 50-800
		TI	Anti fuego	DN 50-800
		IN	Acero inox (max. 25 bar)	DN 50-800
❾	**ATEX opcional**	ATEX	ATEX 94/9/EC, Zone 1 and 21 – Gr II, Cat. 2 G/D	

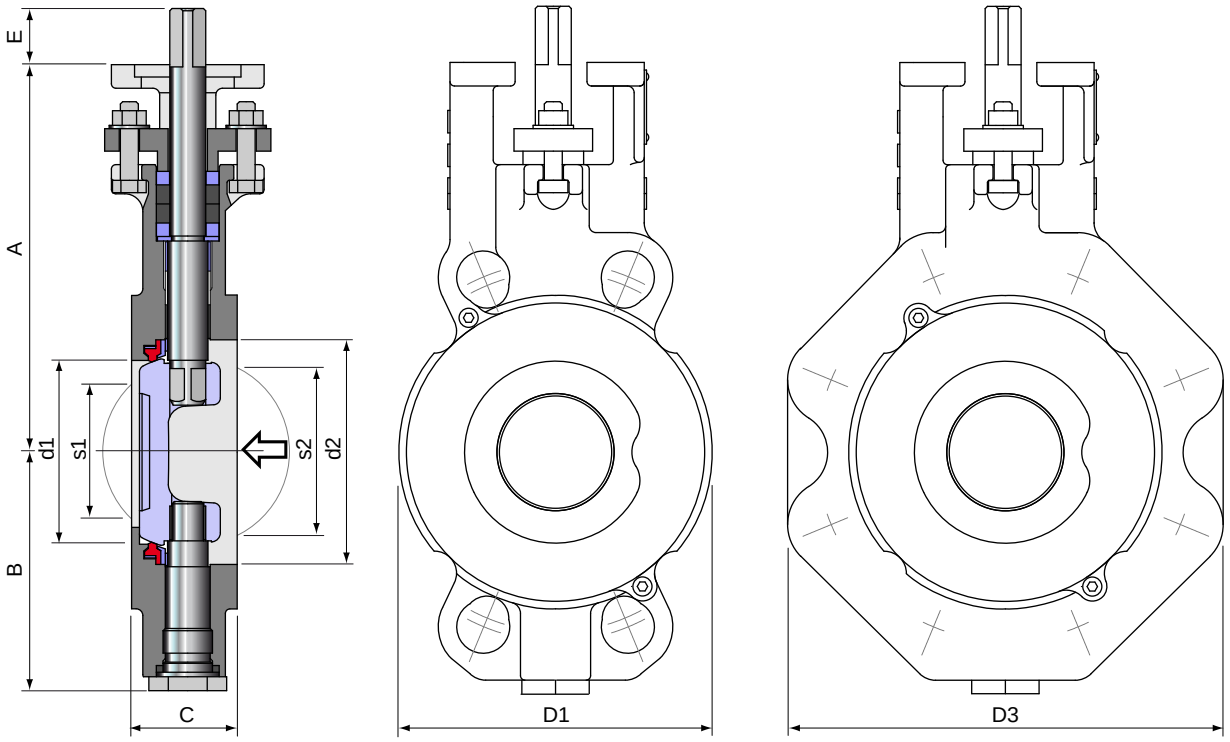
Montajes al final de la línea - bajo demanda
Los limites de temperatura y presión están sujetas a las condiciones de trabajo

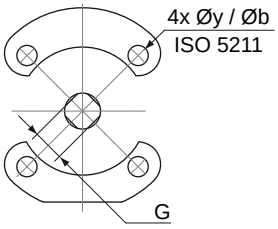
Dimensiones

ELARA DN 50 - 125

ELARA E1C

ELARA E3C





Cuerpo	3HD	Acero 1.0625 / A216WCB	4C0	Acero inox 1.4408 / A351CF8M
Eje	4A	Acero inox 1.4021	4T	Acero inox 1.4462
Disco	4C0	Acero inox 1.4408	4C0	Acero inox 1.4408

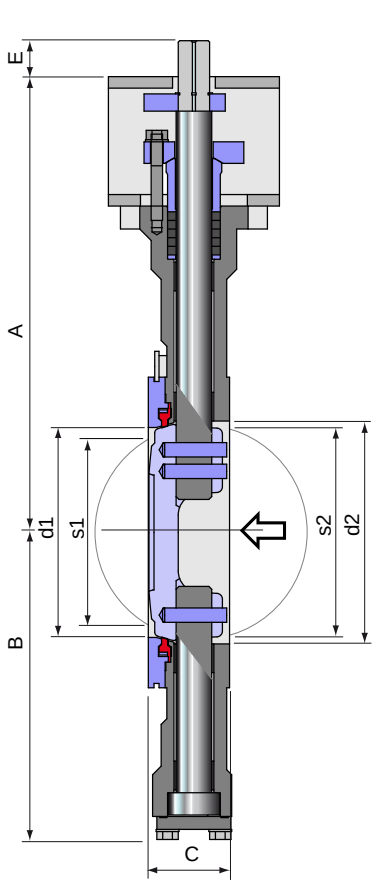
3 tipos de asiento:

TG	TI (Fire Safe)	IN
PTFE 25%GF	PTFE 25%GF INCONEL	INCONEL

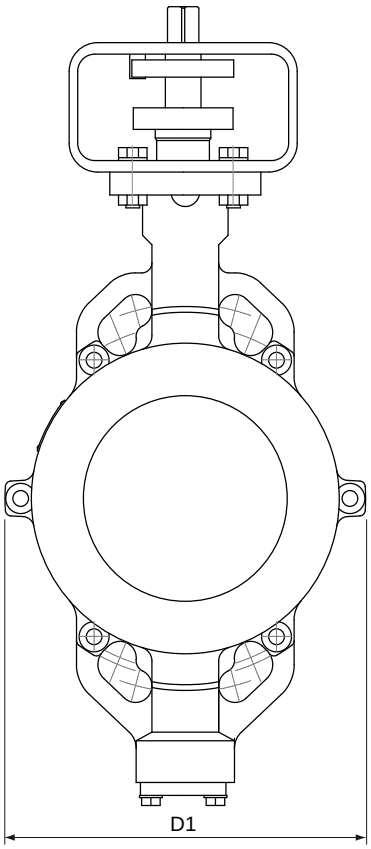
								(TG)		(TI, IN)							E1C	E3C
DN	d1	d2	A	B	C	D1	D3	s1	s2	s1	s2	E	G	ISO5211	y	b	[kg]	[kg]
50	48	68	163	93	44	105	154	12	32	0	41	19	14	F07	9	70	5,3	7,5
65	64	82	170	100	47	125	178	47	58	38	63	19	14	F07	9	70	6,0	9,2
80	80	100	174	106	47	140	196	64	68	55	73	19	14	F07	9	70	7,0	10,3
100	101	123	206	123	53	163	225	84	88	77	93	19	14	F07	9	70	8,7	12,4
125	121	146	215	137	57	193	260	112	117	105	121	19	14	F07	9	70	12,0	16,7

Dimensiones

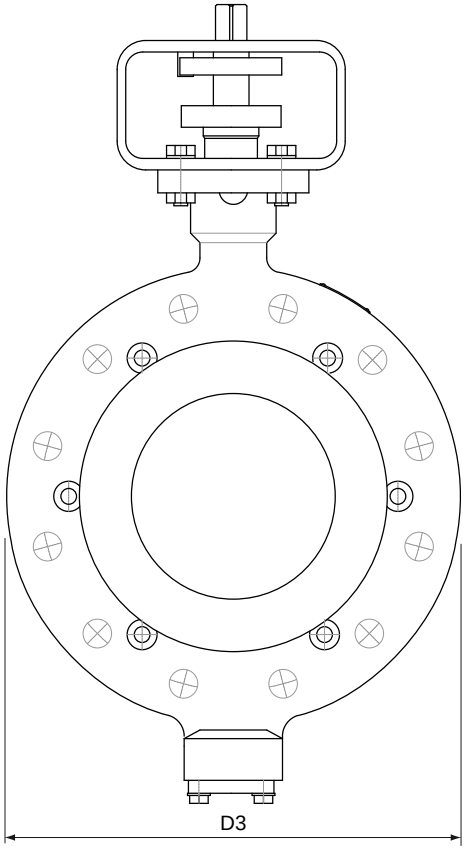
ELARA DN 150 - 800



ELARA E1C



ELARA E3C



Cuerpo	3HD	Acero 1.0625 / A216WCB	4C0	Acero inox 1.4408 / A351CF8M
Eje	4A	Acero inox 1.4021	4T	Acero inox 1.4462
Disco	4A0	Acero inox 1.4021	4C0	Acero inox 1.4408

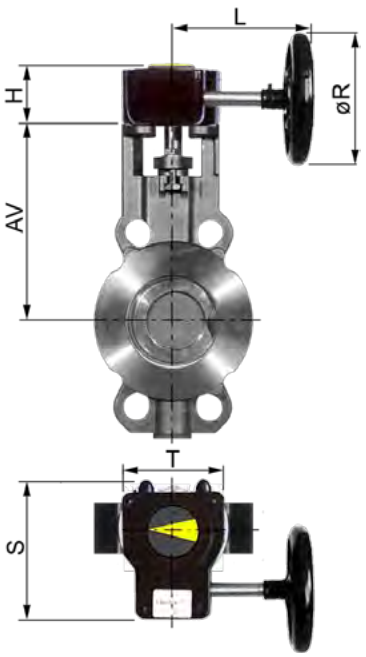
3 tipos de asiento:

TG	TI (Fire Safe)	IN
PTFE 25% GF	PTFE 25%GF 1.4843	1.4843

								(TG)		(TI, IN)							E1C	E3C
DN	d1	d2	A	B	C	D1	D3	s1	s2	s1	s2	E	G	ISO5211	y	b	[kg]	[kg]
150	146	155	317	214	56	253	318	137	143	134	146	25	17	F10	4x 11	102	21	28
200	194	204	349	246	60	307	381	189	194	186	196	25	17	F10	4x 11	102	29	41
250	241,5	258,5	395	275	69	348	450	222	235	217	234	31	22	F12	4x 13	125	46	70
300	289	309	460	313	79	393	521	268	284	262	282	31	27	F14	4x 17	140	67	105
350	323	342	508	355	92	448	577	290	308	292	313	45	27	F16	4x 21	165	91	140
400	385	405	556	402	103	542	657	341	360	353	377	58	36	F16	4x 21	165	132	211
450	414	436,5	594	411	114	594	670	375	396	378	405	37	36	F16	4x 21	165	183	275
500	464	487	625	449	127	658	730	418	441	423	451	47	46	F25	8x 17	254	241	356
600	553	581	698	527	154	760	845	495	529	499	541	100	Ø65	F30	8x 21	298	369	547
700	645	683	813	591	165	869	960	586	618	590	630	111	Ø75	F30	8x 21	298	501	756
800	769	796	869	647	190	976	1085	688	731	692	735	111	Ø75	F30	8x 21	298	653	1000

Dimensiones

Reductores:



TG con la junta de PTFE

DN		pmax [bar]	AV	H	L	R	S	T	n**	[kg]*
50	**GB232-05.F05-F0714.100**	50	163	53	121	100	114	80	10	0,8
65	**GB232-05.F05-F0714.100**	50	170	53	121	100	114	80	10	0,8
80	**GB232-05.F05-F0714.100**	50	174	53	121	100	114	80	10	0,8
100	**GB232-05.F05-F0714.100**	50	206	53	121	100	114	80	10	0,8
125	**GB232-06.F05-F0714.160**	40	215	59	179	160	131	80	10	0,9
150	**GB232-08.F07-F1017.250**	40	317	67	209	250	131	100	9,25	1,55
200	**GB232-08.F07-F1017.250**	40	349	67	209	250	131	100	9,25	1,55
250	**GB232-13.F10-F1222.300**	25	395	84	361	300	209	175	10	5,4
300	**GB232-13.F1427.400**	25	460	84	376	400	209	175	10	5,4
350	**GB880N-F1627.500**	25	508	92	315	500	227	200	9,5	14
400	**GB880N-F1636.600**	25	556	92	315	600	227	200	9,5	14
450	**GB1250N-F1636-600**	25	594	101	356	600	258	220	13,75	22
500	**GB1950N/HR-F2546-500**	25	625	123	397	500	323	285	21	32
600	**GB6800N-F3065-600**	16	698	160	422	600	402	370	19,5	56
700	**GBA250G/SP9-F3075-400**	16	813	175	609	400	725	510	176	225
800	**GBA250G/SP9-F3075-400**	16	869	175	609	400	725	510	176	225

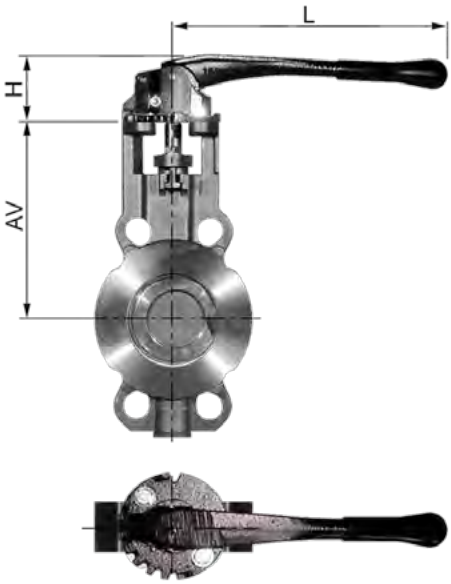
TI anti fuego
IN con el asiento de metal

DN		pmax [bar]	AV	H	L	R	S	T	n**	[kg]*
50	**GB150N.F05-F0714.160**	25	163	52	134	160	124	80	10	2,2
65	**GB150N.F05-F0714.160**	25	170	52	134	160	124	80	10	2,2
80	**GB150N.F05-F0714.160**	25	174	52	134	160	124	80	10	2,2
100	**GB215N.F07-F1014.160**	25	206	64	193	160	143	125	9,25	3,5
125	**GB215N.F07-F1014.160**	25	215	64	193	160	143	125	9,25	3,5
150	**GB215N.F07-F1017.160**	25	317	64	193	160	143	125	9,25	3,5
200	**GB215N.F07-F1017.250**	25	349	64	208	250	143	125	9,25	3,5
250	**GB880N.F1222.500**	25	395	92	315	500	227	200	9,5	14
300	**GB1250N.F1427.500**	25	460	101	356	500	258	220	13,75	22
350	**GB1950N/HR.F1627.500**	25	508	123	397	500	323	285	21	32
400	**GB1950N/SP4.F1636.400**	25	556	155	437	400	403	285	52	45
450	**GB1950N/SP4.F1636.400**	25	594	155	437	400	403	285	52	45
500	**GB1950N/SP4.F2546.600**	25	625	155	457	600	403	285	79,25	45
600	**GB6800N-F3065-700**	16	698	160	422	700	402	370	19,5	56
700	**GBA250G/SP9-F3075-400**	16	813	175	609	400	725	510	176	225
800	**GBA250G/SP9-F3075-400**	16	869	175	609	400	725	510	176	225

* [kg] Los pesos no incluyen la válvula
** n = Vueltas del volante de apertura/cierre

Dimensiones

Palanca:



DN		pmax[bar]	AV	H	L	[kg]*
50	**HLG.F0714.260-E.C**	50	162,5	66	260	1,2
65	**HLG.F0714.260-E.C**	50	169,5	66	260	1,2
80	**HLG.F0714.260-E.C**	25	173,5	66	260	1,2
100	**HLG.F0714.260-E.C**	25	205,5	66	260	1,2
125	**HLG.F0714.350-E.C**	20	215,0	66	350	1,6

* [kg] Los pesos no incluyen la válvula

Mas documentación

Actuadores neumáticos, Actuadores eléctricos, Accesorios en hojas separados.
Instrucciones de instalación, Instrucciones de mantenimiento, Tablas de bridas: Observe por favor estas instrucciones para la instalación y mantenimiento de nuestras válvulas.

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FKO PP butterfly valve d50-315 (DN40-300)

Description

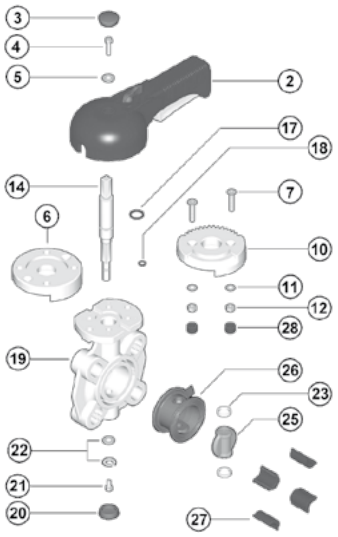
Centric PP butterfly valve with elastomer liner EPDM or Viton® (FPM) for water and harmless fluids to which the material is resistant.

Product features

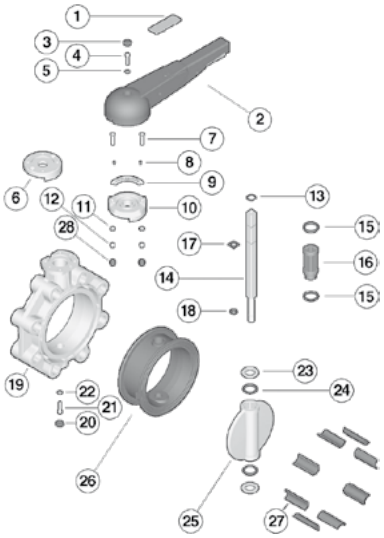
FKOM	Disc PP (standard execution)
FKOC	Disc PVC-C
FKOF	Disc PVDF
• Face to face dimension	DN040-200: ISO 5752/25, EN 558/1-25 DN250-300: ISO 5752/16, EN 558/1-16
• Top flange	according to EN ISO 5211
• Max. working pressure	DN40-250 10 bar, DN300 8 bar
• Rating	PN10 (DN40-300), PN16 (DN40-150), ANSI cl. 150 (DN40-200)

Construction

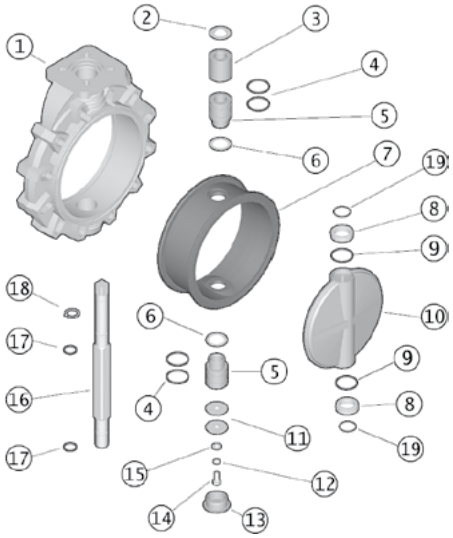
DN40-50



DN65-200



DN250-300



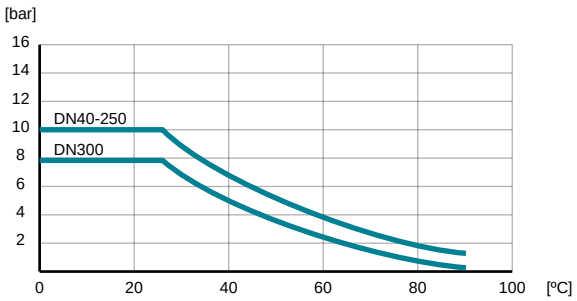
DN40-200								
1	Insert	ABS	11	Washer	Stainless steel	21	Screw	Stainless steel
2	Handle	PVC	12	Nut	Stainless steel	22	Washer	Stainless steel
3	Protection cap	PE	13	Seeger ring	Stainless steel	23	Anti-friction ring	PTFE
4	Screw	Stainless steel	14	Shaft	Stainless steel	24	Disc O-ring	EPDM or Viton®
5	Washer	Stainless steel	15	Bush O-ring	EPDM or Viton®	25	Disk	PP,PVC-C,PVDF
6	Flange	PP-GR	16	Bush	Nylon	26	Liner	EPDM or Viton®
7	Screw	Stainless steel	17	Shaft O-ring	EPDM or Viton®	27	Inserts	ABS
8	Screw	Stainless steel	18	Shaft O-ring	EPDM or Viton®	28	Plug	PE
9	Ratchet	Stainless steel	19	Body	PP-GR			
10	Pad	PP-GR	20	Protection cap	PE			

DN250-300					
1	Body	PP-GR	11	Washer	Stainless steel
2	Washer	Stainless steel	12	Washer	Stainless steel
3	Bush	PP	13	Protection cap	PE
4	Bush O-Ring	EPDM or Viton®	14	Screw	Stainless steel
5	Bush	PP	15	Washer	Stainless steel
6	Washer	PTFE	16	Shaft	Stainless steel
7	Liner	EPDM or Viton®	17	Shaft O-Ring	EPDM or Viton®
8	Anti-friction ring	PTFE	18	Seeger ring	Stainless steel
9	Disc O-Ring	EPDM or Viton®	19	O-Ring	EPDM or Viton®
10	Disc	PP,PVC-C,PVDF			

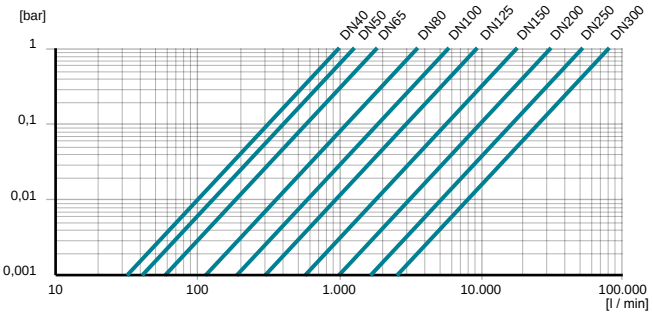
InterApp®

Fluids under control.

Pressure- / temperature diagram:



Pressure loss diagram:

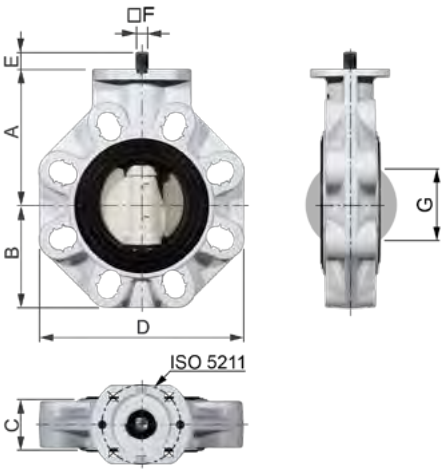


kv values:

d / DN	50 / 40	63 / 50	75 / 65	90 / 80	110 / 100	140 / 125	160 / 150	115 / 200	280 / 250	315 / 300
kv [l/min]	1 000	1 285	1 700	3 550	5 900	9 850	18 700	30 500	53 200	81 600

Dimensions

With bare shaft



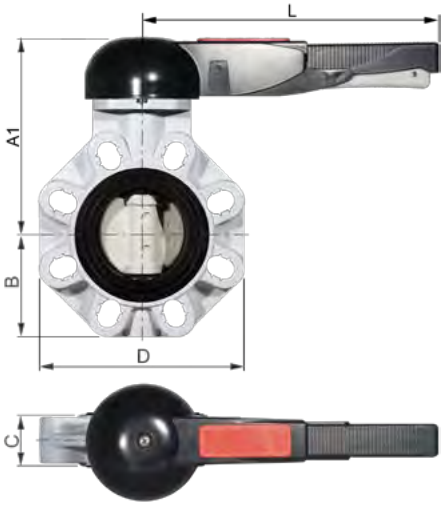
Before installing the valve it is suggested to check that stubs internal diameter allows the complete disc opening (**note dimenson G!**)

	d	DN	A	B	C	D	E	F	G	ISO5211	[kg]
FKOM 050 03	50	40	94	60	33	132	24	11	25	F05	0,57
FKOM 063 03	63	50	100	70	43	147	24	11	28	F05	0,75
FKOM 075 03	75	65	107	80	46	165	24	11	47	F05/F07	1,00
FKOM 090 03	90	80	121	93	49	185	28	14	64	F07	1,40
FKOM 110 03	110	100	135	107	56	211	28	14	84	F07	1,75
FKOM 125 03*	125	125	155	120	64	240	31	17	108	F07	2,55
FKOM 140 03	140	125	155	120	64	240	31	17	108	F07	2,55
FKOM 160 03	160	150	168	134	70	268	31	17	134	F07	3,30
FKOM 225 03	225	200	227	161	71	323	36	22	187	F10	6,0
FKOM 280 03	280	250	248	210	114	405	29	27	225	F10/12/14	12,0
FKOM 315 03	315	300	305	245	114	475	29	27	280	F10/12/14	19,0

Code **03** = with EPDM liner
Code **02** = with Viton® liner

* FKO 125 is the same as FKO 140 but with special stubs d125 DN125 to be mounted with flange d140 DN125

With hand lever

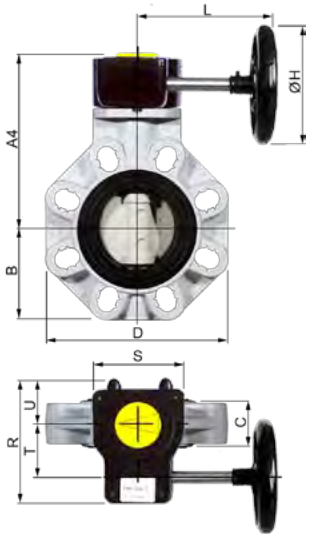


	d	DN	A1	B	C	D	L	[kg]
FKOM 050 03	50	40	137	60	33	132	175	0,90
FKOM 063 03	63	50	143	70	43	147	175	1,08
FKOM 075 03	75	65	164	80	46	165	272	1,47
FKOM 090 03	90	80	178	93	49	185	272	1,87
FKOM 110 03	110	100	192	107	56	211	272	2,22
FKOM 125 03	125	125	212	120	64	240	330	3,10
FKOM 140 03	140	125	212	120	64	240	330	3,10
FKOM 160 03	160	150	225	134	70	268	330	3,85
FKOM 225 03	225	200	272	161	71	323	420	6,75

Code **03** = with EPDM liner
Code **02** = with Viton® liner

Dimensions

With gear box



GB232: Aluminium, Polyurethan coated

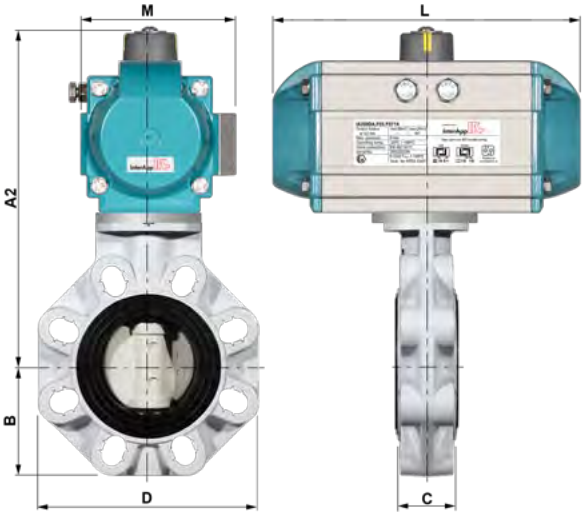
	d	DN	A4	B	C	D	L	ØH	R	S	T	U	n*	[kg]
FKOM 050 03 + GB232-05.F05-F0711.100	50	40	146	60	33	132	109	100	110,5	80	42,5	44,5	10	1,4
FKOM 063 03 + GB232-05.F05-F0711.100	63	50	152	70	43	147	109	100	110,5	80	42,5	44,5	10	1,6
FKOM 075 03 + GB232-05.F05-F0711.100	75	65	159	80	46	165	109	100	110,5	80	42,5	44,5	10	1,8
FKOM 090 03 + GB232-05.F05-F0714.100	90	80	173	93	49	185	109	100	110,5	80	42,5	44,5	10	2,2
FKOM 110 03 + GB232-05.F05-F0714.100	110	100	187	107	56	211	109	100	110,5	80	42,5	44,5	10	2,6
FKOM 125 03 + GB232-07.F0717.160	125	125	207	120	64	240	109	160	133	100	50	58	9,25	4,4
FKOM 140 03 + GB232-07.F0717.160	140	125	207	120	64	240	109	160	133	100	50	58	9,25	4,4
FKOM 160 03 + GB232-07.F0717.160	160	150	220	134	70	268	109	160	133	100	50	58	9,25	5,1
FKOM 225 03 + GB232-10.F1022.250	225	200	302	161	71	323	205	250	177,5	148	60	82,5	11,25	9,3
FKOM 280 03 + GB232-12.F1227.315	280	250	336	210	114	405	229	315	218	175	80	91	10	19
FKOM 315 03 + GB232-12.F1227.315	315	300	393	245	114	475	229	315	218	175	80	91	10	26

Code **03** = with EPDM liner
Code **02** = with Viton® liner

* n = Handwheel turns ON/OFF

With pneumatic actuator

Selection of actuator for 6 bar air supply



Double acting actuator

	d	DN	A2	B	C	D	L	M	[kg]
FKOM 050 03 + IA100D.F05-F0711	50	40	209	60	33	132	154	91,5	2,27
FKOM 063 03 + IA100D.F05-F0711	63	50	215	70	43	147	154	91,5	2,45
FKOM 075 03 + IA100D.F05-F0711	75	65	222	80	46	165	154	91,5	2,70
FKOM 090 03 + IA100D.F05-F0714	90	80	236	93	49	185	154	91,5	3,10
FKOM 110 03 + IA200D.F05-F0714	110	100	267	107	56	211	204	105	4,65
FKOM 125 03 + IA200D.F05-F0717	125	125	287	120	64	240	204	105	5,45
FKOM 140 03 + IA200D.F05-F0717	140	125	287	120	64	240	204	105	5,45
FKOM 160 03 + IA250D.F05-F0717	160	150	313	134	70	268	241	118,5	7,40
FKOM 225 03 + IA300D.F07-F1022	225	200	384	161	71	323	259	130,5	11,6
FKOM 280 03 + IA400D.F07-F1027	280	250	435	210	114	405	333	159	23,0
FKOM 315 03 + IA450D.F10-F1227	315	300	512	245	114	475	395	182,5	34,0

Single acting actuator

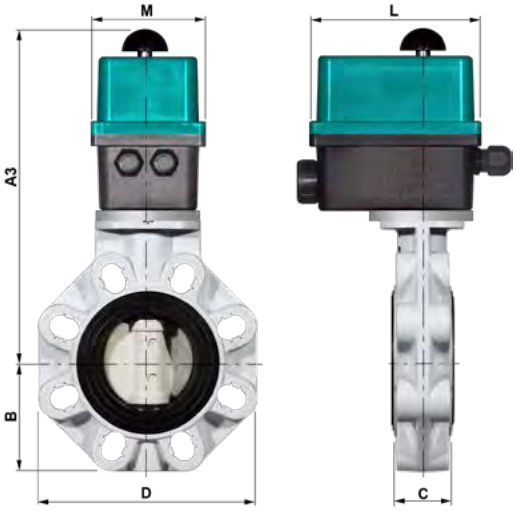
	d	DN	A2	B	C	D	L	M	[kg]
FKOM 050 03 + IA200S12.F05-F0714 (R11)	50	40	226	80	46	165	204	105	3,87
FKOM 063 03 + IA200S12.F05-F0714 (R11)	63	50	232	80	46	165	204	105	4,05
FKOM 075 03 + IA200S12.F05-F0714 (R11)	75	65	239	80	46	165	204	105	4,30
FKOM 090 03 + IA200S12.F05-F0714	90	80	253	93	49	185	204	105	4,70
FKOM 110 03 + IA250S12.F05-F0717 (R14)	110	100	280	107	56	211	241	118,5	6,45
FKOM 125 03 + IA300S12.F07-F1017	125	125	312	120	64	240	259	130,5	9,05
FKOM 140 03 + IA300S12.F07-F1017	140	125	312	120	64	240	259	130,5	9,05
FKOM 160 03 + IA350S12.F07-F1017	160	150	353	134	70	268	304	148,5	13,3
FKOM 225 03 + IA450S12.F10-F1227 (R22)	225	200	444	161	71	323	395	182,5	24,0
FKOM 280 03 + IA550S12.F10-F1227	280	250	528	210	114	405	473	223	45,0
FKOM 315 03 + IA550S12.F10-F1227	315	300	585	245	114	475	473	223	52,0

Code **03** = with EPDM liner
Code **02** = with Viton® liner

Dimensions

With electric actuator

230V50Hz, 1 phase, IP65



	d	DN	A3	B	C	D	L	M	[kg]
FKOM 050 03 + ER35-100-240/AC-035-F05-F0711	50	40	251	80	46	165	136	92	2,07
FKOM 063 03 + ER35-100-240/AC-035-F05-F0711	63	50	257	80	46	165	136	92	2,25
FKOM 075 03 + ER35-100-240/AC-035-F05-F0711	75	65	264	80	46	165	136	92	2,50
FKOM 090 03 + ER35-100-240/AC-035-F05-F0714	90	80	278	93	49	185	136	92	2,90
FKOM 110 03 + ER60-100-240/AC-060-F05-F0714	110	100	320	107	56	211	151	128	4,75
FKOM 125 03 + ER100-100-240/AC-100-F05-F0717	125	125	340	120	64	240	151	128	5,55
FKOM 140 03 + ER100-100-240/AC-100-F05-F0717	140	125	340	120	64	240	151	128	5,55

Code **03** = with EPDM liner
Code **02** = with Viton® liner

Other tensions on request

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FEOV PVC butterfly valve d50-225 (DN40-200)

Description

Centric PVC butterfly valve with elastomer liner EPDM or Viton® (FPM) for water and harmless fluids to which the material is resistant.

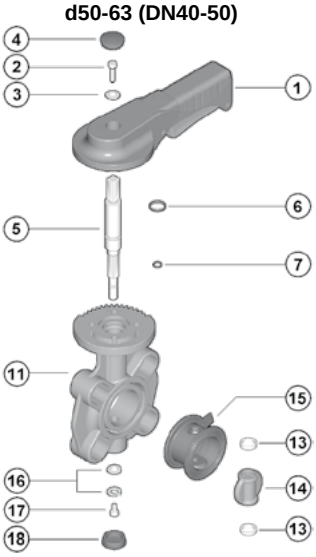
Product features

- **Face to face dimension** according to ISO 5752/25, EN 558/1-25
- **Top flange** according to EN ISO 5211
- **Max. working pressure** DN40-50 16 bar, DN65-200 10 bar,
- **Rating** PN10, PN16, ANSI cl. 150
- **Temperature range** 0ºC ÷ 60ºC

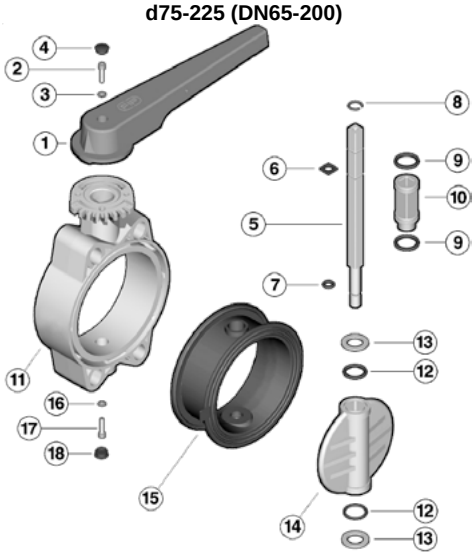
Construction

1	Handle	PVC
2	Screw	Stainless steel
3	Washer	Stainless steel
4	Protection cap	PE
5	Shaft	Zincplated steel
6	Shaft O-ring	EPDM or FPM
7	Shaft O-ring	EPDM or FPM
8	Seeger ring	Stainless steel
9	Bush O-ring	EPDM or FPM
10	Bush	Nylon
11	Body	PVC
12	Disc O-ring	EPDM or FPM
13	Anti-friction ring	PTFE
14	Disc	PVC
15	Liner	EPDM or FPM
16	Washer	Stainless steel
17	Screw	Stainless steel
18	Protection cap	PE

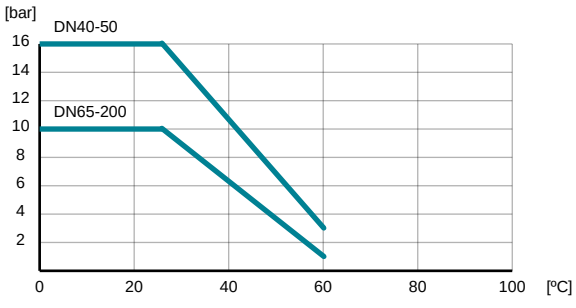
d50-63 (DN40-50)



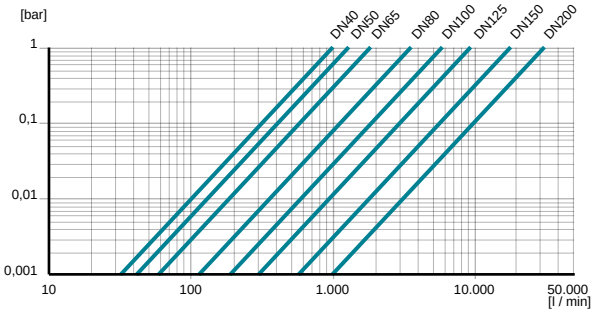
d75-225 (DN65-200)



Pressure / temperature diagram:



Pressure loss diagram:



kv values:

DN / d	kv [l/min]
40 / 50	1.000
50 / 63	1.285
65 / 75	1.700
80 / 90	3.550
100 / 110	5.900
125 / 140	9.850
150 / 160	18.700
200 / 225	30.500

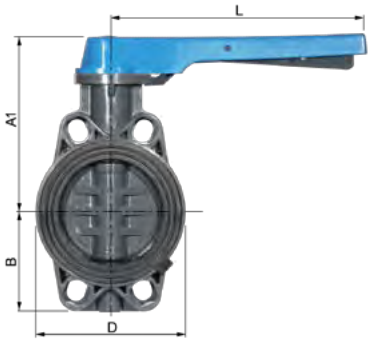
InterApp®

Fluids under control.

Dimensions

With bare shaft

With hand lever



Before installing the valve it is suggested to check that stubs internal diameter allows the complete disc opening (**note dimenson G!**)

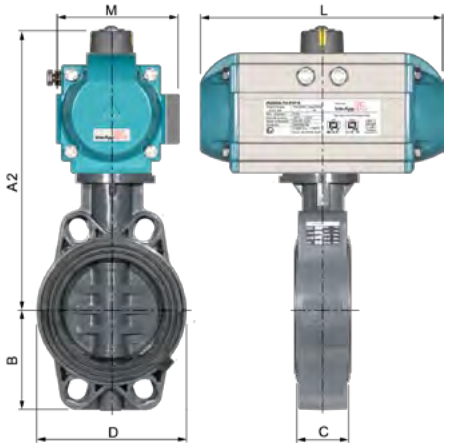
	d	DN	A	A1	B	C	D	E	F	G	L	ISO5211
FEOV 050 03	50	40	106	136	60	33	132	12	11	25	175	F05
FEOV 063 03	63	50	112	143	70	43	147	12	11	28	175	F05
FEOV 075 03	75	65	119	168	80	46	165	12	11	47	250	F05/F07
FEOV 090 03	90	80	133	182	90	49	130	16	14	64	250	F07
FEOV 110 03	110	100	147	196	105	56	150	16	14	84	250	F07
FEOV 125 03*	125	125	167	215	121	64	185	19	17	108	335	F07
FEOV 140 03	140	125	167	215	121	64	185	19	17	108	335	F07
FEOV 160 03	160	150	180	229	132	70	210	19	17	134	335	F07
FEOV 225 03	225	200	227	309	161	71	325	24	22	187	425	F10

Code **03** = with EPDM liner
Code **02** = with Viton® liner

* FEOV 125 is the same as FEOV 140 but with special stubs d125 DN125 to be mounted with flange d140 DN125

With pneumatic actuator

Selection of actuator for 6 bar air supply

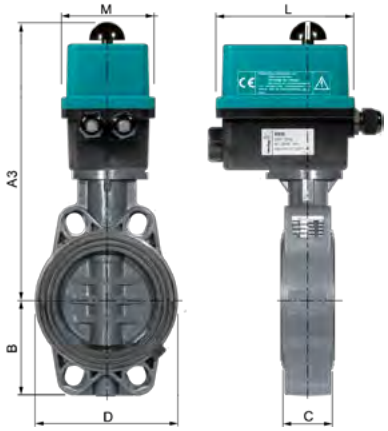


Double acting actuator	d	DN	A2	B	C	D	L	M	[kg]
FEOV 050 03 + IA100D.F05-F0711	50	40	211	60	33	132	154	91,5	2,5
FEOV 063 03 + IA100D.F05-F0711	63	50	217	70	43	147	154	91,5	2,7
FEOV 075 03 + IA100D.F05-F0711	75	65	224	80	46	165	154	91,5	3,1
FEOV 090 03 + IA100D.F05-F0714	90	80	238	90	49	130	154	91,5	3,3
FEOV 110 03 + IA200D.F05-F0714	110	100	269	105	56	150	204	105	4,9
FEOV 125 03 + IA200D.F05-F0717	125	125	289	121	64	185	204	105	5,9
FEOV 140 03 + IA200D.F05-F0717	140	125	289	121	64	185	204	105	5,9
FEOV 160 03 + IA250D.F05-F0717	160	150	315	132	70	210	241	118,5	7,8
FEOV 225 03 + IA300D.F07-F1022	225	200	374	161	71	325	259	130,5	13,8

Single acting actuator	d	DN	A2	B	C	D	L	M	[kg]
FEOV 050 03 + IA100S12.F05-F0711	50	40	211	60	33	132	154	91,5	2,7
FEOV 063 03 + IA100S12.F05-F0711	63	50	217	70	43	147	154	91,5	2,9
FEOV 075 03 + IA200S12.F05-F0714 (R11)	75	65	241	80	46	165	204	105	4,7
FEOV 090 03 + IA200S12.F05-F0714	90	80	255	90	49	130	204	105	4,9
FEOV 110 03 + IA250S12.F05-F0717 (R14)	110	100	282	105	56	150	241	118,5	6,7
FEOV 125 03 + IA300S12.F07-F1017	125	125	314	121	64	185	259	130,5	9,5
FEOV 140 03 + IA300S12.F07-F1017	140	125	314	121	64	185	259	130,5	9,5
FEOV 160 03 + IA350S12.F07-F1017	160	150	355	132	70	210	304	148,5	13,7
FEOV 225 03 + IA450S12.F10-F1227 (R22)	225	200	434	161	71	325	395	182,5	26,2

With electric actuator

230V50Hz, 1 phase, IP65



	d	DN	A3	B	C	D	L	M	[kg]
FEOV 050 03 + ER20-100-240/AC-020-F03-F04-F0511	50	40	253	60	33	132	136	92	2,3
FEOV 063 03 + ER35-100-240/AC-035-F05-F0711	63	50	259	70	43	147	136	92	2,5
FEOV 075 03 + ER35-100-240/AC-035-F05-F0711	75	65	266	80	46	165	136	92	2,9
FEOV 090 03 + ER35-100-240/AC-035-F05-F0714	90	80	280	90	49	130	136	92	3,1
FEOV 110 03 + ER60-100-240/AC-060-F05-F0714	110	100	322	105	56	150	151	128	5,0
FEOV 125 03 + ER100-100-240/AC-100-F05-F0717	125	125	342	121	64	185	151	128	6,0
FEOV 140 03 + ER100-100-240/AC-100-F05-F0717	140	125	342	121	64	185	151	128	6,0

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Description

Centric butterfly valve plastomer lined for On/off and control service for aggressive and corrosive fluids and high purity application

Product features

• Body construction	B1 Wafer Sizes 1 1/4“ to 24“ B3 Lug Sizes 1 1/4“ to 16“ B4 U-section Sizes 18“ to 36“
• Face to face dimension	according to ISO 5752/20, EN 558-1/20
• Top flange	according to EN ISO 5211
• Max. working pressure	232 psi (1 1/4”-6”), 145 psi (8”-12”), 87 psi (14”-28”), 36 psi (30”), 87 psi bar (32”-36”)
• Rating	ANSI cl. 150, PN6, PN10, PN16
• Temperature range	-4°F to 392°F according to working conditions, other temperatures on request
• Work´s tests	Porosity check of the liner and overmolded disc according to DIN EN 60243-1. Test certificates on request. Tightness test according to EN 12266-1/P12 leakage rate A. The torque of each valve is registered.
CE	The butterfly valves BIANCA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.
SIL	Butterfly valves BIANCA are suitable to be operated in safety related systems according to IEC 61508 / 61511, Safety Integrity Level SIL 2
Ex ATEX	Special versions of the Bianca valves may be used in explosive atmospheres. See brochure BIANCA ATEX.

B1
Wafer

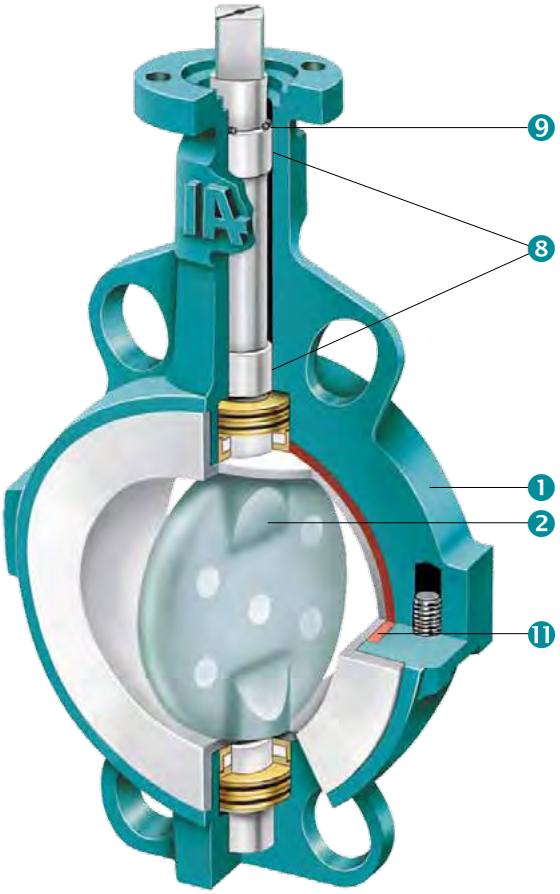
B3
Lug

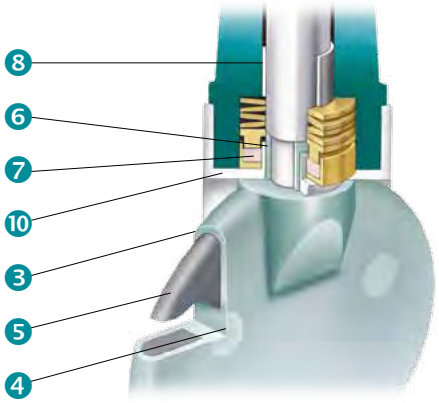
B4
U-section

InterApp

Fluids under control.

Construction





1	Two-piece body in GGG40.3 / EN-GJS-400-18(A-LT)
2	One-piece, blow out proof disc/shaft
3	Overmolding with a min. thickness of 0.118“ (3 mm)
4	Overmolding is mechanically locked on the disc
5	Thin core, allows high c_v flow rate
6	Shaft overmolded in the shaft sealing area
7	Shaft sealing by prestressed safety packing
8	Self-lubricating shaft bushing
9	External shaft sealing
10	Chambered liner, prevents radial cold-flow
11	Elastomer back-up, immersed in body

BIANCA HP cleanroom production

Decontamination by ultrasonic cleaning

Material lock

Assembling, testing, packaging in clean room class 10,000

Tightness test with HP nitrogen

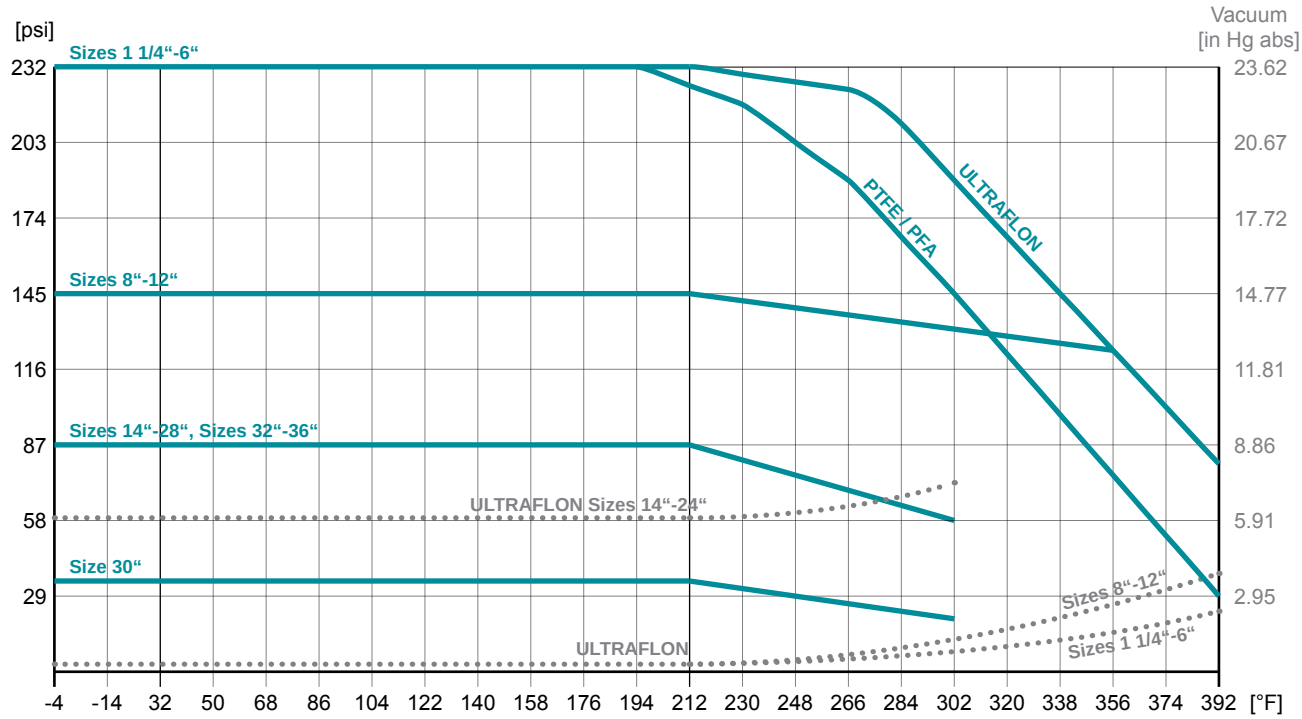
Torques with PTFE liner, security factor included

Inch	1¼ - 1½	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	35	36
Lb-Ins	310	372	372	522	664	797	1390	2390	3319	4514	5974	7966	9736	11506	15489	18587	22127	27437	35403

Cv values

	Opening angle of the valve							
Sizes	20°	30°	40°	50°	60°	70°	80°	90°
1 ¼ - 1 ½	4,6	9,2	19,7	34,7	52	75,1	98,3	110
2	8,1	18,5	40,5	69,4	106	153	197	223
2 ½	8,1	18,5	40,5	69,4	106	153	197	223
3	17,3	38,2	83,2	145	220	312	387	453
4	23,1	55,5	110	187	295	445	561	676
5	43,9	94,8	191	295	526	746	942	1173
6	69,4	150	272	457	746	1104	1410	1728
8	110	266	538	919	1364	2098	2786	3526
10	202	405	821	1341	1861	2798	4220	5214
12	306	603	1150	1988	3081	4584	6890	8335
14	405	763	1364	2081	3330	5260	8301	10127
16	590	1139	1711	2832	4890	7572	10694	13122
18	769	1451	2578	4451	7226	10636	14162	17226
20	1029	1873	3445	6185	9422	13642	17989	20810
24	1121	2486	4832	8578	13122	19018	24509	28324
28	1225	2960	5628	9725	16600	27632	43513	56225
30	1407	3398	6460	11185	19057	31720	49952	64544
32	1621	3848	7342	12912	22050	37081	59909	73881
36	2214	4924	9130	16011	27616	47530	77194	93663

Pressure / temperature diagram

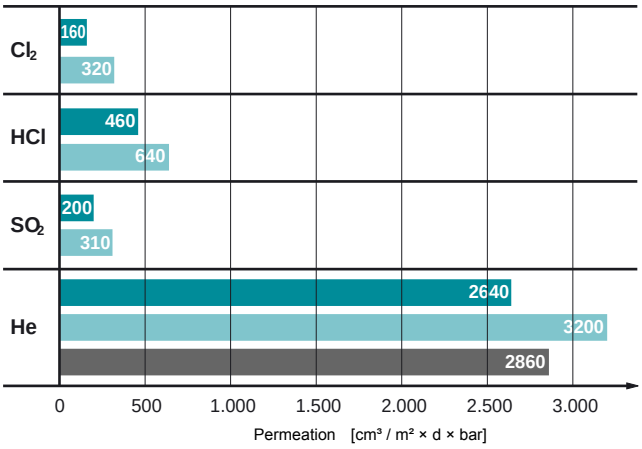


Please consult our technical department for higher temperatures.

Advantage of ULTRAFLON® liner

Permeation

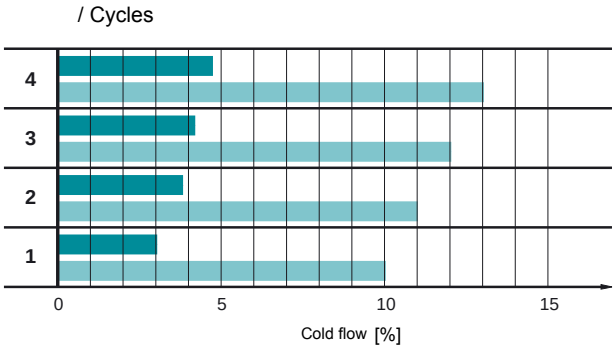
Comparison of **ULTRAFLON®** - **PTFE** - **PFA** (film thickness 0.0394“)



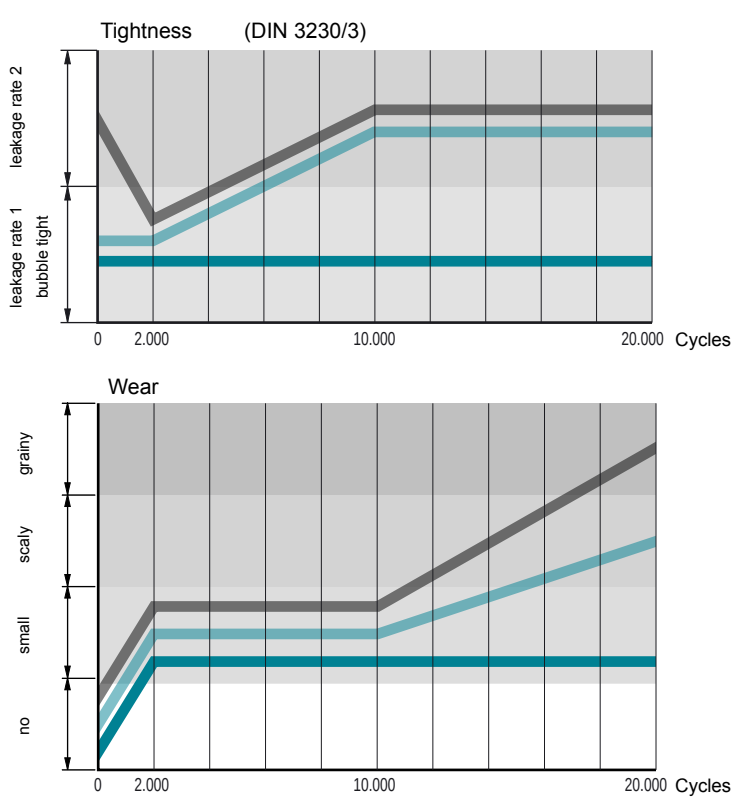
Deformation

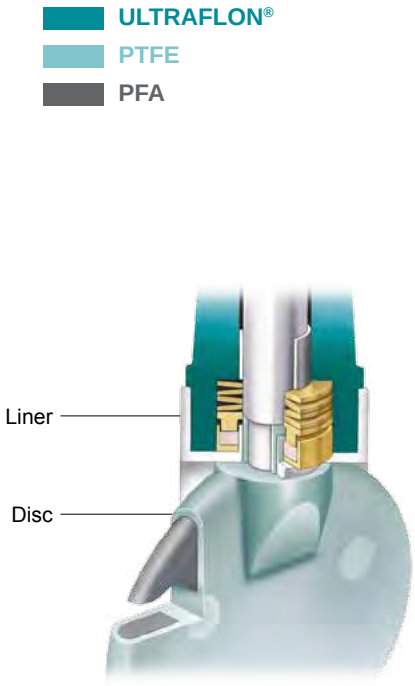
under repeated load „Cold flow behavior“

Loading : 15 N/mm², 4 cycles
Duration : 100 hours each cycle
Temperature : 23°C (73°F)
Perm. deformation after 24 hours recovery



Endurance test (tightness)





Type code

B1	0100	.	3	3	.	2BE	.	4GT	.	TS	.	xx
❶	❷		❸	❹		❺		❻		❼		❽

❶ **Body type**	B1	Wafer	Sizes 1 1/4“-24“
	B3	LUG body	Sizes 1 1/4“-16“
	B4	U-section body	Sizes 18“-36“
❷ **Nominal diameter**	0032-0900	mm	
❸ **Working pressure**	0	2,5 bar	Size 30“
	1	6 bar	Sizes 14“-28“ and 32“-36“
	2	10 bar	Sizes 8“-12“
	3	16 bar	Sizes 1 1/4“-6“
❹ **Rating**	**	PN10/16/ANSI B16-5 cl150 see table below	
❺ **Body**	2BE	Ductile iron GGG40.3 / EN-GJS-400-18(A-LT), Epoxy coated 80µm	
	4G0	Stainless steel 1.4435	
❻ **Disc-shaft, one piece**	4G0	Stainless steel 1.4408	
		Stainless steel 1.4404	
	4GP	Stainless steel 1.4408 polished Ra < 0,8	
		Stainless steel 1.4404 polished Ra < 0,8	
	4GJ	Stainless steel 1.4404, Ferrite < 1%, e-polished Ra < 0,4	Sizes 1 1/4“-12“
	4GT	Stainless steel PFA coated	Sizes 1 1/4“-12“ (>12“ on request)
	3BT	Disc carbon steel PFA coated, shaft stainless steel	Sizes 14“-36“
	4D0	Uranus 1.4539 (≈ AISI 904L)	(on request)
	7H0	Hastelloy 2.4602 (≈ Hastelloy C-22)	(on request)
	7T0	Titan 3.7035, Gr2	(on request)
❼ **Liner / backup**	TS	PTFE / MVQ	
	TE	PTFE / EPDM	
	TV	PTFE / FPM	
	**V	ULTRAFLON® for Vacuum or Chlorine applications	
	**A	Antistatic (PTFE or ULTRAFLON®)	
❽ **Special execution**	LF	without painting adhesion interfering substance	
	HP	High purity: The valve is cleaned, mounted, proofed and packed under cleanroom conditions. (US federal standard 209b, class 10000)	
	Ex	ATEX execution see brochure BIANCA ATEX	

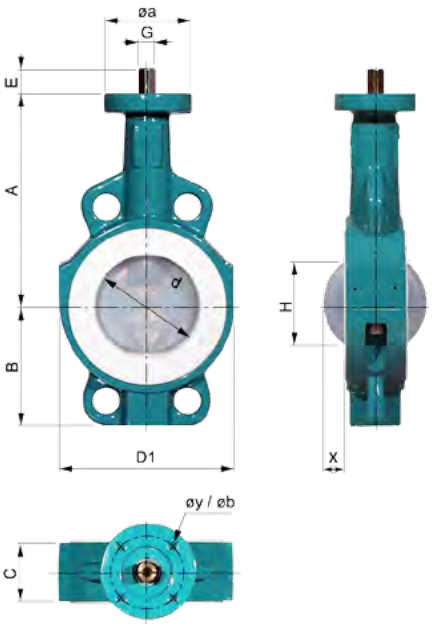
BIANCA	DN→	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900
 B1	PN10	3												Other executions on request !							
	PN16	3																			
	ANSI cl.150		3											A							
 B3	PN10	3								2											
	PN16	3																			
	ANSI cl.150		A																		
 B4	PN10														2					2	
	PN16														3					3	
	ANSI cl.150														A						

When mounting the valve at the end of a line please note:

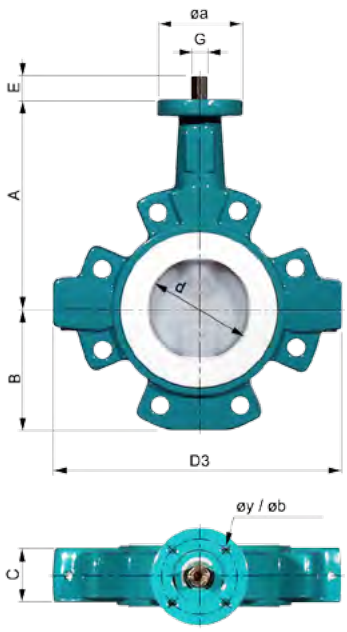
- **Body type** B3, B4
- **Temperature** 50 to 86ºF
- **Medium** only for non hazardous liquids
- **Max. working pressure** Sizes 1 1/4“-24“ 87 psi
  > DN24“ on request
- **no water hammer !!!**

Dimensions

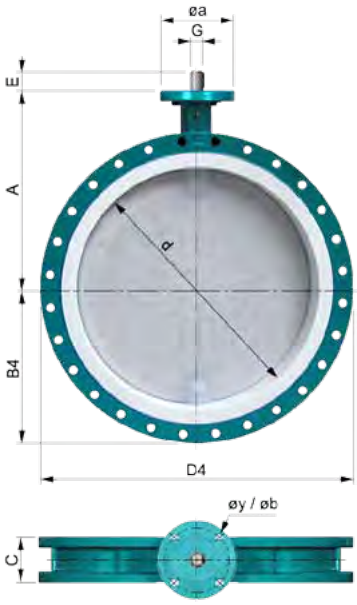
BIANCA B1



BIANCA B3



BIANCA B4



Inch	d	A	B	B4	C	H	D1	D3	D4	ISO	a	y	b	G	E	B1[lb]	B3[lb]	B4[lb]
1¼-1½	1,57	4,92	2,76	-	1,30	1,10	5,75	5,75	-	F05/07	3,54	4x .26/.35	1.97/2.76	0,43	0,75	6,61	6,61	-
2	2,36	5,28	2,68	-	1,69	1,85	4,53	6,30	-	F05	3,54	4x .26	1.97	0,43	0,75	6,61	8,82	-
2 1/2	2,36	5,67	2,68	-	1,81	1,73	4,53	6,85	-	F05/07	3,54	4x .26/.35	1.97/2.76	0,43	0,75	8,82	11,02	-
3	3,15	6,26	3,58	-	1,81	2,72	5,20	7.48/8.74*	-	F05/07	3,54	4x .26/.35	1.97/2.76	0,43	0,75	11,02	13,23	-
4	3,94	6,85	4,17	-	2,05	3,50	6,10	9,92	-	F05/07	3,54	4x .26/.35	1.97/2.76	0,55	0,75	13,23	19,84	-
5	4,92	7,64	4,69	-	2,20	4,53	7,09	11,10	-	F05/07	3,54	4x .26/.35	1.97/2.76	0,55	0,75	17,64	26,46	-
6	5,91	8,23	5,16	-	2,20	5,59	8,46	12,44	-	F07	3,54	4x .35	2,76	0,67	0,98	24,25	35,27	-
8	7,87	9,41	6,34	-	2,36	7,64	10,31	14,80	-	F07	3,54	4x .35	2,76	0,67	0,98	35,27	48,50	-
10	9,84	10,79	7,80	-	2,68	9,57	12,99	17,76	-	F10	4,92	4x .43	4,02	0,87	1,26	55,12	68,34	-
12	11,81	12,17	9,06	-	3,07	11,50	14,57	20,04	-	F10	4,92	4x .43	4,02	0,87	1,26	74,96	101,40	-
14	13,35	13,78	10,12	-	3,07	13,11	16,85	22,20	-	F12	6,10	4x .53	4,92	1,06	1,57	110,20	191,80	-
16	15,75	14,96	11,34	-	4,02	15,35	18,82	24,61	-	F12	6,10	4x .53	4,92	1,06	1,57	149,90	216,10	-
18	17,72	16,77	12,60	12,60	4,49	17,24	21,14	-	24,80	F14	6,89	4x .71	5,51	Ø 1.77	2,56	220,50	-	308,60
20	19,69	17,76	14,17	14,17	5,00	19,13	23,43	-	27,56	F14	6,89	4x .71	5,51	Ø 1.77	2,56	269,00	-	385,80
24	23,62	21,85	16,30	16,30	6,06	22,95	27,28	-	32,28	F16	8,27	4x .87	6,50	Ø 2.66	3,54	396,80	-	606,30
28	27,56	23,82	-	18,98	6,50	26,89	-	-	36,61	F16	8,27	4x .87	6,50	Ø 2.83	3,15	-	-	932,60
30	29,53	24,80	-	19,25	7,48	28,66	-	-	38,19	F16	8,27	4x .87	6,50	Ø 2.36	3,54	-	-	844,40
32	31,50	25,91	-	21,97	7,48	30,71	-	-	41,73	F25	11,81	8x .71	10,00	Ø 3.15	4,33	-	-	1477,10
36	35,43	27,95	-	24,09	7,99	34,61	-	-	45,67	F30	13,78	8x .87	11,73	Ø 3.86	5,04	-	-	1940,10

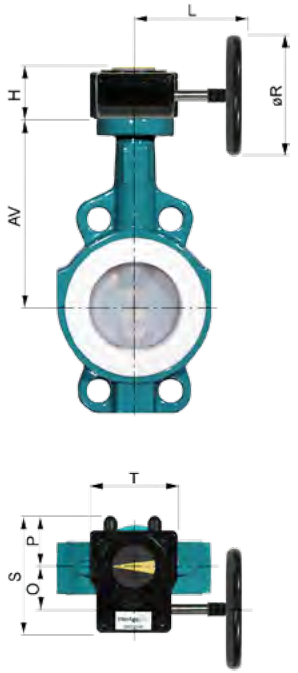
Dimensions X and H are without safety!
The costumer must define safety distances to secure accurate installation of the valve.

***** 7.48“ for ANSI 150 / 8.74“ for PN10/16

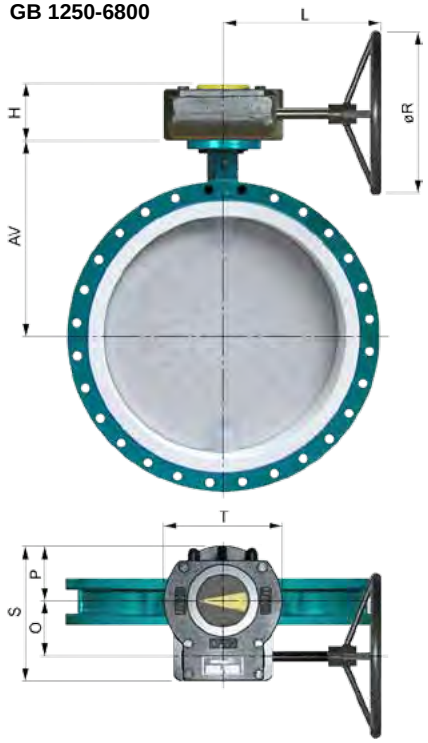
Dimensions

Gearbox

GB 232



GB 1250-6800



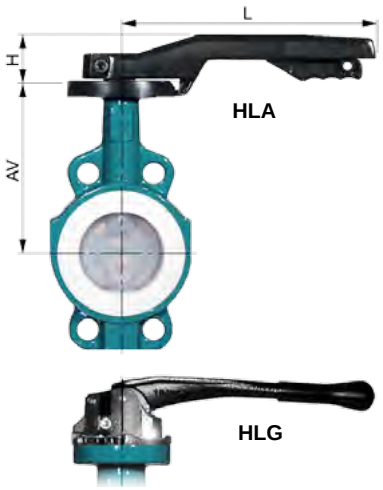
Inch		AV	H	L	O	P	R	S	T	n**	[lb]*
1¼-1½	**GB232-05.F05-F0711.100**	4,92	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
2	**GB232-05.F05-F0711.100**	5,28	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
2 1/2	**GB232-05.F05-F0711.100**	5,67	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
3	**GB232-05.F05-F0711.100**	6,26	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
4	**GB232-05.F05-F0714.100**	6,85	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
5	**GB232-05.F05-F0714.100**	7,64	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
6	**GB232-06.F05-F0717.160**	8,23	2,32	7,05	1,67	1,89	6,30	4,49	3,15	10	2,0
8	**GB232-08.F07-F1017.250**	9,41	2,64	8,23	1,97	2,20	9,84	5,16	3,94	9,25	3,4
10	**GB232-08.F07-F1022.250**	10,79	2,64	8,23	1,97	2,20	9,84	5,16	3,94	9,25	3,4
12	**GB232-13.F10-F1222.300**	12,17	3,31	14,21	3,15	3,27	11,81	8,23	6,89	10	11,9
14	**GB232-13.F10-F1227.400**	13,78	3,31	14,80	3,15	3,27	15,75	8,23	6,89	10	11,9
16	**GB232-13.F10-F1227.500**	14,96	3,31	15,59	3,15	3,27	19,69	8,23	6,89	10	11,9
18	**GB232-14.F1445.500**	16,77	3,31	15,59	3,15	3,27	19,69	8,23	6,89	10	11,9
20	**GB232-14.F1445.600**	17,76	3,31	15,59	3,15	3,27	23,62	8,23	6,89	10	11,9
24	**GB1250N.F1660.500**	21,85	3,94	13,62	4,13	4,33	19,69	10,16	8,66	13,75	48,5
28	**GB1950N.F1672.600**	23,82	4,96	15,24	5,12	5,59	23,62	12,68	11,22	13	70,5
30	**GB1250N.F1660.700**	24,80	3,94	13,62	4,13	4,33	19,69	10,16	8,66	13,75	48,5
32	**GB1950N/HR.F2580.600**	25,91	4,96	15,24	5,12	5,59	23,62	12,68	11,22	21	70,5
36	**GB6800NSP4.F3098.400**	27,95	6,30	19,69	10,35	6,69	15,75	18,98	14,57	79,25	154,3

Material: GB 232 Aluminium, Polyurethane coated
GB1250-GB6800 GG25 / A48-40 B Polyurethane coated

* [lb] weight without butterfly valve
** n = Handwheel turns ON/OFF

Dimensions

Handlever



HLA : Aluminum Epoxy coated

Inch		AV	H	L	[lb]*
1¼-1½	**HLA.F0711.180**	4,92	1,61	7,09	0,9
2	**HLA.F0511.240**	5,28	1,69	9,57	1,1
2 1/2	**HLA.F0711.240**	5,67	1,69	9,57	1,1
3	**HLA.F0711.240**	6,26	1,69	9,57	1,1
4	**HLA.F0714.340**	6,85	1,69	13,39	1,3
5	**HLA.F0714.340**	7,64	1,69	13,39	1,3
6	**HLA.F0717.340**	8,23	2,01	13,39	1,3
8	**HLA.F0717.340**	9,41	2,01	13,39	1,3
10	**HLA.F1022.500**	10,79	1,57	19,69	4,9
12	**HLA.F1022.500**	12,17	1,57	19,69	4,9

HLG: GGG40 (A 536 60-40-18), Epoxy coated

Inch		AV	H	L	[lb]*
1¼-1½	**HLG.F0711.260-E.C**	4,92	2,60	10,24	2,0
2	**n. a.**	-	-	-	-
2 1/2	**HLG.F0711.260-E.C**	5,67	2,60	10,24	2,0
3	**HLG.F0711.260-E.C**	6,26	2,60	10,24	2,0
4	**HLG.F0714.350-E.C**	6,85	2,60	13,78	3,5
5	**HLG.F0714.350-E.C**	7,64	2,60	13,78	3,5
6	**HLG.F0717.350-E.C**	8,23	2,60	13,78	3,5
8	**HLG.F0717.350-E.C**	9,41	2,60	13,78	3,5

* [lb] weight without butterfly valve

Further documentation

Pneumatic actuators, Electric actuators, Accessories according separate data sheets.
Installation guide, Maintenance guide, Flanges: Please consult these guides for the installation and maintenance of our butterfly valves.

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Description

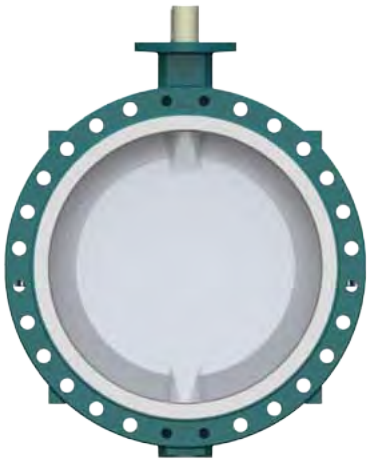
Centric butterfly valve plastomer lined for On/off and control service for aggressive and corrosive fluids and high purity application

Product features

• Body construction	B1 Wafer Sizes 1 1/4“ to 24“ B3 Lug Sizes 1 1/4“ to 16“ B4 U-section Sizes 18“ to 36“
• Face to face dimension	according to ISO 5752/20, EN 558-1/20
• Top flange	according to EN ISO 5211
• Max. working pressure	232 psi (1 1/4”-6”), 145 psi (8”-12”), 87 psi (14”-28”), 36 psi (30”), 87 psi bar (32”-36”)
• Rating	ANSI cl. 150, PN10, PN16
• Temperature range	-4°F to 392°F according to working conditions, other temperatures on request
• Work´s tests	Porosity check of the liner and overmolded disc according to DIN EN 60243-1. Test certificates on request. Tightness test according to EN 12266-1/P12 leakage rate A. The torque of each valve is registered.
CE	The butterfly valves BIANCA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.
SIL	Butterfly valves BIANCA are suitable to be operated in safety related systems according to IEC 61508 / 61511, Safety Integrity Level SIL 2
ATEX	Special versions of the Bianca valves may be used in explosive atmospheres. See brochure BIANCA ATEX.
TA-Luft	VDI 2440 as option

B1
Wafer

B3
Lug

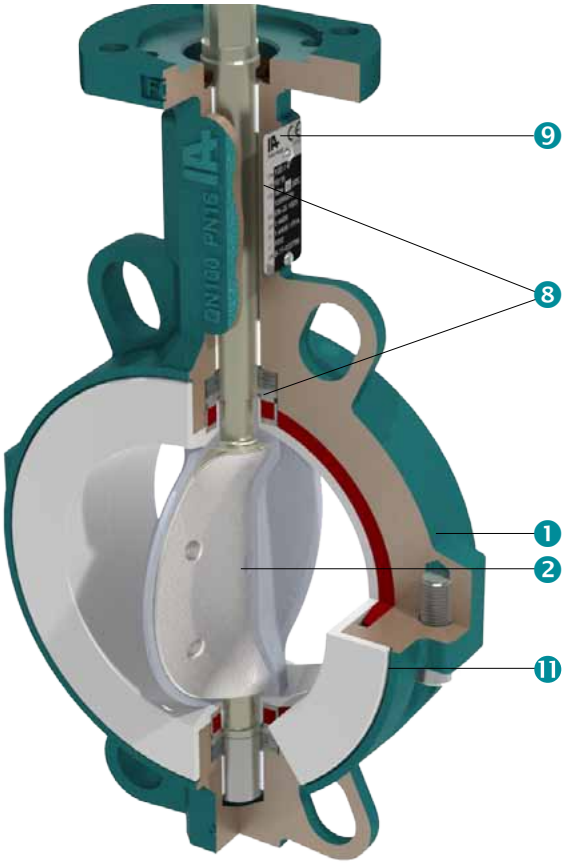


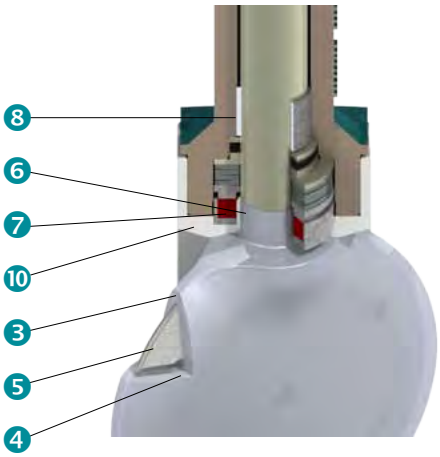
B4
U-section

InterApp

Fluids under control.

Construction





1	Two-piece body in GGG40.3 / EN-GJS-400-18-LT
2	One-piece, blow out proof disc/shaft
3	Overmolding with a min. thickness of 0.118“ (3 mm)
4	Overmolding is mechanically locked on the disc
5	Thin core, allows high c_v flow rate
6	Shaft overmolded in the shaft sealing area
7	Shaft sealing by prestressed safety packing
8	Self-lubricating shaft bushing
9	External shaft sealing
10	Chambered liner, prevents radial cold-flow
11	Elastomer back-up, immersed in body

BIANCA HP cleanroom production

Decontamination by ultrasonic cleaning

Material lock

Assembling, testing, packaging in clean room class 10‘000

Tightness test with HP nitrogen

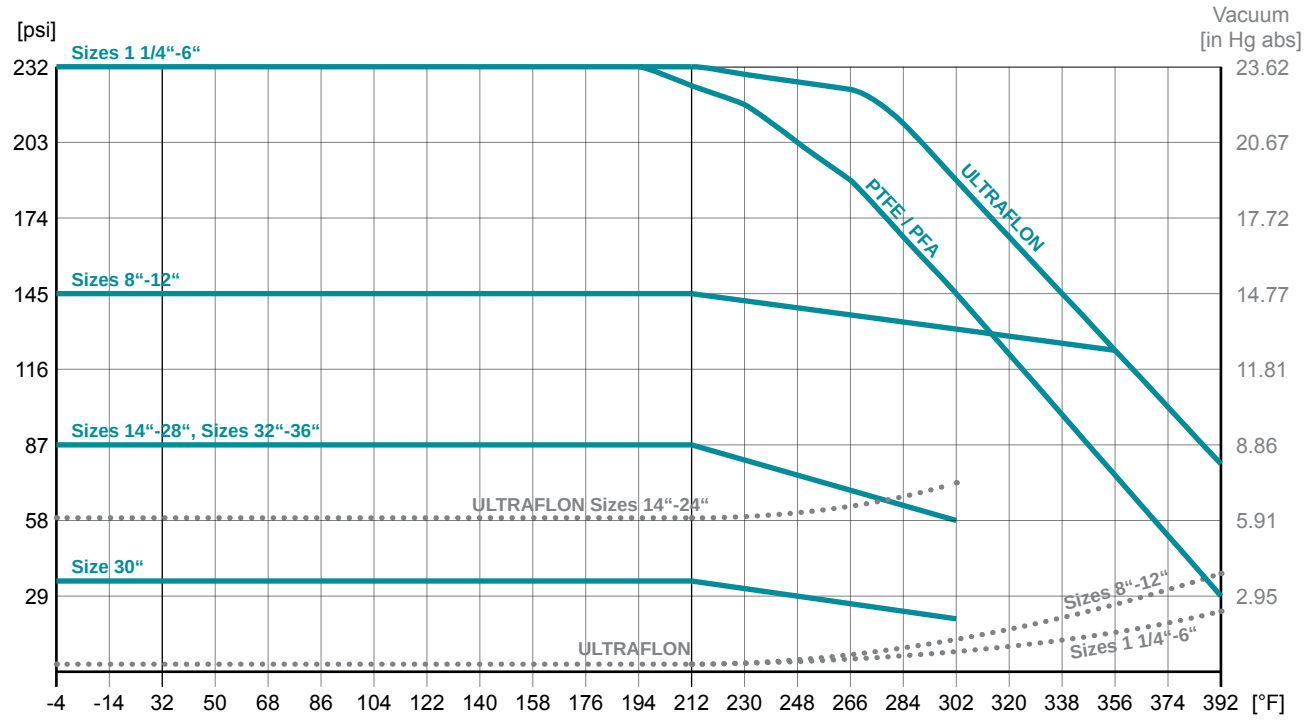
Torques with PTFE liner, security factor included

Inch	1¼ - 1½	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	35	36
Lb-Ins	310	372	372	522	664	797	1390	2390	3319	4514	5974	7966	9736	11506	15489	18587	22127	27437	35403

Cv values

	Opening angle of the valve							
Sizes [INCH]	20°	30°	40°	50°	60°	70°	80°	90°
1 ¼ - 1 ½	4,6	9,2	19,7	34,7	52	75,1	98,3	110
2	8,1	18,5	40,5	69,4	106	153	197	223
2 ½	8,1	18,5	40,5	69,4	106	153	197	223
3	17,3	38,2	83,2	145	220	312	387	453
4	23,1	55,5	110	187	295	445	561	676
5	43,9	94,8	191	295	526	746	942	1173
6	69,4	150	272	457	746	1104	1410	1728
8	110	266	538	919	1364	2098	2786	3526
10	202	405	821	1341	1861	2798	4220	5214
12	306	603	1150	1988	3081	4584	6890	8335
14	405	763	1364	2081	3330	5260	8301	10127
16	590	1139	1711	2832	4890	7572	10694	13122
18	769	1451	2578	4451	7226	10636	14162	17226
20	1029	1873	3445	6185	9422	13642	17989	20810
24	1121	2486	4832	8578	13122	19018	24509	28324
28	1225	2960	5628	9725	16600	27632	43513	56225
30	1407	3398	6460	11185	19057	31720	49952	64544
32	1621	3848	7342	12912	22050	37081	59909	73881
36	2214	4924	9130	16011	27616	47530	77194	93663

Pressure / temperature diagram

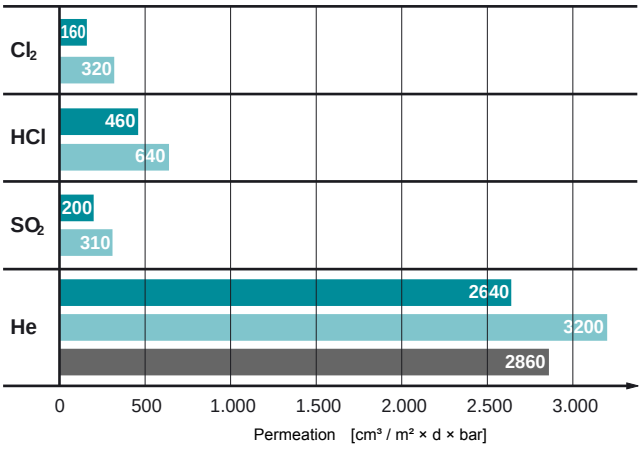


Please consult our technical department for higher temperatures.

Advantage of ULTRAFLON® liner

Permeation

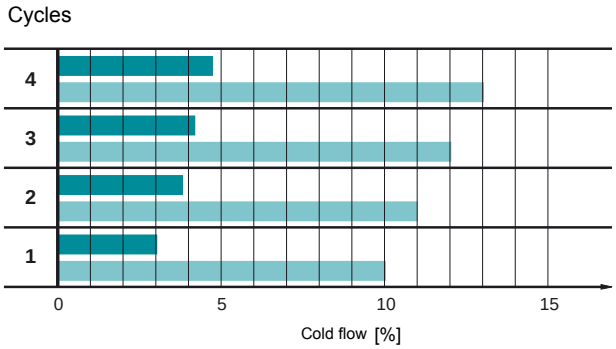
Comparison of **ULTRAFLON®** - **PTFE** - **PFA** (film thickness 0.0394“)



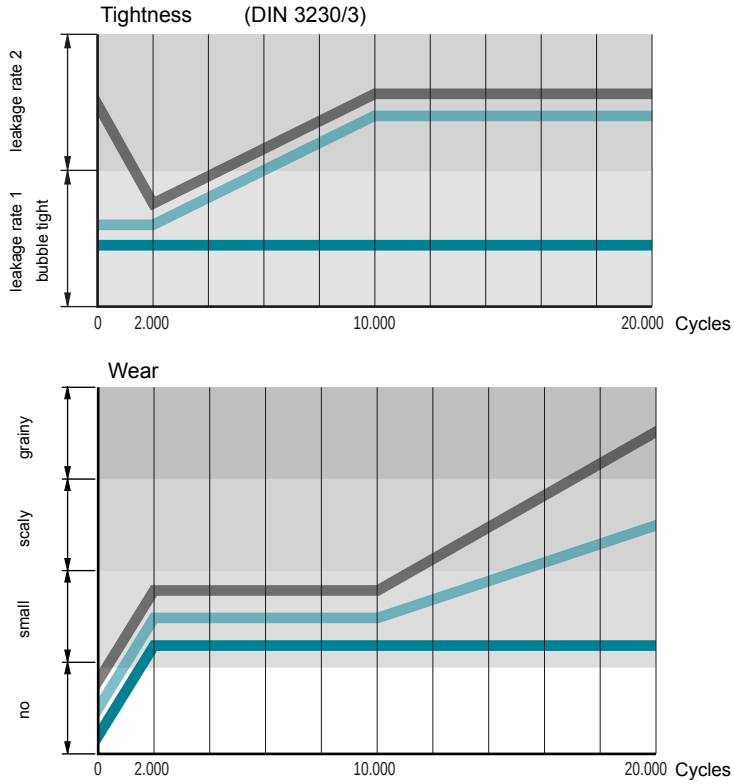
Deformation

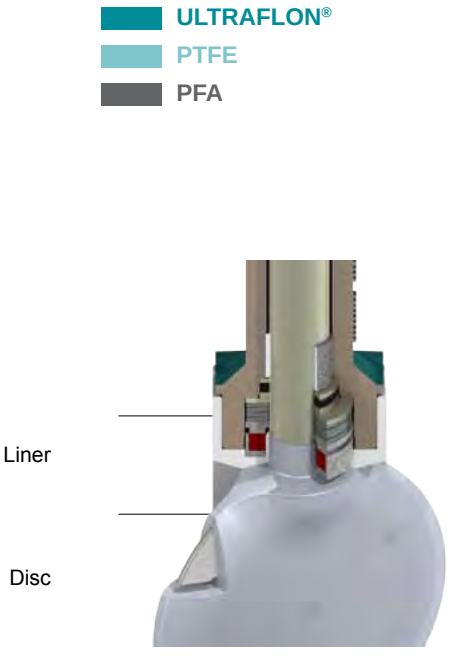
under repeated load „Cold flow behavior“

Loading : 15 N/mm², 4 cycles
Duration : 100 hours each cycle
Temperature : 23°C (73°F)
Perm. deformation after 24 hours recovery



Endurance test (tightness)





Type code

B1	0100	.	3	3	.	2BE	.	4GT	.	TS	.	xx
❶	❷		❸	❹		❺		❻		❼		❽

❶ **Body type**	B1	Wafer	Sizes 1 1/4“-24“
	B3	LUG body	Sizes 1 1/4“-16“
	B4	U-section body	Sizes 18“-36“
❷ **Nominal diameter**	0032-0900	mm	
❸ **Working pressure**	0	2,5 bar	Size 30“
	1	6 bar	Sizes 14“-28“ and 32“-36“
	2	10 bar	Sizes 8“-12“
	3	16 bar	Sizes 1 1/4“-6“
❹ **Rating**	**	PN10/16/ANSI B16.5 cl150 see table below	
❺ **Body**	2BE	Ductile iron GGG40.3 / EN-GJS-400-18(A-LT), Epoxy coated 80µm	
	4G0	Stainless steel 1.4435	
❻ **Disc-shaft, one piece**	4G0	Stainless steel 1.4408	
		Stainless steel 1.4404	
	4GP	Stainless steel 1.4408 polished Ra < 0,8	
		Stainless steel 1.4404 polished Ra < 0,8	
	4GJ	Stainless steel 1.4404, Ferrite < 1%, e-polished Ra < 0,4	Sizes 1 1/4“-12“
	4GT	Stainless steel PFA coated	Sizes 1 1/4“-12“ (>12“ on request)
	3BT	Disc carbon steel PFA coated, shaft stainless steel	Sizes 14“-36“
	4D0	Uranus 1.4539 (≈ AISI 904L)	(on request)
	7H0	Hastelloy 2.4602 (≈ Hastelloy C-22)	(on request)
	7T0	Titan 3.7035, Gr2	(on request)
❼ **Liner / backup**	TS	PTFE / MVQ	
	TE	PTFE / EPDM	
	TV	PTFE / FPM	
	**V	ULTRAFLON® for Vacuum or Chlorine applications	
	**A	Antistatic (PTFE or ULTRAFLON®)	
❽ **Special execution**	LF	without painting adhesion interfering substance	
	HP	High purity: The valve is cleaned, mounted, proofed and packed under cleanroom conditions. (US federal standard 209b, class 10000)	
	Ex	ATEX execution see brochure BIANCA ATEX	
	180	TA-Luft VDI 2440	

Other executions on request !

****Rating (Code)**

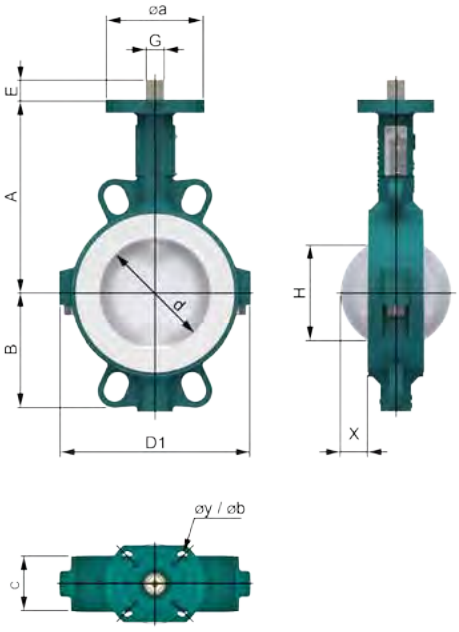
BIANCA	INCH→	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24	28	30	32	36
 B1	PN10	3												2							
	PN16	3																			
	ANSI cl.150		3											A							
 B3	PN10	3								2											
	PN16	3																			
	ANSI cl.150		A																		
 B4	PN10														2					2	
	PN16														3					3	
	ANSI cl.150														A						

When mounting the valve at the end of a line please note:

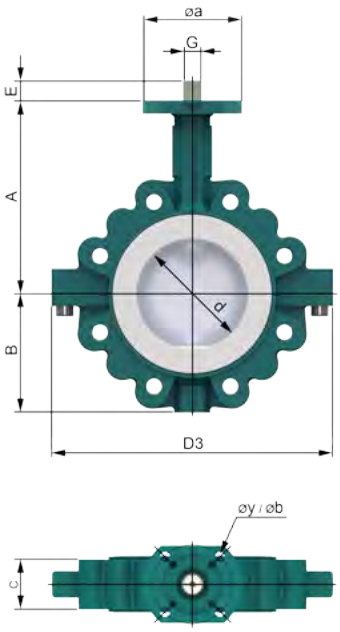
- **Body type** B3, B4
- **Temperature** 50 to 86ºF
- **Medium** only for non hazardous liquids
- **Max. working pressure** Sizes 1 1/4“-24“ 87 psi; > DN24“ on request
- **no water hammer !!!**

Dimensions

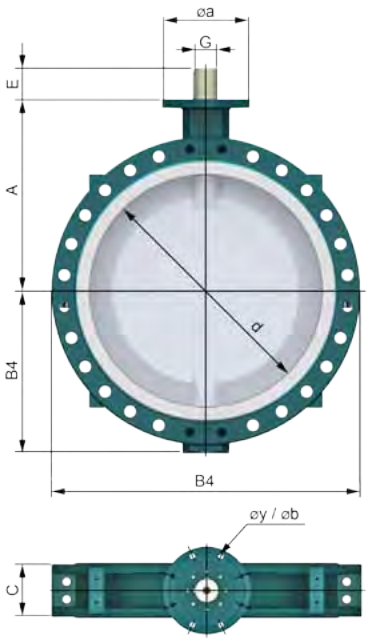
BIANCA B1



BIANCA B3



BIANCA B4



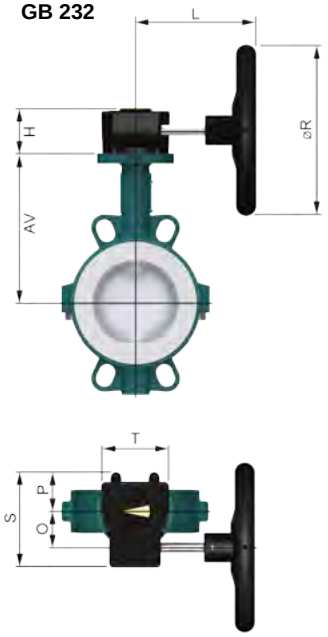
Inch	d	A	B	B4	C	H	D1	D3	D4	ISO	a	y	b	G	E	B1[lb]	B3[lb]	B4[lb]
1¼-1½	1,57	4,92	2,72	-	1,30	1,10	4,17	5,35	-	F05	2,56	4x .28	1.97	0,43	0,75	3.7	5.3	-
2	1,96	5,28	2,68	-	1,69	1,85	4,66	6,38	-	F05	2,56	4x .28	1.97	0,43	0,75	5.1	7.1	-
2 1/2	2,56	5,71	3.07	-	1,81	1,73	5,22	6,85	-	F05	2,56	4x .28	1.97	0,43	0,75	6.4	9	-
3	3,15	6,23	3,62	-	1,81	2,72	5,67	8.50	-	F05	2,56	4x .28	1.97	0,43	0,75	7.5	13.7	-
4	3,94	6,89	4,17	-	2,05	3,50	6,81	10,00	-	F05/07	3,54	4x .28/.35	1.97/2.76	0,55	0,75	11.2	20.5	-
5	4,92	7,64	4,72	-	2,20	4,53	8,62	11,54	-	F05/07	3,54	4x .28/.35	1.97/2.76	0,55	0,75	15.2	23.6	-
6	5,91	8,27	5,28	-	2,20	5,59	9,72	12,40	-	F07	3,54	4x .35	2,76	0,67	0,98	22	28.4	-
8	7,87	9,41	6,38	-	2,36	7,64	11,61	15,31	-	F07/F10	4,92	4x .35/.43	2,76/4,02	0,67	0,98	31	49.2	-
10	9,84	10,83	7,83	-	2,68	9,57	14,45	19,02	-	F10	4,92	4x .43	4,02	0,87	1,26	50.5	71.4	-
12	11,81	12,20	9,06	-	3,07	11,50	16,50	21,38	-	F10	4,92	4x .43	4,02	0,87	1,26			-
14	13,35	13,78	10,12	-	3,07	13,11	16,85	22,20	-	F12	6,10	4x .53	4,92	1,06	1,57	110,20	191,80	-
16	15,75	14,96	11,34	-	4,02	15,35	18,82	24,61	-	F12	6,10	4x .53	4,92	1,06	1,57	149,90	216,10	-
18	17,72	16,77	12,60	12,60	4,49	17,24	21,14	-	24,80	F14	6,89	4x .71	5,51	Ø 1.77	2,56	220,50	-	308,60
20	19,69	17,76	14,17	14,17	5,00	19,13	23,43	-	27,56	F14	6,89	4x .71	5,51	Ø 1.77	2,56	269,00	-	385,80
24	23,62	21,85	16,30	16,30	6,06	22,95	27,28	-	32,28	F16	8,27	4x .87	6,50	Ø 2.66	3,54	396,80	-	606,30
28	27,56	23,82	-	18,98	6,50	26,89	-	-	36,61	F16	8,27	4x .87	6,50	Ø 2.83	3,15	-	-	932,60
30	29,53	24,80	-	19,25	7,48	28,66	-	-	38,19	F16	8,27	4x .87	6,50	Ø 2.36	3,54	-	-	844,40
32	31,50	25,91	-	21,97	7,48	30,71	-	-	41,73	F25	11,81	8x .71	10,00	Ø 3.15	4,33	-	-	1477,10
36	35,43	27,95	-	24,09	7,99	34,61	-	-	45,67	F30	13,78	8x .87	11,73	Ø 3.86	5,04	-	-	1940,10

Dimensions X and H are without safety!
The costumer must define safety distances to secure accurate installation of the valve.

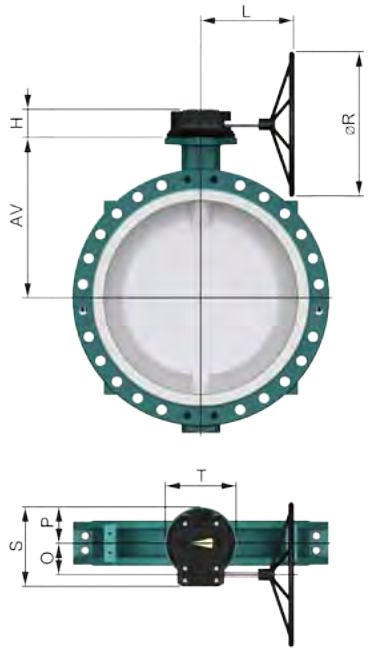
Dimensions

Gearbox

GB 232



GB 1250-6800



Inch		AV	H	L	O	P	R	S	T	n**	[lb]*
1¼-1½	**GB232-05.F05-F0711.100**	4,92	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
2	**GB232-05.F05-F0711.100**	5,28	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
2 1/2	**GB232-05.F05-F0711.100**	5,71	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
3	**GB232-05.F05-F0711.100**	6,23	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
4	**GB232-05.F05-F0714.100**	6,89	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
5	**GB232-05.F05-F0714.100**	7,64	2,09	4,76	1,67	1,89	3,94	4,49	3,15	10	1,8
6	**GB232-06.F05-F0717.160**	8,27	2,32	7,05	1,67	1,89	6,30	4,49	3,15	10	2,0
8	**GB232-08.F07-F1017.250**	9,41	2,64	8,23	1,97	2,20	9,84	5,16	3,94	9,25	3,4
10	**GB232-08.F07-F1022.250**	10,83	2,64	8,23	1,97	2,20	9,84	5,16	3,94	9,25	3,4
12	**GB232-13.F10-F1222.300**	12,20	3,31	14,21	3,15	3,27	11,81	8,23	6,89	10	11,9
14	**GB232-13.F10-F1227.400**	13,78	3,31	14,80	3,15	3,27	15,75	8,23	6,89	10	11,9
16	**GB232-13.F10-F1227.500**	14,96	3,31	15,59	3,15	3,27	19,69	8,23	6,89	10	11,9
18	**GB232-14.F1445.500**	16,77	3,31	15,59	3,15	3,27	19,69	8,23	6,89	10	11,9
20	**GB232-14.F1445.600**	17,76	3,31	15,59	3,15	3,27	23,62	8,23	6,89	10	11,9
24	**GB1250N.F1660.500**	21,85	3,94	13,62	4,13	4,33	19,69	10,16	8,66	13,75	48,5
28	**GB1950N.F1672.600**	23,82	4,96	15,24	5,12	5,59	23,62	12,68	11,22	13	70,5
30	**GB1250N.F1660.700**	24,80	3,94	13,62	4,13	4,33	19,69	10,16	8,66	13,75	48,5
32	**GB1950N/HR.F2580.600**	25,91	4,96	15,24	5,12	5,59	23,62	12,68	11,22	21	70,5
36	**GB6800NSP4.F3098.400**	27,95	6,30	19,69	10,35	6,69	15,75	18,98	14,57	79,25	154,3

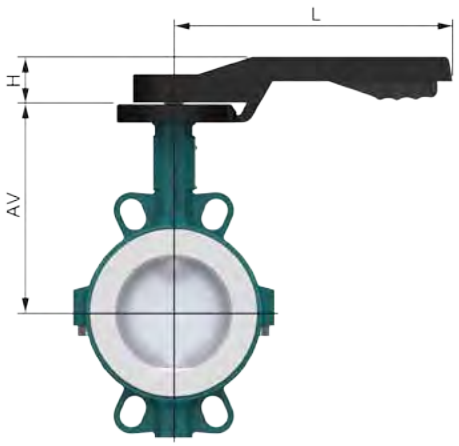
Material: GB 232 Aluminium, Polyurethane coated
GB1250-GB6800 GG25 / A48-40 B Polyurethane coated

* [lb] weight without butterfly valve
** n = Handwheel turns ON/OFF

Dimensions

Handlever

HLA



HLA : Aluminum Epoxy coated

Inch		AV	H	L	[lb]*
1¼-1½	**HLA.F0511.180**	4,92	1,61	7,09	0,9
2	**HLA.F0511.240**	5,28	1,69	9,57	1,1
2 1/2	**HLA.F0511.240**	5,71	1,69	9,57	1,1
3	**HLA.F0511.240**	6,23	1,69	9,57	1,1
4	**HLA.F0714.340**	6,89	1,69	13,39	1,3
5	**HLA.F0714.340**	7,64	1,69	13,39	1,3
6	**HLA.F0717.340**	8,27	2,01	13,39	1,3

* [lb] weight without butterfly valve

Further documentation

Pneumatic actuators, Electric actuators, Accessories according separate data sheets.
Installation guide, Maintenance guide, Flanges: Please consult these guides for the installation and maintenance of our butterfly valves.

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Descripción

Válvula de eje centrado con asiento de plastomero.
Campo de aplicación: Servicio todo/nada y de control de fluidos corrosivos y agresivos así como de alta pureza.

Características

• Tipos de cuerpo	B1 Wafer DN 32-600 B3 Lug DN 32-400 B4 Sección en U DN 450-900
• Ancho del cuerpo	Según ISO 5752/20, EN 558-1/20
• Brida superior	Según EN ISO 5211
• Presión máxima	16 bar (DN32-150), 10 bar (DN200-300), 6 bar (DN350-700), 2,5 bar (DN750), 6 bar (DN800-900)
• Tipos de bridas	PN6, PN10, PN16, ANSI cl. 150
• Rango de temperatura	-20°C ÷ 200°C Según condiciones de trabajo, otras temperaturas bajo demanda
• Pruebas durante la producción	La prueba de la porosidad del recubrimiento del disco y del asiento, según DIN EN 60243-1. Certificado del ensayo, bajo demanda. Estanqueidad según EN 12266-1/ P12, grado A. El par de cada válvula es registrado.
CE	Las válvulas de mariposa cumplen los requisitos de seguridad del anexo en la directiva europea para equipos de presión 97/23/EG para fluidos grupo 1 y 2.
SIL	Válvulas BIANCA se pueden utilizar en sistemas relacionados con la seguridad según IEC 61508 / 61511, Nivel de Integridad de Seguridad SIL 2
Ex ATEX	Ejecuciones especiales de la válvula Bianca pueden instalarse en zonas con peligro de explosion. Version ATEX, vease el catalogo BIANCA ATEX

B1
Wafer

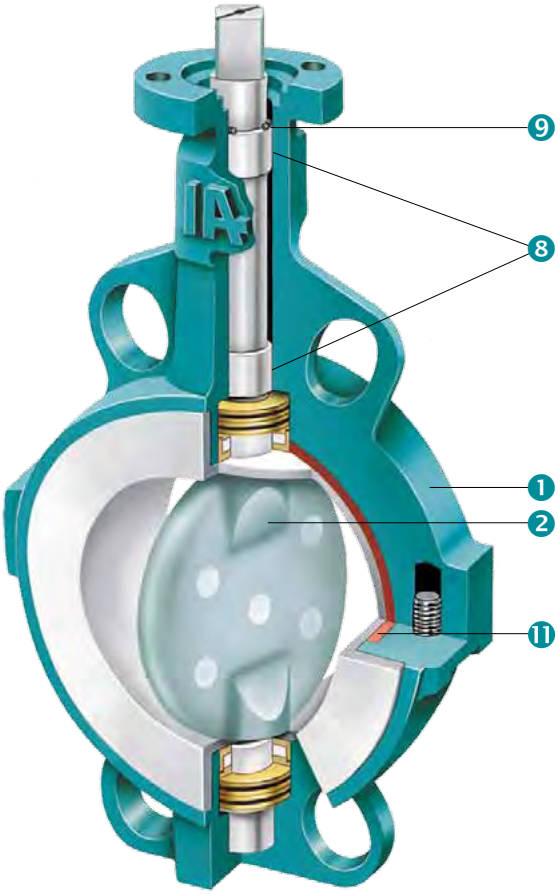
B3
Lug

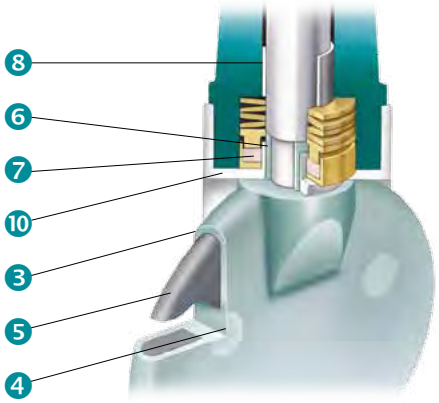
B4
Sección en U

InterApp

Fluids under control.

Construcción





1	Cuerpo en dos piezas en GGG40.3 / EN-GJS-400-18(A-LT)
2	Disco/eje, monoblock
3	Espesor mínimo del recubrimiento 3 mm
4	Sujeción mecánica del recubrimiento
5	Espesor reducido de la mariposa forjada permite mayor caudal
6	Recubrimiento del eje en el area del asiento
7	Estanqueidad del eje mediante empaquetadura comprimida
8	Cojinete auto lubricante
9	Junta de estanqueidad exterior
10	Asiento envolvente previene radialmente fluencia en frio
11	Elastomero base alojado en el cuerpo

Producción de BIANCA HP en hab.purificado

Limpieza con ultrasonido

Esclusa

Montaje, test, empaquetado en habitaculo puro clase 10.000

Ensayo de espesor

Pares con asientos PTFE incluyendo el factor seguridad

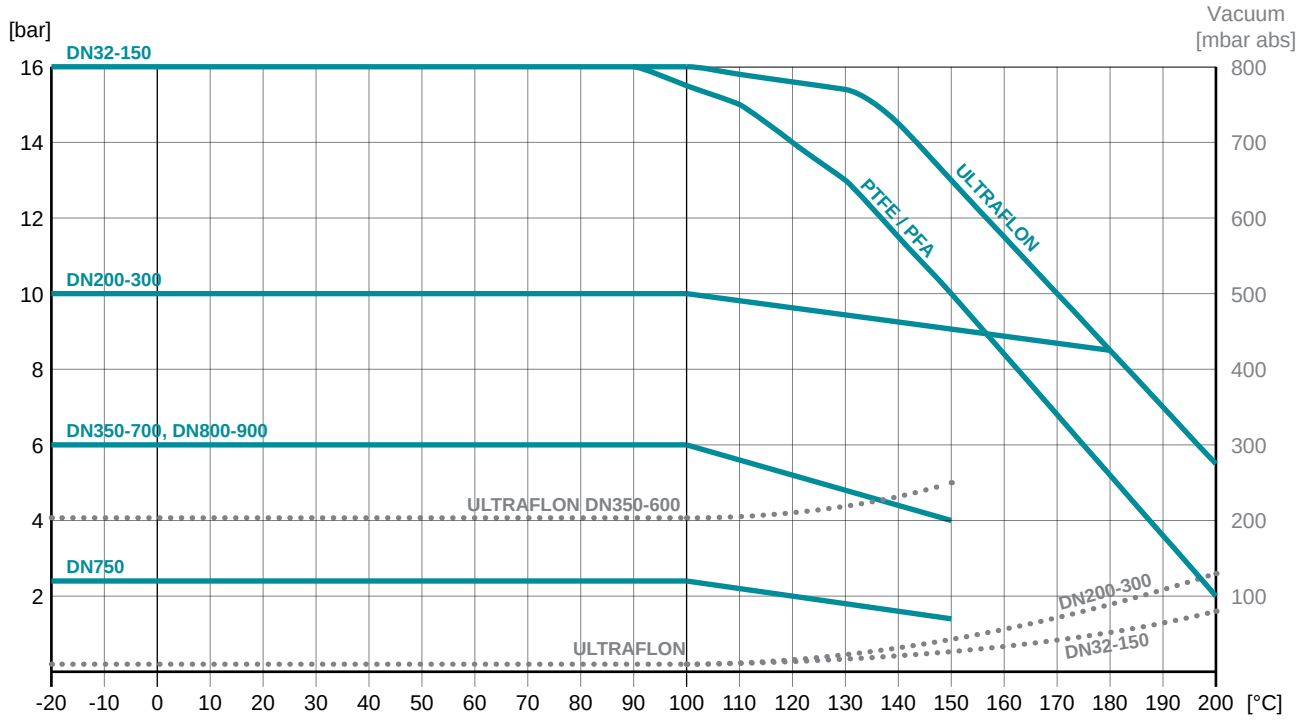
DN	32/40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900
Nm	35	42	42	59	75	90	157	270	375	510	675	900	1100	1300	1750	2100	2500	3100	4000

Valores Kv m³/h

	Angulos de apertura de la válvula							
DN	20°	30°	40°	50°	60°	70°	80°	90°
32/40	4	8	17	30	45	65	85	95
50	7	16	35	60	92	132	170	193
65	7	16	35	60	92	132	170	193
80	15	33	72	125	190	270	335	392
100	20	48	95	162	255	385	485	585
125	38	82	165	255	455	645	815	1015
150	60	130	235	395	645	955	1220	1495
200	95	230	465	795	1180	1815	2410	3050
250	175	350	710	1160	1610	2420	3650	4510
300	265	522	995	1720	2665	3965	5960	7210
350	350	660	1180	1800	2880	4550	7180	8760
400	510	985	1480	2450	4230	6550	9250	11350
450	665	1255	2230	3850	6250	9200	12250	14900
500	890	1620	2980	5350	8150	11800	15560	18000
600	970	2150	4180	7420	11350	16450	21200	24500
700	1060	2560	4868	8412	14359	23901	37638	48633
750	1217	2939	5588	9675	16484	27437	43207	55829
800	1402	3328	6351	11169	19073	32074	51820	63905
900	1915	4259	7897	13849	23887	41112	66771	81016

$c_v = k_v \cdot 1{,}16$

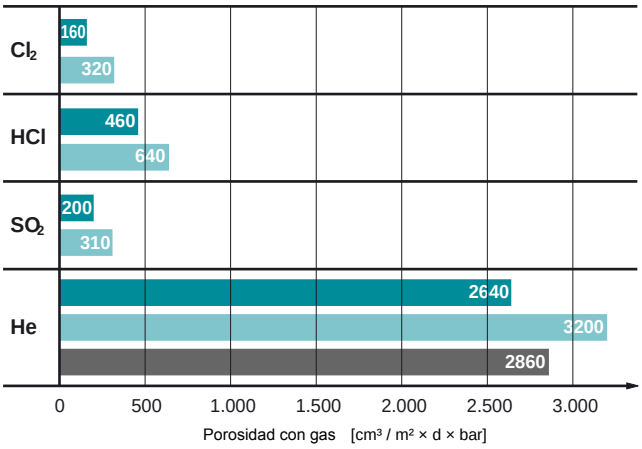
Diagrama de Presión / Temperatura



Ventajas del asiento en ULTRAFLON®

Porosidad con gas

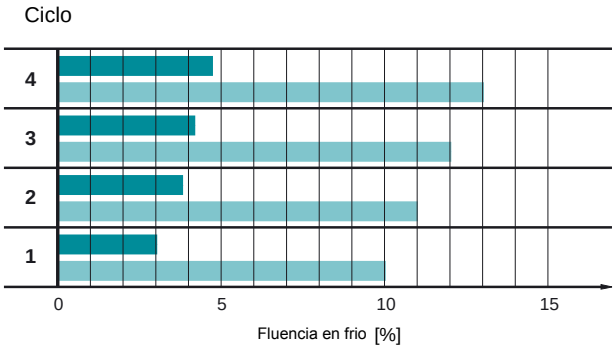
Comparación de **ULTRAFLON®** - **PTFE** - **PFA** (Espesor de la placa de ensayo 1mm)



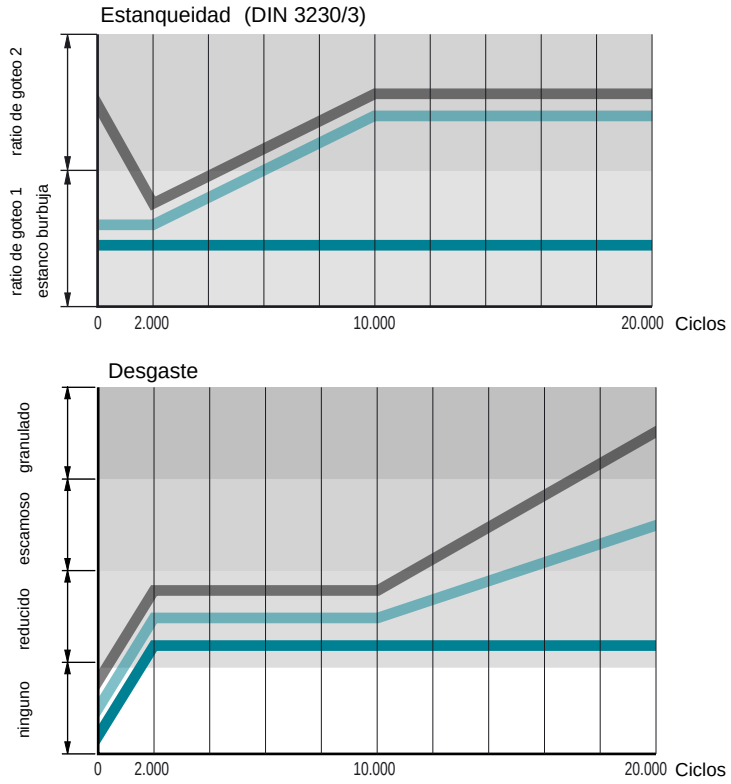
Deformación

bajo repetición de carga “fluencia en frio”

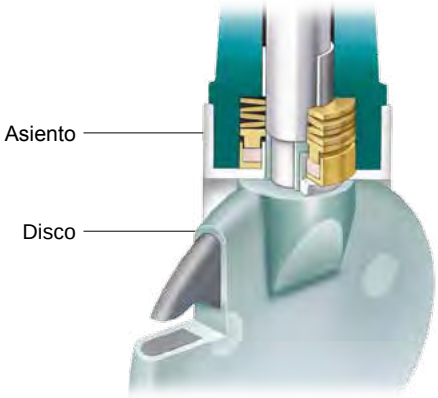
Carga : 15 N/mm², 4 ciclos
Duración : 100 horas por ciclo
Temperatura : 23°C (73°F)
Deformación residual después de 24h



Ensayo continuo (estanqueidad)



ULTRAFLON®
PTFE
PFA



Designación de la válvula

B1	0100	.	3	3	.	2BE	.	4GT	.	TS	.	xx
❶	❷		❸	❹		❺		❻		❼		❽

❶ **Modelo**	B1	Wafer	DN32-600
	B3	Lug	DN32-400
	B4	Sección en U	DN450-900
❷ **Diámetro nominal**	0032-0900	mm	
❸ **Presión de servicio**	0	2,5 bar	DN750
	1	6 bar	DN350-700, DN800-900
	2	10 bar	DN200-300
	3	16 bar	DN32-150
❹ **Norma de bridas**	**	PN10/16/ANSI B16-5 cl150 vea tabla inferior	
❺ **Material del cuerpo**	2BE	Fundición nodular GGG40.3, recubierto de Epoxy con 80 micras	
	4G0	Acero inoxidable 1.4435	
❻ **Material del eje y disco (monoblock)**	4G0	Acero inoxidable 1.4408	DN32-300
		Acero inoxidable 1.4404	DN350-900
	4GP	Acero inoxidable 1.4408 pulido Ra < 0,8	DN32-300
		Acero inoxidable 1.4404	DN350-900
	4GJ	Acero inoxidable AISI316L, Fe < 1%, e-pulido Ra < 0,4	DN32-300
	4GT	Acero inoxidable encapsulado en PFA	DN32-300 (>300 bajo demanda)
	3BT	Disco acero encapsulado en PFA, eje acero inoxidable	DN350-900
	4D0	Uranus 1.4539	(bajo demanda)
	7H0	Hastelloy 2.4602	(bajo demanda)
	7T0	Titan 3.7035, Gr2	(bajo demanda)
❼ **Material del asiento**	TS	PTFE / Silicona	
	TE	PTFE / EPDM	
	TV	PTFE / Viton	
	**V	ULTRAFLON® para vacío o aplicaciones para cloro	
	**A	Antiestático (PTFE o ULTRAFLON®)	
❽ **Ejecuciones especiales**	LF	Libre de silicona	
	HP	Alta pureza (High purity) La válvula es; lavada, montada, probada y embalada en un habitáculo con el aire puro. (US federal standard 209b, class 10000)	
	Ex	Version ATEX, vease el catalogo BIANCA ATEX	

Otras ejecuciones bajo demanda

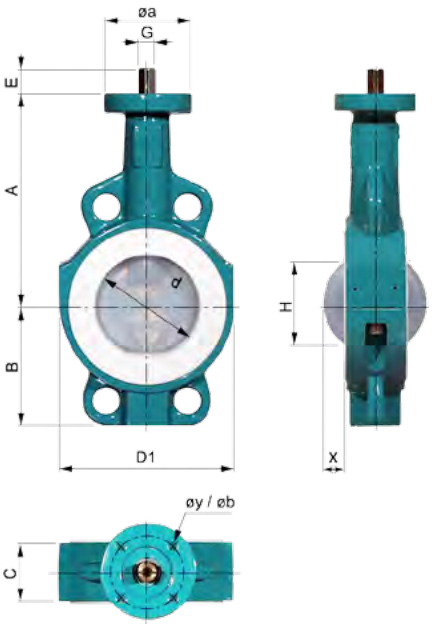
BIANCA	DN→	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900
 B1	PN10		3												2						
	PN16		3																		
	ANSI cl.150			3											A						
 B3	PN10		3							2											
	PN16		3																		
	ANSI cl.150			A																	
 B4	PN10														2					2	
	PN16														3					3	
	ANSI cl.150														A						

En montajes al final de la línea tenga en cuenta:

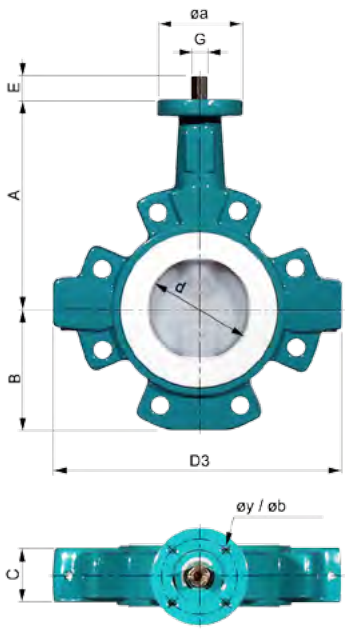
- **Tipo del cuerpo** B3, B4
- **Temperatura** 10 ÷ 30ºC
- **Medio** para fluidos no peligrosos
- **Presión de trabajo max** DN32-600 6 bar; > DN 600 bajo demanda
- **Golpes de ariete no permitidos !!!**

Dimensiones

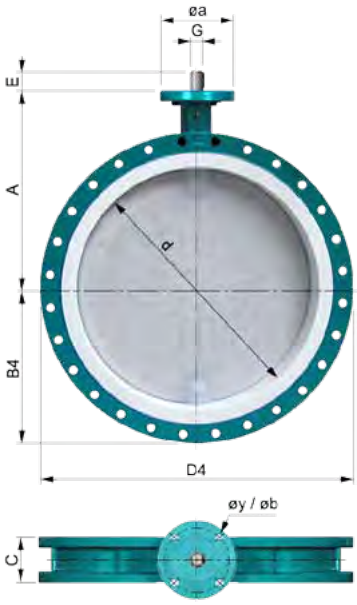
BIANCA B1



BIANCA B3



BIANCA B4



DN	d	A	B	B4	C	H	X	D1	D3	D4	ISO	a	y	b	G	E	B1[kg]	B3[kg]	B4[kg]
32/40	40	125	70	-	33	23	4	146	146	-	F05/07	90	4x 7/9	50/70	11	19	3	3	-
50	60	134	68	-	43	42	9	122	160	-	F05	90	4x 6,5	50	11	19	3	4	-
65	60	144	68	-	46	39	7	139	170	-	F05/07	90	4x 6,5/9	50/70	11	19	4	5	-
80	80	159	91	-	46	66	17	132	190/220 *	-	F05/07	90	4x 6,5/9	50/70	11	19	5	6	-
100	100	174	107	-	52	86	24	165	250	-	F05/07	90	4x 6,5/9	50/70	14	19	6	9	-
125	125	194	119	-	56	112	35	190	282	-	F05/07	90	4x 6,5/9	50/70	14	19	8	12	-
150	150	209	131	-	56	140	47	220	316	-	F07	90	4x 9	70	17	25	11	16	-
200	200	239	161	-	60	191	70	270	376	-	F07	90	4x 9	70	17	25	16	22	-
250	250	274	197	-	68	241	91	330	450	-	F10	125	4x 11	102	22	32	25	31	-
300	300	309	233	-	78	290	111	380	508	-	F10	125	4x 11	102	22	32	34	46	-
350	339	349	254	-	78	330	131	428	564	-	F12	155	4x 13,5	125	27	41	50	87	-
400	400	379	287	-	102	387	149	473	620	-	F12	155	4x 13,5	125	27	42	68	98	-
450	450	426	320	320	114	436	168	528	-	630	F14	175	4x 18	140	Ø45	65	100	-	140
500	500	451	360	360	127	484	187	588	-	700	F14	175	4x 18	140	Ø45	65	122	-	175
600	600	555	415	415	154	580	223	686	-	820	F16	210	4x 22	165	Ø60	90	180	-	275
700	703	605	-	482	165	684	269	-	-	930	F16	210	4x 22	165	Ø72	80	-	-	423
750	750	629	-	489	190	726	280	-	-	970	F16	210	4x 22	165	Ø60	91	-	-	383
800	803	658	-	550	190	781	307	-	-	1060	F25	300	8x 18	254	Ø80	108	-	-	670
900	900	710	-	602	203	877	349	-	-	1160	F30	350	8x 22	298	Ø98	128	-	-	880

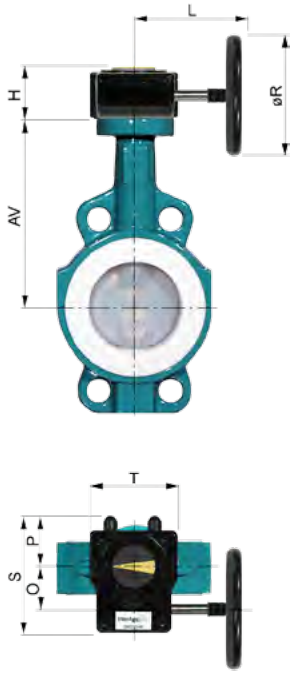
Las cotas X y H no incluyen margen de seguridad.
El cliente debe definir las distancias mínimas para asegurar un funcionamiento correcto al instalar la válvula.

***** 220mm -> PN10/16; 190mm -> ANSI 150

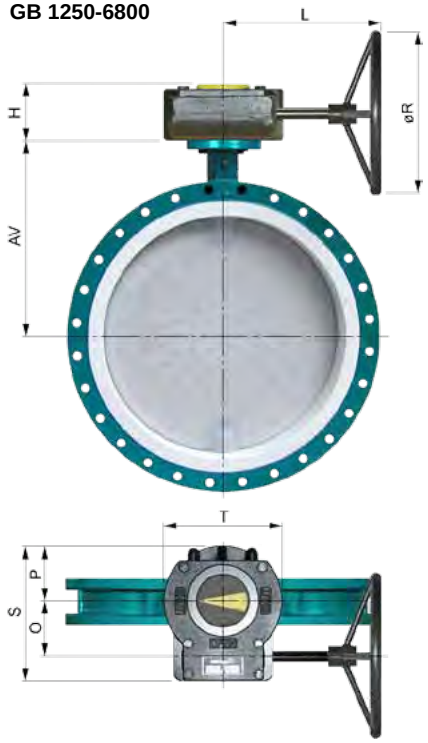
Dimensiones

Reductores

GB 232



GB 1250-6800



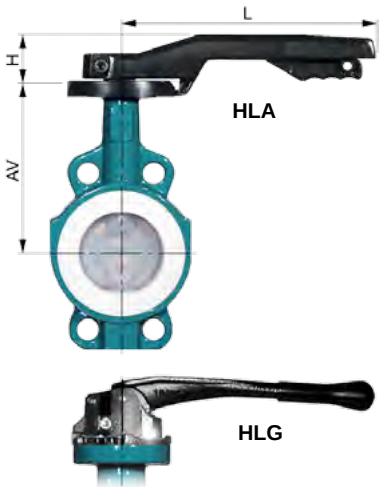
DN		AV	H	L	O	P	R	S	T	n**	[kg]*
32/40	**GB232-05.F05-F0711.100**	125	53	121	42,5	48	100	114	80	10	0,8
50	**GB232-05.F05-F0711.100**	134	53	121	42,5	48	100	114	80	10	0,8
65	**GB232-05.F05-F0711.100**	144	53	121	42,5	48	100	114	80	10	0,8
80	**GB232-05.F05-F0711.100**	159	53	121	42,5	48	100	114	80	10	0,8
100	**GB232-05.F05-F0714.100**	174	53	121	42,5	48	100	114	80	10	0,8
125	**GB232-05.F05-F0714.100**	194	53	121	42,5	48	100	114	80	10	0,8
150	**GB232-06.F05-F0717.160**	209	59	179	42,5	48	160	114	80	10	0,9
200	**GB232-08.F07-F1017.250**	239	67	209	50	56	250	131	100	9,25	1,55
250	**GB232-08.F07-F1022.250**	274	67	209	50	56	250	131	100	9,25	1,55
300	**GB232-13.F10-F1222.300**	309	84	361	80	83	300	209	175	10	5,4
350	**GB232-13.F10-F1227.400**	350	84	376	80	83	400	209	175	10	5,4
400	**GB232-13.F10-F1227.500**	380	84	396	80	83	500	209	175	10	5,4
450	**GB232-14.F1445.500**	426	84	396	80	83	500	209	175	10	5,4
500	**GB232-14.F1445.600**	451	84	396	80	83	600	209	175	10	5,4
600	**GB1250N.F1660.500**	555	100	346	105	110	500	258	220	13,75	22
700	**GB1950N.F1672.600**	605	126	387	130	142	600	322	285	13	32
750	**GB1250N.F1660.700**	630	100	346	105	110	500	258	220	13,75	22
800	**GB1950N/HR.F2580.600**	658	126	387	130	142	600	322	285	21	32
900	**GB6800NSP4.F3098.400**	710	160	500	263	170	400	482	370	79,25	70

Material: GB 232 Aluminio, recubrimiento Polyuretano
GB1250-GB6800 GG25, recubrimiento Polyuretano

* [kg] Los pesos no incluyen la válvula
** n = Vueltas del volante de apertura/cierre

Dimensiones

Palanca



HLA : Aluminio, recubrimiento Epoxy

DN		AV	H	L	[kg]*
32/40	**HLA.F0711.180**	125	41	180	0,4
50	**HLA.F0511.240**	134	43	243	0,5
65	**HLA.F0711.240**	144	43	243	0,5
80	**HLA.F0711.240**	159	43	243	0,5
100	**HLA.F0714.340**	174	43	340	0,6
125	**HLA.F0714.340**	194	43	340	0,6
150	**HLA.F0717.340**	209	51	340	0,6
200	**HLA.F0717.340**	239	51	340	0,6
250	**HLA.F1022.500**	274	40	500	2,2
300	**HLA.F1022.500**	309	40	500	2,2

HLG: GGG40, recubrimiento Epoxy

DN		AV	H	L	[kg]*
32/40	**HLG.F0711.260-E.C**	125	66	260	0,9
50	**n.a.**	-	-	-	-
65	**HLG.F0711.260-E.C**	144	66	260	0,9
80	**HLG.F0711.260-E.C**	159	66	260	0,9
100	**HLG.F0714.350-E.C**	174	66	350	1,6
125	**HLG.F0714.350-E.C**	194	66	350	1,6
150	**HLG.F0717.350-E.C**	209	66	350	1,6
200	**HLG.F0717.350-E.C**	239	66	350	1,6

* [kg] Los pesos no incluyen la válvula

Mas documentación

Actuadores neumáticos, Actuadores eléctricos, Accesorios en hojas separados.
Instrucciones de instalación, Instrucciones de mantenimiento, Tablas de bridas: Observe por favor estas instrucciones para la instalación y mantenimiento de nuestras válvulas.

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CH-6343 Rotkreuz
Phone +41 (0) 41 7982233
Fax +41 (0) 41 7982234
info@ch.interapp.net

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I-20016 Pero (MI)
Phone +39 02 339371
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Phone +49 (0) 2058 901 01
Fax +49 (0) 2058 901 110
info@avkmittelmann.com

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InterApp Válvulas S.A.
Poligono Industrial Francoli, parcela 27
E-46006 Tarragona
Phone +34 977 543 008
Fax +34 977 541 622
avk@avkvalvulas.com

Descripción

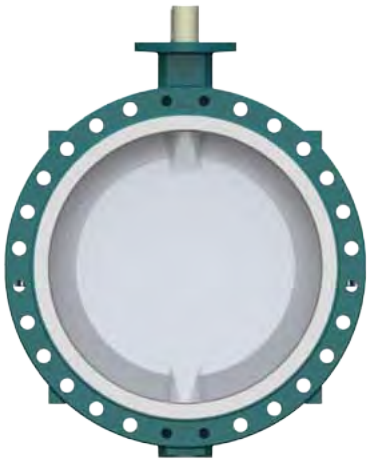
Válvula de eje centrado con asiento de plastomero.
Campo de aplicación: Servicio todo/nada y de control de fluidos corrosivos y agresivos así como de alta pureza.

Características

• Tipos de cuerpo	B1 Wafer DN 32-600 B3 Lug DN 32-400 B4 Sección en U DN 450-900
• Ancho del cuerpo	Según ISO 5752/20, EN 558-1/20
• Brida superior	Según EN ISO 5211
• Presión máxima	16 bar (DN32-150), 10 bar (DN200-300), 6 bar (DN350-700), 2,5 bar (DN750), 6 bar (DN800-900)
• Tipos de bridas	PN10, PN16, ANSI cl. 150
• Rango de temperatura	-20°C ÷ 200°C Según condiciones de trabajo, otras temperaturas bajo demanda
• Pruebas durante la producción	La prueba de la porosidad del recubrimiento del disco y del asiento, según DIN EN 60243-1. Certificado del ensayo, bajo demanda. Estanqueidad según EN 12266-1/ P12, grado A. El par de cada válvula es registrado.
CE	Las válvulas de mariposa cumplen los requisitos de seguridad del anexo en la directiva europea para equipos de presión 97/23/EG para fluidos grupo 1 y 2.
SIL	Válvulas BIANCA se pueden utilizar en sistemas relacionados con la seguridad según IEC 61508 / 61511, Nivel de Integridad de Seguridad SIL 2
Ex ATEX	Ejecuciones especiales de la válvula Bianca pueden instalarse en zonas con peligro de explosion. Version ATEX, vease el catalogo BIANCA ATEX

B1
Wafer

B3
Lug

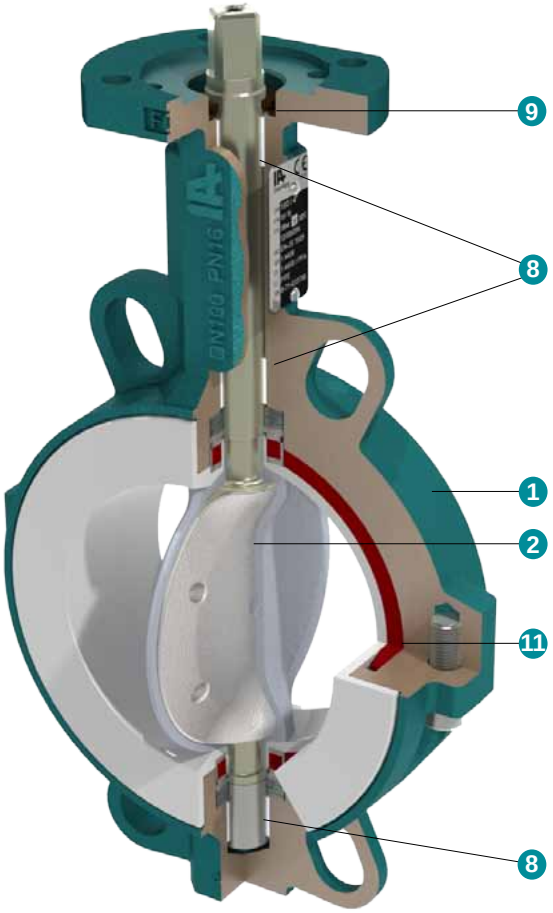


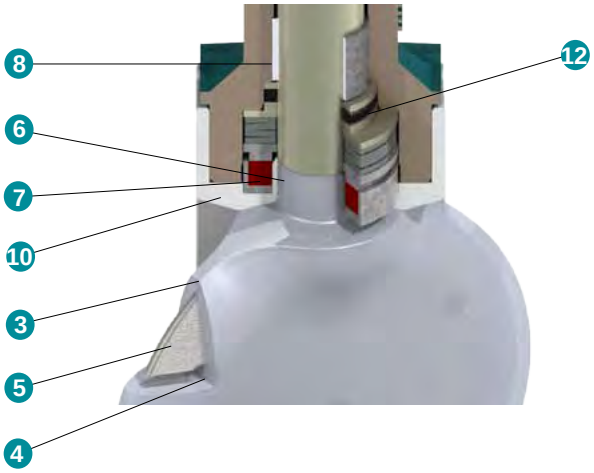
B4
Sección en U

InterApp

Fluids under control.

Construcción





1	Cuerpo en dos piezas en GGG40.3 / EN-GJS-400-18-LT
2	Disco/eje, monoblock
3	Espesor mínimo del recubrimiento 3 mm
4	Sujeción mecánica del recubrimiento
5	Espesor reducido de la mariposa forjada permite mayor caudal
6	Recubrimiento del eje en el area del asiento
7	Estanqueidad del eje mediante empaquetadura comprimida
8	Cojinete auto lubricante
9	Junta de estanqueidad exterior
10	Asiento envolvente previene radialmente fluencia en frio
11	Elastomero base alojado en el cuerpo

Producción de BIANCA HP en hab.purificado


Limpieza con ultrasonido


Esclusa


Montaje, test, empaquetado en habitaculo puro clase 10'000


Ensayo de espesor

Pares con asientos PTFE incluyendo el factor seguridad

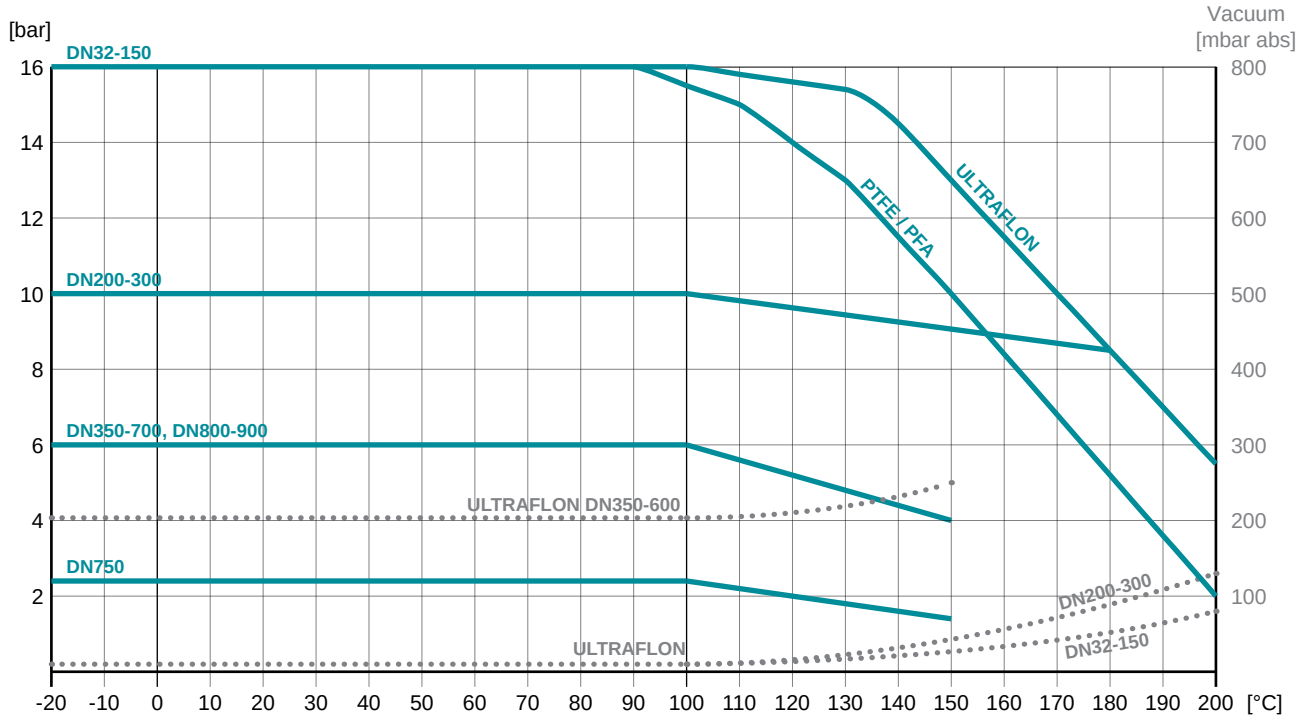
DN	32/40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900
Nm	35	42	42	59	75	90	157	270	375	510	675	900	1100	1300	1750	2100	2500	3100	4000

Valores Kv m³/h

	Angulos de apertura de la válvula							
DN	20°	30°	40°	50°	60°	70°	80°	90°
32/40	4	8	17	30	45	65	85	95
50	7	16	35	60	92	132	170	193
65	7	16	35	60	92	132	170	193
80	15	33	72	125	190	270	335	392
100	20	48	95	162	255	385	485	585
125	38	82	165	255	455	645	815	1015
150	60	130	235	395	645	955	1220	1495
200	95	230	465	795	1180	1815	2410	3050
250	175	350	710	1160	1610	2420	3650	4510
300	265	522	995	1720	2665	3965	5960	7210
350	350	660	1180	1800	2880	4550	7180	8760
400	510	985	1480	2450	4230	6550	9250	11350
450	665	1255	2230	3850	6250	9200	12250	14900
500	890	1620	2980	5350	8150	11800	15560	18000
600	970	2150	4180	7420	11350	16450	21200	24500
700	1060	2560	4868	8412	14359	23901	37638	48633
750	1217	2939	5588	9675	16484	27437	43207	55829
800	1402	3328	6351	11169	19073	32074	51820	63905
900	1915	4259	7897	13849	23887	41112	66771	81016

$c_v = k_v \cdot 1{,}16$

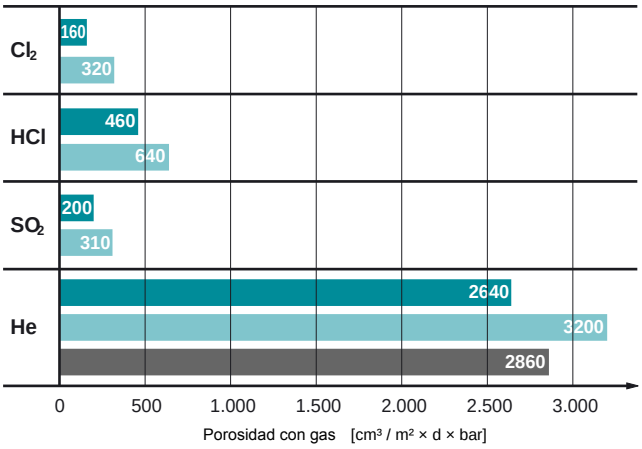
Diagrama de Presión / Temperatura



Ventajas del asiento en ULTRAFLON®

Porosidad con gas

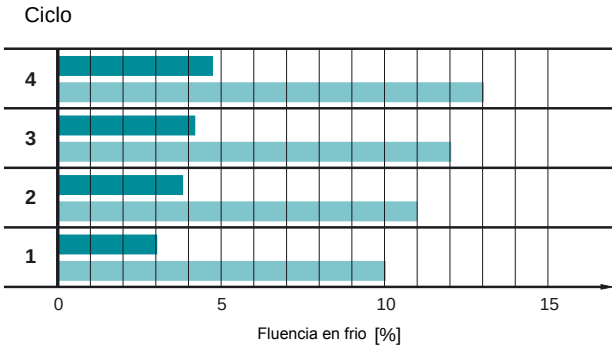
Comparación de **ULTRAFLON®** - **PTFE** - **PFA** (Espesor de la placa de ensayo 1mm)



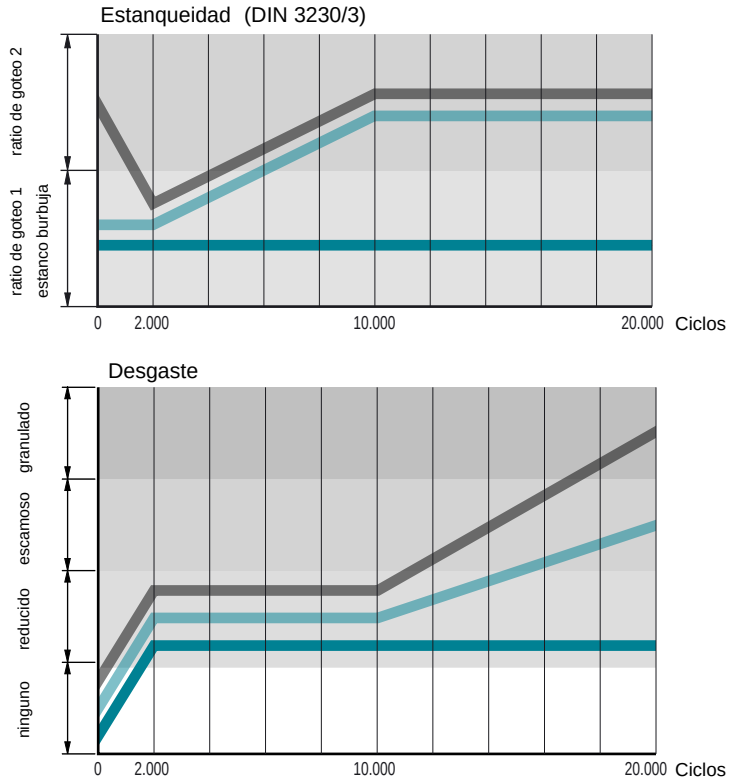
Deformación

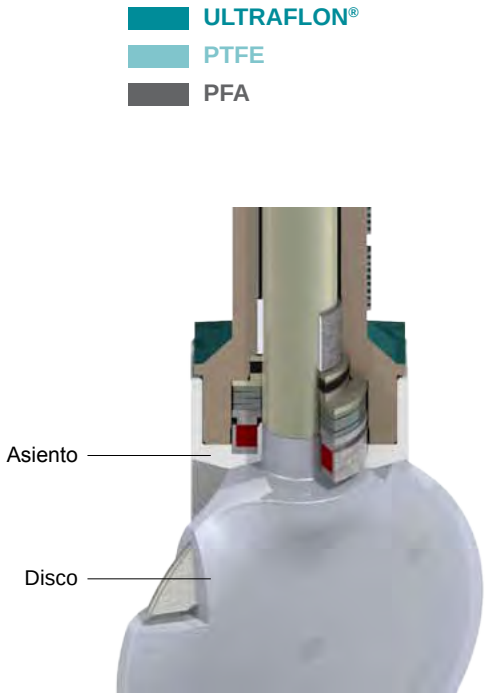
bajo repetición de carga “fluencia en frio”

Carga : 15 N/mm², 4 ciclos
Duración : 100 horas por ciclo
Temperatura : 23°C (73°F)
Deformación residual después de 24h



Ensayo continuo (estanqueidad)





Designación de la válvula

B1	0100	.	3	3	.	2BE	.	4GT	.	TS	.	xx
❶	❷		❸	❹		❺		❻		❼		❽

❶ **Modelo**	B1	Wafer	DN32-600
	B3	Lug	DN32-400
	B4	Sección en U	DN450-900
❷ **Diámetro nominal**	0032-0900	mm	
❸ **Presión de servicio**	0	2,5 bar	DN750
	1	6 bar	DN350-700, DN800-900
	2	10 bar	DN200-300
	3	16 bar	DN32-150
❹ **Norma de bridas**	**	PN10/16/ANSI B16.5 cl150 vea tabla inferior	
❺ **Material del cuerpo**	2BE	Fundición nodular GGG40.3, recubierto de Epoxy con 80 micras	
	4G0	Acero inoxidable 1.4435	
❻ **Material del eje y disco (monoblock)**	4G0	Acero inoxidable 1.4408	DN32-300
		Acero inoxidable 1.4404	DN350-900
	4GP	Acero inoxidable 1.4408 pulido Ra < 0,8	DN32-300
		Acero inoxidable 1.4404	DN350-900
	4GJ	Acero inoxidable AISI316L, Fe < 1%, e-pulido Ra < 0,4	DN32-300
	4GT	Acero inoxidable encapsulado en PFA	DN32-300 (>300 bajo demanda)
	3BT	Disco acero encapsulado en PFA, eje acero inoxidable	DN350-900
	4D0	Uranus 1.4539	(bajo demanda)
	7H0	Hastelloy 2.4602	(bajo demanda)
	7T0	Titan 3.7035, Gr2	(bajo demanda)
❼ **Material del asiento**	TS	PTFE / Silicona	
	TE	PTFE / EPDM	
	TV	PTFE / Viton	
	**V	ULTRAFLON® para vacío o aplicaciones para cloro	
	**A	Antiestático (PTFE o ULTRAFLON®)	
❽ **Ejecuciones especiales**	LF	Libre de silicona	
	HP	Alta pureza (High purity) La válvula es; lavada, montada, probada y embalada en un habitáculo con el aire puro. (US federal standard 209b, class 10000)	
	Ex	Version ATEX, vease el catalogo BIANCA ATEX	
	180	TA-Luft VDI 2440	

Otras ejecuciones bajo demanda

****Norma de bridas (Code)**

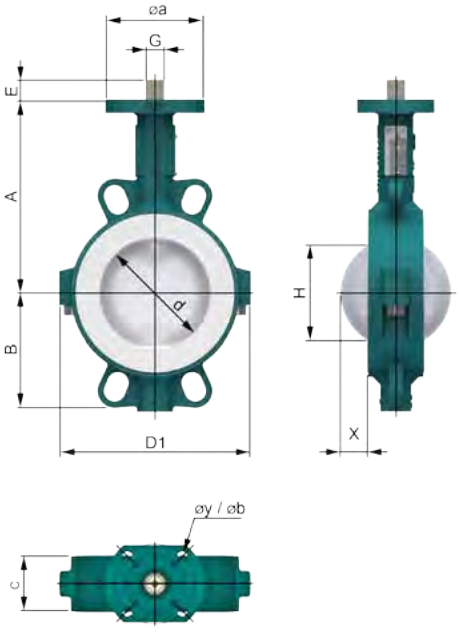
BIANCA	DN →	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900
 B1	PN10	3													2						
	PN16	3																			
	ANSI cl.150		3												A						
 B3	PN10	3								2											
	PN16	3																			
	ANSI cl.150		A																		
 B4	PN10														2					2	
	PN16														3					3	
	ANSI cl.150														A						

En montajes al final de la línea tenga en cuenta:

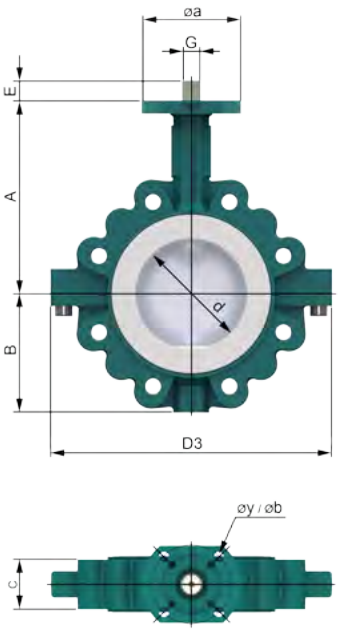
- **Tipo del cuerpo** B3, B4
- **Temperatura** 10 ÷ 30ºC
- **Medio** para fluidos no peligrosos
- **Presión de trabajo max** DN32-600 6 bar; > DN 600 bajo demanda
- **Golpes de ariete no permitidos !!!**

Dimensiones

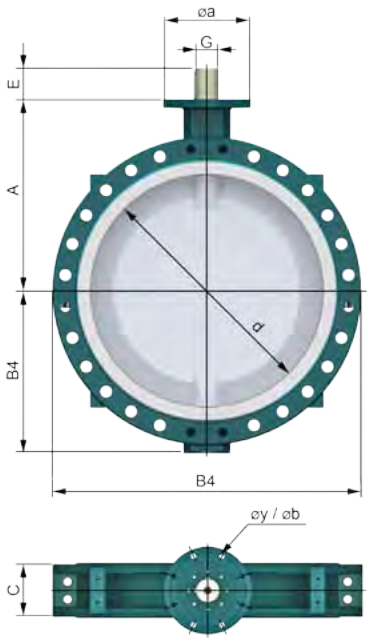
BIANCA B1



BIANCA B3



BIANCA B4



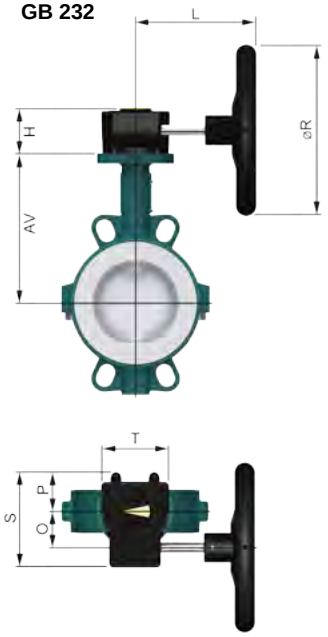
DN	d	A	B	B4	C	H	X	D1	D3	D4	ISO	a	y	b	G	E	B1[kg]	B3[kg]	B4[kg]
32/40	40	125	69	-	33	23	4	105.8	136	-	F05	65	4x7	50	11	19	1.7	2.4	-
50	50	134	68	-	43	42	9	118.4	162	-	F05	65	4x7	50	11	19	2.3	3.2	-
65	65	145	78	-	46	39	7	132.5	170	-	F05	65	4x7	50	11	19	2.9	4.1	-
80	80	160	92	-	46	66	17	144	216	-	F05	65	4x7	50	11	19	3.4	6.2	-
100	100	175	107	-	52	86	24	173	254	-	F05/07	90	4x7/9	50/70	14	19	5.1	9.3	-
125	125	194	120	-	56	112	35	219	293	-	F05/07	90	4x7/9	50/70	14	19	6.9	10.7	-
150	150	210	134	-	56	140	47	247	315	-	F07	90	4x9	70	17	25	10	12.9	-
200	200	239	162	-	60	191	70	295	389	-	F07/F10	125	4x9/11	70/102	17	25	14.1	22.3	-
250	250	275	199	-	68	241	91	367	483	-	F10	125	4x11	102	22	32	22.9	32.4	-
300	300	310	230	-	78	290	111	419	543	-	F10	125	4x11	102	22	32	32.9	46.9	-
350	339	349	254	-	78	330	131	428	564	-	F12	155	4x 13.5	125	27	40	50	87	-
400	400	379	287	-	102	387	149	473	620	-	F12	155	4x 13.5	125	27	42	68	98	-
450	450	426	320	320	114	436	168	528	-	630	F14	175	4x 18	140	Ø45	65	100	-	140
500	500	451	360	360	127	484	187	588	-	700	F14	175	4x 18	140	Ø45	65	122	-	175
600	600	555	415	415	154	580	223	686	-	820	F16	210	4x 22	165	Ø60	90	180	-	275
700	703	605	-	482	165	684	269	-	-	930	F16	210	4x 22	165	Ø72	80	-	-	423
750	750	629	-	489	190	726	280	-	-	970	F16	210	4x 22	165	Ø60	91	-	-	383
800	803	658	-	550	190	781	307	-	-	1060	F25	300	8x 18	254	Ø80	108	-	-	670
900	900	710	-	602	203	877	349	-	-	1160	F30	350	8x 22	298	Ø98	128	-	-	880

Las cotas X y H no incluyen margen de seguridad.
El cliente debe definir las distancias mínimas para asegurar un funcionamiento correcto al instalar la válvula.

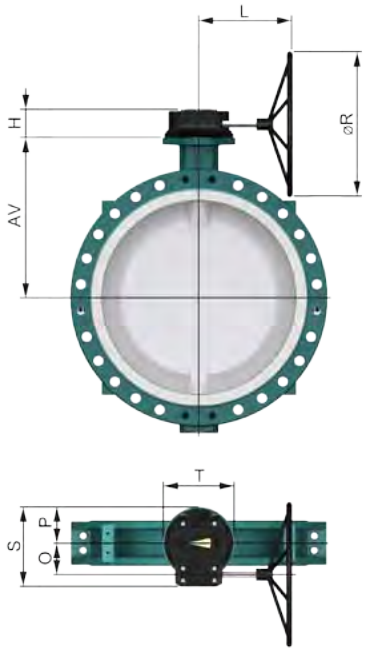
Dimensiones

Reductores

GB 232



GB 1250-6800



DN		AV	H	L	O	P	R	S	T	n**	[kg]*
32/40	**GB232-05.F05-F0711.100**	125	53	121	42.5	48	100	114	80	10	0.8
50	**GB232-05.F05-F0711.100**	134	53	121	42.5	48	100	114	80	10	0.8
65	**GB232-05.F05-F0711.100**	145	53	121	42.5	48	100	114	80	10	0.8
80	**GB232-05.F05-F0711.100**	160	53	121	42.5	48	100	114	80	10	0.8
100	**GB232-05.F05-F0714.100**	175	53	121	42.5	48	100	114	80	10	0.8
125	**GB232-05.F05-F0714.100**	194	53	121	42.5	48	100	114	80	10	0.8
150	**GB232-06.F05-F0717.160**	210	59	179	42.5	48	160	114	80	10	0.9
200	**GB232-08.F07-F1017.250**	239	67	209	50	56	250	131	100	9.25	1.55
250	**GB232-08.F07-F1022.250**	275	67	209	50	56	250	131	100	9.25	1.55
300	**GB232-13.F10-F1222.300**	310	84	361	80	83	300	209	175	10	5.4
350	**GB232-13.F10-F1227.400**	350	84	376	80	83	400	209	175	10	5.4
400	**GB232-13.F10-F1227.500**	380	84	396	80	83	500	209	175	10	5.4
450	**GB232-14.F1445.500**	426	84	396	80	83	500	209	175	10	5.4
500	**GB232-14.F1445.600**	451	84	396	80	83	600	209	175	10	5.4
600	**GB1250N.F1660.500**	555	100	346	105	110	500	258	220	13.75	22
700	**GB1950N.F1672.600**	605	126	387	130	142	600	322	285	13	32
750	**GB1250N.F1660.700**	630	100	346	105	110	500	258	220	13.75	22
800	**GB1950N/HR.F2580.600**	658	126	387	130	142	600	322	285	21	32
900	**GB6800NSP4.F3098.400**	710	160	500	263	170	400	482	370	79.25	70

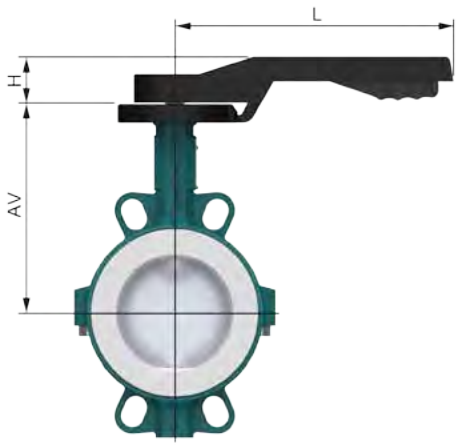
Material: GB 232 Aluminio, recubrimiento Polyuretano
GB1250-GB6800 GG25, recubrimiento Polyuretano

* [kg] Los pesos no incluyen la válvula
** n = Vueltas del volante de apertura/cierre

Dimensiones

Palanca

HLA



HLA : Aluminio, recubrimiento Epoxy

DN		AV	H	L	[kg]*
32/40	**HLA.F0511.180**	125	41	180	0.4
50	**HLA.F0511.240**	134	43	243	0.5
65	**HLA.F0511.240**	145	43	243	0.5
80	**HLA.F0511.240**	160	43	243	0.5
100	**HLA.F0714.340**	175	43	340	0.6
125	**HLA.F0714.340**	194	43	340	0.6
150	**HLA.F0717.340**	210	51	340	0.6

* [kg] Los pesos no incluyen la válvula

Mas documentación

Actuadores neumáticos, Actuadores eléctricos, Accesorios en hojas separados.
Instrucciones de instalación, Instrucciones de mantenimiento, Tablas de bridas: Observe por favor estas instrucciones para la instalación y mantenimiento de nuestras válvulas.

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TITANIA - Butterfly valve DN80 - 1400

Description

Triple offset metal to metal seat butterfly valve Titania is specially designed to ensure a perfect tightness in steam, gas, chemical, petrochemical and cryogenic applications.

Product features

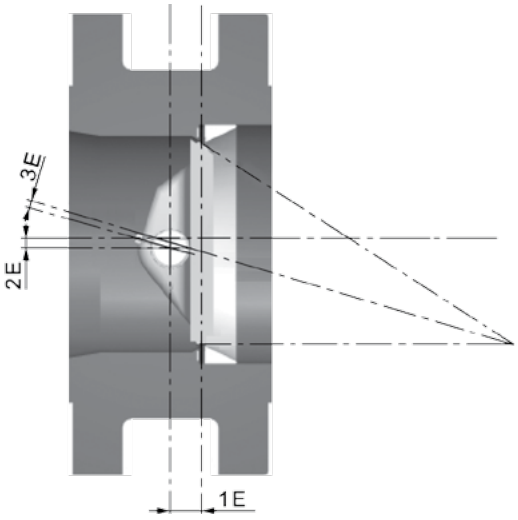
• Body types	T1 Wafer, T3 Lug, T8 Flange
• Face to face dimension	PN10/16/25/40 according to EN558-1 ANSI cl.150/300 according to EN558-1 Table 16 for T1 Wafer and T3 Lug Table 13 for T8 Flange
• Top flange	according to EN ISO 5211
• Rating	PN10/16/25/40, ANSI cl.150/300
• Max. working pressure	50 bar (up to 100 bar on request)
• Temperature range	-196°C ... +700°C according to material
• Tightness test	according to API 598
• FIRE SAFE design	according to BS 6755 part 2-87, with amendment 2
• ATEX option	Execution according to ATEX 94/9/EC, Zone 1 and 21 – Gr II, Cat. 2 G/D
CE	The butterfly valves TITANIA meet the safety requirements of the pressure Equipments Directive 97/23/EC (PED) appendix 1 for fluids of the groups 1 and 2.

Triple offset function:

Offset 1E:
The center of rotation is offset from the thigtness surface to allow a total contact around the entire seal.

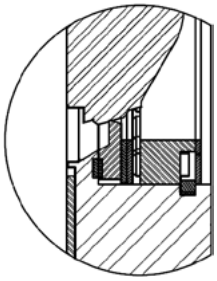
Offset 2E:
The center of rotation of the disc is offset from the pipe centerline to allow a cleaning opening valve.

Offset 3E:
The third offset issue from the seal cone tilting cancel jamming and friction and allow complete tightness without seal deformation (solid seal).



Tightness:

Bi-directional tightness
Closing without jamming and friction
No deformation on the seal



InterApp

Fluids under control.

Product features

Flow values k_v [m³/h], Torques [Nm]:

DN	k_v [m³/h]	Md [Nm]															
		Δ p 4 bar		Δ p 6 bar		Δ p 10 bar		Δ p 16 bar		Δ p 20 bar		Δ p 25 bar		Δ p 40 bar		Δ p 50 bar	
		o*	c*	o	c	o	c	o	c	o	c	o	c	o	c	o	c
80	213											59	212	92	251	114	276
100	323											117	275	179	323	221	355
125	323											117	275	179	323	221	355
150	888					153	296	226	320	273	336	333	355	513	415	633	454
200	1701					356	469	524	504	635	527	774	557	1192	645	1471	703
250	2780					583	640	854	686	1034	717	1260	756	1937	870	2389	946
300	4038					888	1042	1337	1123	1636	1177	2008	1245	3132	1449	3880	1584
350	4984					1228	1189	1855	1280	2272	1341	2794	1416	4359	1642	5403	1793
400	7128					2005	2059	3072	2223	3784	2333	4674	2471	7343	2883	9121	3158
450	8150					2614	2525	3964	2719	4866	2849	5993	3012	9372	3499	11625	3824
500	10460					3874	4038	5870	4352	7201	4562	8865	4824	13856	5609	17182	6133
600	14674					5953	5537	9128	5976	11244	6268	13889	6634	21824	7731	27115	8461
700	20095					9793	9666	14858	10414	18234	10912	22454	11536	35114	13407	43556	14653
800	35791	5099	4962	7522	5430	12608	6094	10649	7090								
1000	52958	10891	8550	15615	9092	26159	10175	41977	11780								
1200	77439	17136	13475	25938	14337	43541	16062										
1400	100987	27284	17504	41096	18608	68717	20814										

* o=open, c=close

Type code

T1 00150 . 3 3 . 3PD . 4A . 4HS . 4X - ATEX

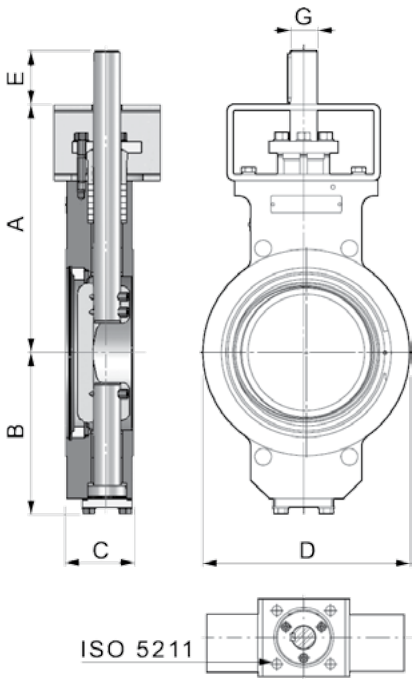
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

❶	**Body type**	**T1**	Wafer	DN80-1200
		T3	Lug	DN80-1200
		T8	Flange	DN80-1400
❷	**Nominal diameter**	**0080-1400**	mm	
❸	**Working pressure**	**2**	10 bar	
		3	16 bar	
		4	20 bar	
		5	25 bar	
		6	40 bar	
		7	50 bar	
❹	**Rating**	**2**	PN 10	DN 200-1400
		3	PN 10 / 16	DN 80-150
			PN 16	DN 200-1400
		A	ANSI cl.150	DN 80-1400
		5	PN 25	DN 200-1400
		6	PN 25 / 40	DN 80-150
			PN 40	DN 200-600
		B	ANSI cl.300 (~50bar)	DN 80-600
❺	**Body**	**T1 Wafer, T3 Lug**		
		3PD	Cast steel E36-3 / P355GH / 1.0473	T1, T3
		4B0	Stainless steel X2CrNiMo17-12-1 1.4404	T1, T3 DN 80-450
		4C0	Stainless steel 1.4408	T1, T3 DN 500-1200
		T8 Flange		
		3HD	Cast steel GP280GH 1.0625	T8
		4C0	Stainless steel A351CF8M 1.4408	T8
❻	**Shaft**	**4A**	Stainless steel X20Cr13, 1.4021 (with cast steel body)	
		4L	Stainless steel X5CrNiCuNb16-4, 1.4542 (with stainless steel body)	
❼	**Disc**	**3HS**	Cast steel 1.0619 A216WCB stellited (with cast steel body)	
		4CS	Stainless steel A351CF8M, 1.4408 stellited (with stainless steel body)	
❽	**Seat**	**4X**	Stainless steel GX12CrNiSi25-20, 1.4843	
❾	**ATEX option**	**ATEX**	Execution according to ATEX 94/9/EC, Zone 1 and 21 – Gr II, Cat. 2 G/D	

Mounting the valve at the end of a line on request
Pressure and temperature limits of application are dependent of the working conditions

Dimensions

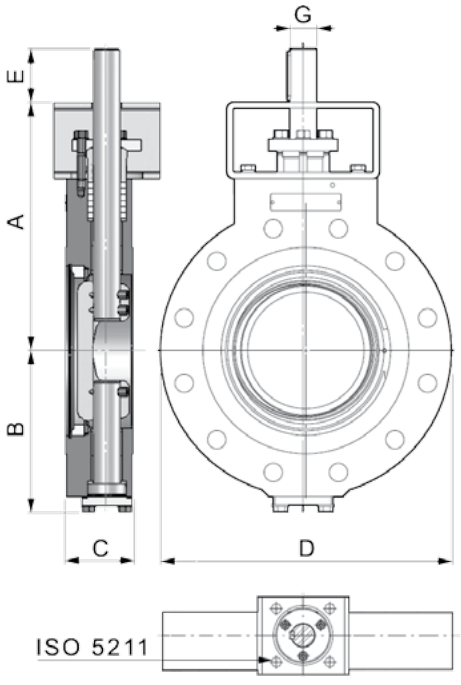
TITANIA T1 Wafer



								[kg]					
DN	A	B	C	Dmax	E	G	ISO 5211	PN10	PN16	cl.150	PN25	PN40	cl.300
80	200	119	64	138	35	16	F05-07	11,6	11,6	11	11,6	11,6	11
100	225	143	64	160	45	20	F05-07	16,5	16,5	16,5	16,5	16,5	16,5
125	250	143	70	190	45	20	F05-07	24	24	24	24	24	24
150	295	175	76	216	55	25	F07-10-12-14	31	31	31	31	31	31
200	325	210	89	285	70	35	F07-10-12-14	47,7	47,7	47,7	49,4	51,1	47,7
250	360	247	114	345	75	40	F10-12-14-16	73	73	73	75,5	79,2	73
300	400	287	114	410	80	45	F10-12-14-16	90,3	92	92	98	104,5	92
350	445	322	127	465	85	50	F14-16-25	134,5	138,7	126,2	145	153,3	126,2
400	530	355	140	535	90	60	F16-25-30	186	190	180	198	214	180
450	565	393	152	560	100	65	F25-30	240	255	240	255	264	240
500	652	427	152	615	115	75	F25-30	296	321	296	326	326	296
600	726	502	178	736	130	85	F25-30-35	472	520	472	513	534	472
700	860	574	229	797	150	100	F30-35-40	592	592	592	592	592	592
800	865	646	241	905	115*	75*	F30	858	858				
900	990	710	241	1005	115*	75*	F30-35	1080	1080				
1000	1078	772	300	1117	150*	100*	F30-35	1342	1342				
1200	1243	920	254	1330	165*	110*	F30-40	1675	1675				

* PN10/16

TITANIA T3 Lug

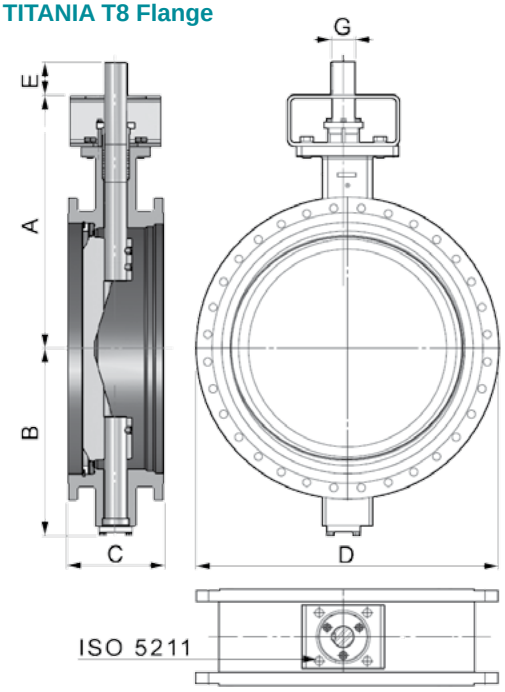


								[kg]					
DN	A	B	C	Dmax	E	G	ISO 5211	PN10	PN16	cl.150	PN25	PN40	cl.300
80	200	119	64	210	35	16	F05-07	15	15	14	15	15	15
100	225	143	64	254	45	20	F05-07	20	20	21	21	21	23
125	250	143	70	279	45	20	F05-07	29	29	29	31	31	32
150	295	175	76	318	55	25	F07-10-12-14	40	40	39	43	43	46
200	325	210	89	381	70	35	F07-10-12-14	63	63	63	68	72	73
250	360	247	114	450	75	40	F10-12-14-16	98	101	101	108	119	117
300	400	287	114	521	80	45	F10-12-14-16	121	126	137	137	154	156
350	445	322	127	582	85	50	F14-16-25	176	185	194	208	226	226
400	530	355	140	660	90	60	F16-25-30	245	256	273	287	316	316
450	565	393	152	711	100	65	F25-30	312	337	337	367	383	410
500	652	427	152	775	115	75	F25-30	379	429	409	446	475	497
600	726	502	178	914	130	85	F25-30-35	594	692	642	692	764	802
700	860	574	229	1035	150	100	F30-35-40	800	800	800	800	800	800
800	865	646	241	1150*	115*	75*	F30	1100	1100				
900	990	710	241	1185*	115*	75*	F30-35	1450	1450				
1000	1078	772	300	1117	150*	100*	F30-35	1800	1800				
1200	1243	920	254	1485	165*	110*	F30-40	2178	2178				

* PN10/16

Dimensions

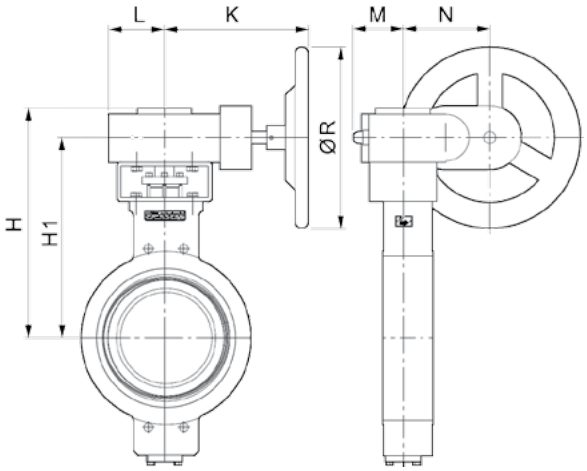
TITANIA T8 Flange



DN	A	B	C	Dmax	E	G	ISO 5211	[kg] PN10/16/25/cl.150	[kg] PN40/cl.300
80	200	119	114	210	35	16	F05-07	-	16
100	225	143	127	254	45	20	F05-07	-	25
125	250	143	140	279	45	20	F05-07	-	39
150	295	175	140	318	55	25	F07-10-12-14	-	58
200	325	210	152	381	70	35	F07-10-12-14	68	86
250	360	247	165	450	75	40	F10-12-14-16	97	127
300	400	287	178	521	80	45	F10-12-14-16	131	176
350	445	322	190	584	85	50	F14-16-25	178	235
400	530	355	216	660	90	60	F16-25-30	258	337
450	565	393	222	711	100	65	F25-30	300	400
500	652	427	229	775	115	75	F25-30	420	522
600	726	502	267	914	130	85	F25-30-35	639	820
700	860	574	292	1035	150	100	F30-35-40	784	1029
800	865	646	318	1149	115*	75*	F30	1024	1344
900	990	710	330	1270	115*	75*	F30-35	1437	1844
1000	1078	772	410	1320	150*	100*	F30-35	1850	-
1200	1243	919	470	1485	165*	110*	F30-40	2226	-
1400	1409	1066	530	1685	185*	126*	F40	3091	-

* PN10/16

Gearbox:



DN	bar		ØR	H	H1	K	L	M	N	T1[kg]	T3[kg]	T8[kg]
80	50	GB210	200	260	227	187	51	51	45	14,8	18,8	20
100	50	GB210	200	285	252	187	51	51	45	19,7	26,2	29
125	50	GB210	200	310	277	187	51	51	45	27,5	35,5	43
150	25	GB210	200	355	322	187	51	51	45	34,8	46,8	62
	50	GB550	250	384	336	238	69	83	71	37,8	49,8	67
200	10	GB550	200	414	366	238	69	83	71	56,5	71,5	77
	25	GB550	300	414	366	238	69	83	71	56,5	75,5	77
	50	GB880	500	417	367	226	100	101	86	62,0	87,0	101
250	10	GB880	250	452	402	226	100	101	86	87,5	115	112
	25	GB880	400	452	402	226	100	101	86	89,5	122	112
	50	GB1250	700	461	408	330	110	110	105	95,5	139	149
300	10	GB1250	300	501	448	330	110	110	105	113	147	153
	25	GB1250	600	501	448	330	110	110	105	120	159	153
	50	GB1950	800	525	455	375	143	143	130	124	188	209
350	10	GB1250	400	546	493	330	110	110	105	158	203	200
	25	GB1250	800	546	493	330	110	110	105	168	230	200
	50	GB1950/SP4	400	556	500	405	143	143	211	213	286	295
400	10	GB1950	500	655	585	375	143	143	130	219	284	290
	25	GB1950	800	655	585	375	143	143	130	231	319	290
	50	GB6800	800	690	589	400	185	170	182	237	372	393
450	10	GB1950/SP4	200	720	620	405	143	143	211	300	372	350
	25	GB1950/SP4	400	720	620	405	143	143	211	315	427	350
	50	GB6800/SP4	500	724	624	488	185	170	263	311	480	480
500	10	GB1950/SP4	300	807	707	405	143	143	211	356	439	480
	25	GB6800/SP4	400	811	711	488	185	170	263	397	516	490
	50	GBA250/SP9	300	826	737	599	255	235	431	522	722	747
600	10	GB6800/SP4	250	885	785	488	185	170	263	543	714	709
	25	GB6800/SP4	600	885	785	488	185	170	263	584	762	709
	50	GBA250/SP9	500	900	811	599	255	235	431	698	965	1045

Further documentation

Pneumatic actuators, Electric actuators, Accessories according separate data sheets.
Installation guide, Maintenance guide, Flanges: Please consult these guides for the installation and maintenance of our butterfly valves.

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AQUARIA - Válvula de mariposa DN 32 - 300

Descripción

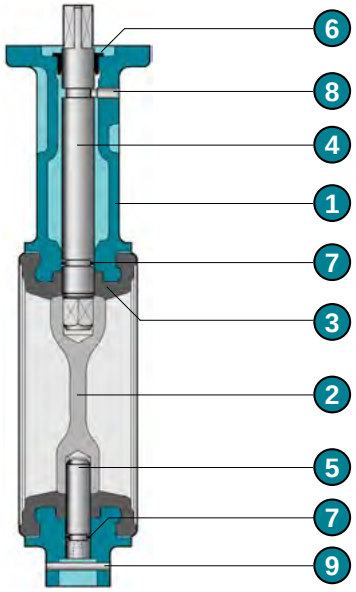
Válvula de mariposa de eje céntrico con elastómero-asiento.
Campo de aplicación: Climatización, Piscinas y Riego

A1C
Wafer

A3C
Lug

Características

• Tipos de cuerpo	A1C Tipo Wafer, A3C Tipo Lug
• Ancho del cuerpo	según ISO 5752/20, EN 558/1-20
• Brida superior	según EN ISO 5211
• Presión máxima	DN32-150 16bar, DN 200-300 10 bar
• Tipos de bridas	PN6, PN10, PN16, ANSI cl. 150
• Rango de temperatura	-10ºC ÷ 130ºC según medio
• Prueba hidráulica	según DIN 3230/parte 3 BN, grado 1, Prueba de estanquiedad 1,1 x PN
CE	Las válvulas de mariposa cumplen los requisitos de seguridad del anexo en la directiva europea para equipos de presión 97/23/EG para fluidos grupo 1 y 2.



Materiales

1	Cuerpo recubierto con Epoxy	Fundición gris solo A1C 50-150	EN-GJL-250
		Fundición nodular	EN-GJS-400-15
2	Disco	Fundición nodular	EN-GJS-400-15
		Acero inoxidable	1.4408 (AISI316)
3	Asiento	EPDM HT	
4	Eje superior	Acero inoxidable	1.4021 (AISI 420)
5	Eje inferior	Acero inoxidable	1.4021 (AISI 420)
6	Casquillo	DELRIN	
7	Junta torica	NBR	
8	Pasador	Acero inoxidable	
9	Tornillo	Acero inoxidable	

Designación de la válvula

A1C	100	.	3	3	-	1AE	.	4A	.	2AE	.	EC
❶	❷		❸	❹		❺		❻		❼		❽

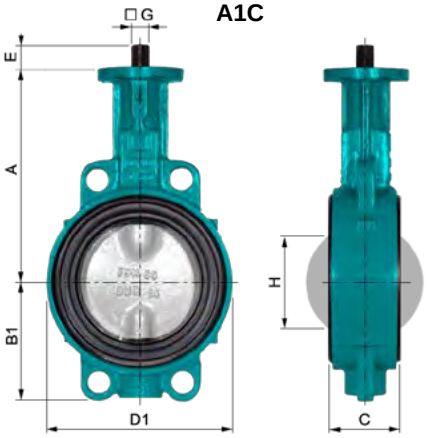
❶	**Tipo de cuerpo**	**A1C**	Wafer	DN32-300
		A3C	Lug	DN32-300
❷	**Diámetro nominal**	**032 - 300**	mm	
❸	**Presión de trabajo**	**2**	10 bar	DN200-300
		3	16 bar	DN32-150
❹	**Norma de brida**	**para A1C Wafer**		
		3	PN6/10/16, ANSI cl. 150	A1C Wafer DN32-300
		para A3C Lug		
		2	PN10	A3C Lug DN200-300
		3	PN10/16	A3C Lug DN32-150
❺	**Cuerpo**	**1AE**	Fundición gris EN-GJL-250 (GG-25), recubierto con Epoxy	A1C Wafer DN50-150
		2AE	Fundición nodular EN-GJS-400-15 (GGG-40), recubierto con Epoxy	A3C Lug DN32-300 A1C Wafer DN32/40, DN200-300
❻	**Eje**	**4A**	Acero inoxidable 1.4021 (AISI420)	
❼	**Disco**	**2AE**	Fundición nodular EN-GJS-400-15 (GGG-40), recubierto con Epoxy	DN50-300
		4C0	Acero inoxidable 1.4408, (AISI316)	DN32-300
❽	**Asiento**	**EC**	EPDM HT (-10°C ... 130°C)	

InterApp®

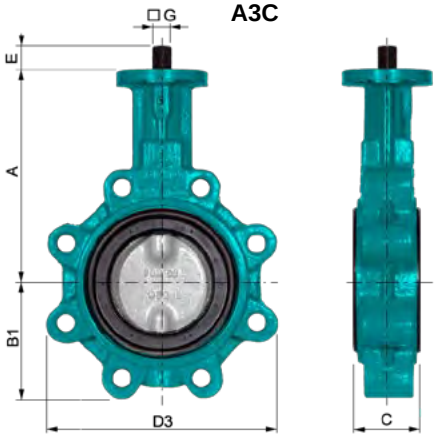
Fluids under control.

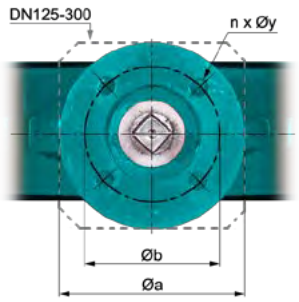
Dimensiones

A1C



A3C





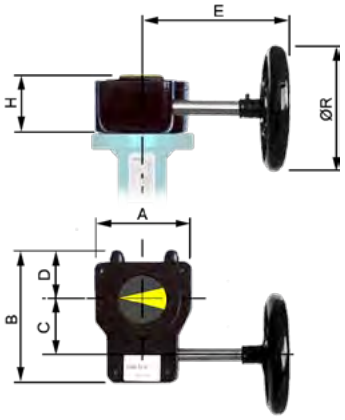
DN	A	B1	B3	C	D1	D3	H	E	G	ISO 5211	a	b	n x øy	kv[m³/h]	[kg]A1	[kg]A3
32	136	54	54	33	78	108	22,5	19	11	F05	70	50	4 x 7	50	2,1	2,2
40	136	54	54	33	78	108	22,5	19	11	F05	70	50	4 x 7	50	2,1	2,2
50	146	64	64	43	96	116	24,5	19	11	F05	70	50	4 x 7	100	2,7	3,1
65	153,5	72	72	46	113	128	45	19	11	F05	70	50	4 x 7	210	3,2	3,7
80	163	88	79	46	128	174	65	19	11	F05	70	50	4 x 7	360	3,6	4,6
100	172,5	98	101	52	150	194	85	19	14	F05	70	50	4 x 7	650	4,6	5,8
125	192,5	119	119	56	184	224	111	19	14	F07	70	70	4 x 9	1050	7,9	9,1
150	205	129	129	56	212	254	138	19	14	F07	70	70	4 x 9	1770	9,2	11,2
200	234	166	166	60	268	320	190	25	17	F07	75	70	4 x 9	3400	13,5	15,5
250	300	202	202	68	320	386	243	30	22	F10	105	102	4 x 10,5	5090	22,3	28,7
300	340	237	237	78	378	454	292	30	22	F10	105	102	4 x 10,5	7360	28,7	40,3

Palanca

Aluminio, recubierto con Epoxy

DN		L	H	(kg)
32-80	**HLA.F0511.200**	200	76	0,4
100	**HLA.F0514.275**	275	76	0,5
125-150	**HLA.F0714.275**	275	76	0,5
200	**HLA.F0717.340**	340	45,5	0,6

Reductores



Aluminio,recubrimiento de poliuretano

DN		A	B	C	D	E	H	øR	n*	[kg]
32-80	**GB232-05.F05-F0711.100**	80	114	42,5	48	121	53	100	10	0,8
100-150	**GB232-05.F05-F0714.100**	80	114	42,5	48	121	53	100	10	0,8
200	**GB232-06.F05-F0717.160**	80	114	42,5	48	179	59	160	10	0,9
250-300	**GB232-08.F10-F1222.250**	100	131	50	56	209	67	250	9,25	1,55

* n = Vueltas del volante de apertura/cierre

Mas documentación

Actuadores neumáticos, Actuadores eléctricos, Accesorios en hojas separados.
Instrucciones de instalación, Instrucciones de mantenimiento, Tablas de bridas: Observe por favor estas instrucciones para la instalación y mantenimiento de nuestras válvulas.

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DESPONIA - Válvula de mariposa DN 25 - 1600

Descripción

Válvula de mariposa de eje céntrico con elastómero-asiento para fluidos y gases en la industria como edificación, sector de aguas.....

Características

• Tipos de cuerpo	D1 Tipo Wafer DN 25-1000 D3 Tipo Lug DN 25-600 D4 Sección en U DN 150-1600
• Ancho del cuerpo	Según ISO 5752/20, EN 558-1/20
• Brida superior	Según EN ISO 5211
• Presión máxima	16 bar
• Tipos de bridas	PN6, PN10, PN16, ANSI cl. 150
• Rango de temperatura	-20°C ÷ 140°C según mat.
• Prueba de estanquiedad	según EN 12266-1/P12, grado A

CE — Las válvulas de mariposa cumplen los requisitos de seguridad del anexo en la directiva europea para equipos de presión 97/23/EG para fluidos grupo 1 y 2.

SIL — Válvulas DESPONIA se pueden utilizar en sistemas relacionados con la seguridad según IEC 61508 / 61511, Nivel de Integridad de Seguridad SIL 2

D1
Wafer

D3
Lug

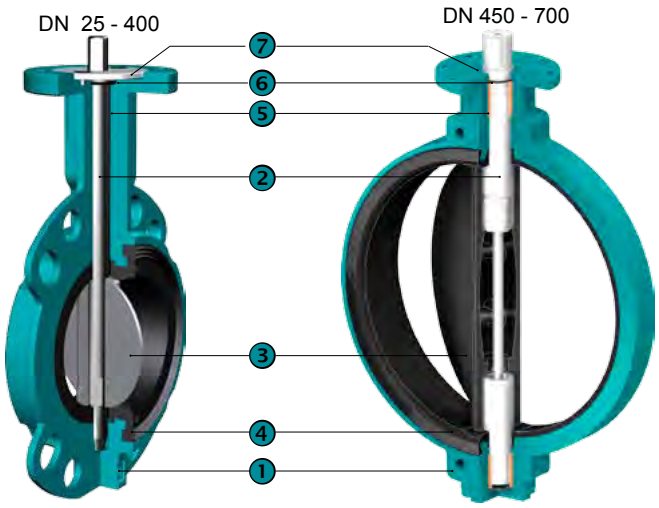
D4
Sección en U

InterApp

Fluids under control.

Construcción

1	Cuerpo (el cuello mas largo permite calorifugación)
2	El eje con indicador de posición
3	Disco
4	Asiento intercambiable con estrías de estanqueidad en zona de contacto
5	Cojinete, DN25-400 Resicoat®, DN450-1600 Bronce
6	Junta torica
7	Collar de retención



DN 750 - 1600

Valores Kv m³/h

Angulos de apertura de la válvula

Sizes	20°	30°	40°	50°	60°	70°	80°	90°
32		1,5	5	10	15	26	34	40
40		2,7	8,5	16	25	37	46	50
50	2	7	15	28	45	68	88	100
65	3	11	24	48	85	138	180	210
80	8	22	50	83	134	230	312	360
100	15	35	70	130	225	410	585	650
125	28	70	135	230	360	600	920	1050
150	33	95	205	320	580	980	1410	1620
200	60	175	355	580	910	1600	2450	2800
250	132	340	590	940	1480	2550	3950	4480
300	200	505	890	1450	2100	3800	5960	6800
350	280	680	1200	2050	3150	5050	8100	9200
400	365	860	1500	2490	3980	6600	10200	11700
450	465	1080	1900	3150	5050	8700	13300	15200
500	580	1200	2300	3740	6150	11000	16800	18900
600	820	1600	2780	5200	8940	14500	23500	26800
700	890	2050	3450	6050	11050	18800	31500	37100
800	1300	2550	4950	8750	14200	23500	39500	48500
900	1650	3300	6400	11800	19400	31500	52500	61300
1000	2150	4250	8200	15100	23500	39400	65500	80500
1200	4000	7500	12500	19800	34000	55400	98300	119200
1400	5200	10120	18200	32500	51500	89500	142000	162000
1600	7100	14210	26050	45000	71200	118500	196200	228500

Designación de la válvula

D1	0100	.	3	3	.	2AR	.	4A	.	2AR	.	E
❶	❷		❸	❹		❺		❻		❼		❽

❶	**Tipo de cuerpo**	D1	Wafer			DN25-1000
		D3	Lug body			DN25-600
		D4	Sección en U			DN150-1600
❷	**Diámetro nominal**	0025-1600	mm			
❸	**Presión de trabajo**	0	2,5 bar			
		1	6 bar			
		*	10/16bar, vea tabla inferior			
❹	**Tipo de brida**	**	PN6/10/16 vea tabla inferior. Otras normas bajo demanda			
❺	**Cuerpo**	1AE	Fundición gris EN-GJL-250, recubrimiento de Polyurethan 70µ	< 140°C		DN450-1600
		2AR	Fundición nodular EN-GJS-400-15, recubrimiento de Epoxy (Resicoat®) 200µ	< 110°C *		DN25-400
		2AE	Fundición nodular EN-GJS-400-15, recubrimiento de Polyurethan 70µ	< 140°C		DN450-1600
		2AN	Fundición nodular EN-GJS-400-15, recubrimiento de Polyurethan 250µ	< 140°C		
❻	**Eje**	4A	Acero inoxidable 1.4021, AISI420			
		4L	Acero inoxidable 1.4542 / 17-4PH			
❼	**Disco**	2AR	Fundición nodular EN-GJS-400-15, recubrimiento de Rilsan 250µ	< 90°C		DN25-700
		2AE	Fundición nodular EN-GJS-400-15, recubrimiento de Polyurethan 70µ	< 120°C		DN800-1600
		2AC	Fundición nodular EN-GJS-400-15, recubrimiento de Cromo			DN25-600
		2AH	Fundición nodular EN-GJS-400-15, recubierto de Halar min.600µ	< 70°C		
		3OD	Acero 1.0552 / GS52.3, encapsulado en Ultralene Coating ™	< 80°C, pmax. 10 ≤ DN400 / 6 bar > DN400		DN80-300, 800–1400
		4C0	Acero inoxidable 1.4408 ≈ CF8M			
		4CP	Acero inoxidable 1.4408 ≈ CF8M pulido			DN25-600
		4I0	Acero Super Duplex 1.4573			
		4S0	Acero Super austenitic 1.4588			
		5C0	Bronce aluminio ASTM B148 C95800 / G-Cu Al 10 Ni			
		7H0	Hastelloy ASTM A494 CW-12MW			
❽	**Asiento**	E	EPDM	< 95°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar	
		EE	EPDM DVGW, ACS, WRAS, EN681-1	< 80°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar	
		EC	EPDM HT	< 130°C	pmax DN25-1200 = 16 bar, DN1400-1600 = 10 bar	
		N	Nitrilo (NBR)	< 100°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar	
		H	CSM (Hypalon)	< 125°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar	
		V	FPM (Viton)	< 200°C	pmax DN25-300 = 16 bar, DN350-1600 = 10 bar	
			Asientos en otros materiales bajo demanda			

*** Presión de trabajo (Código)**

* Par temperaturas mas que 110°C hay que usar Desponia *plus*!

Otras ejecuciones bajo demanda

Material del cuerpo	DN→	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
EN-GJL-250 (1A)	6 bar																							1	
	10 bar															2									
EN-GJS-400-15 (2A)	10 bar	2																							
	16 bar	3																							

****Tipo de brida (Código)**

DESPONIA	DN→	25	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600
 D1	PN6		3																						
	PN10	3														2									
	PN16	3																							
	ANSI cl. 150		3													A									
 D3	PN10	3									2														
	PN16	3																							
	ANSI cl. 150		A																						
 D4	PN10	3									2														
	PN16	3																							
	ANSI cl. 150	A																						A	

Los limites de temperatura y presión están sujetas a las condiciones de trabajo.

Dimensiones

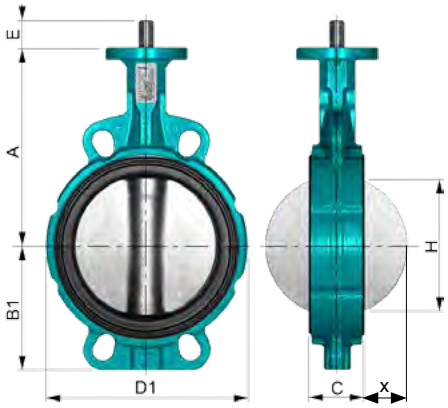
D1 Wafer, DN25-1000

DN 25/32

DN 40/50/65

DN 80/100

DN 125/150/200



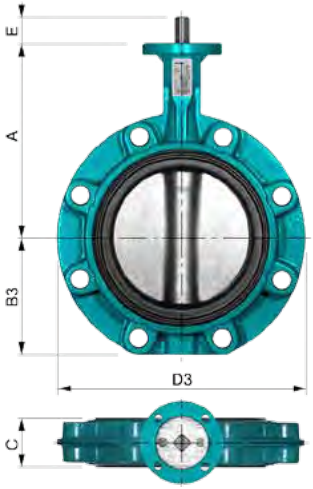
DN 250-400

DN 450-1000

DN	A	B1	C	D1	E	H*	x*	[kg]
(25)32	110	51	30	101	19	19	3	1,4
40	130	54	33	108	19	28	6	2
50	135	72	43	120	19	32	6	3
65	150	82	46	138	19	50	11	3,6
80	160	92	46	142	19	69	19	4
100	180	102	52	162	19	88	26	5,5
125	195	120	56	189	19	115	36	7,5
150	210	133	56	214	19	141	48	8,6
200	240	166	60	270	25	194	72	12,7
250	279	201	68	324	32	240	91	22,2
300	315	234	78	378	32	290	112	30,8
350	330	268	80	425	40	330	130	41,5
400	365	299	102	475	40	377	145	57,2
450	397	355	113	538	65	425	164	95
500	437	393	126	595	65	474	182	125
600	522	464	153	695	80	569	218	180
700	565	503	168	800	80	660	257	280
800	627	577	190	908	80	774	304	387
900	696	643	204	1015	100	855	337	502
1000	745	693	218	1133	100	960	383	710

*** Observe la cota H/x en especial durante el montaje de piezas de conexión hechas en plastico**

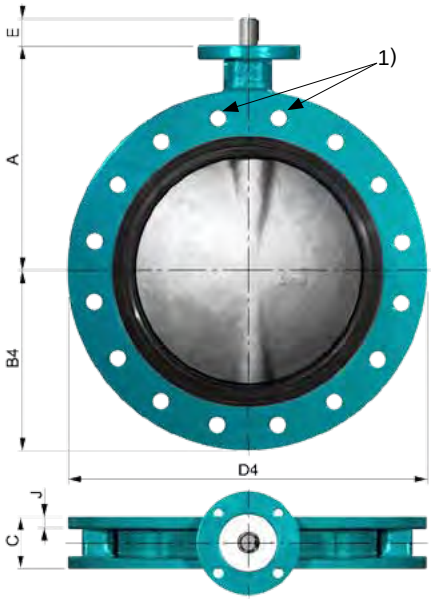
D3 Lug, DN 25-600



DN	A	B3	C	D3	E	H*	x*	[kg]
25	110	51	30	101	19	19	3	1,4
32	110	51	30	101	19	19	3	1,4
40	130	54	33	108	19	28	6	2
50	135	72	43	116	19	32	6	3,2
65	150	82	46	131	19	50	11	4
80	160	88	46	188	19	69	19	6,1
100	180	102	52	219	19	88	26	8,5
125	195	116	56	248	19	115	36	10
150	210	128	56	274	19	141	48	11
200	240	161	60	332	25	194	72	19,6
250	279	199	68	402	32	240	91	28,7
300	315	234	78	472	32	290	112	41,2
350	330	258	80	520	40	330	130	55
400	365	290	102	584	40	377	145	75
450	397	355	113	655	65	425	164	150
500	437	393	126	712	65	474	182	170
600	522	464	153	829	80	569	218	240

Dimensiones

D4 Cuerpo con sección en U, DN 150-1600

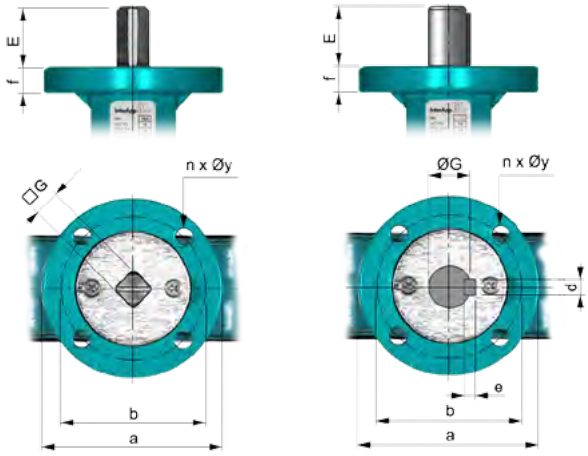


DN	A	B4	C	D4	H*	x*	J	E	[kg]
150	210	143	56	285	141	48	10	19	15
200	240	170	60	340	194	72	12,5	25	19,5
250	279	200	68	406	240	91	15	32	30,5
300	315	239	78	482	290	112	15	32	44
350	330	265	80	533	330	130	18	40	59
400	365	296	102	597	377	145	20	40	82
450	397	355	113	640	425	164	24	65	118
500	437	393	126	715	474	182	26	65	175
600	522	464	153	840	569	218	28,5	80	260
700	565	503	168	927	660	257	31,5	80	345
750	590	541	170	985	709	272	34	80	435
800	627	577	190	1060	774	304	36,5	80	510
900	696	643	204	1170	855	337	38	100	660
1000	745	693	218	1255	960	383	44	100	790
1100	820	738	218	1395	1054	429	44	100	850
1200	881	806	254	1485	1149	462	47	120	1180
1400	990	908	280	1746	1336	543	40	120	1700
1600	1117	1048	318	1924	1553	634	50	155	2600

1) DN 450 - 1600, 2x La rosca en la zona del eje arriba y abajo

Platina según la ISO 5211

DN 25-400 **DN 450-1600**



DN	E	G	d	e	f	ISO	a	b	n x øy
25-40	19	□ 8	-	-	12	F07	90	70	4 x 9
50-100	19	□ 11	-	-	12	F07	90	70	4 x 9
125-150	19	□ 14	-	-	12	F07	90	70	4 x 9
200	25	□ 17	-	-	12	F07	90	70	4 x 9
250-300	32	□ 22	-	-	18	F10/F12	155	102/125	4 x 11 / 4 x 13
350	40	□ 22	-	-	18	F12	155	125	4 x 13
400	40	□ 27	-	-	18	F12	155	125	4 x 13
450-500	65	Ø 45	14	9	25	F14	175	140	4 x 18
600	80	Ø 70	20	12	25	F16	220	165	4 x 22
700	80	Ø 70	20	12	25	F25	300	254	8 x 18
(750)	80	Ø 70	20	12	30	F25	300	254	8 x 18
800	80	Ø 70	20	12	30	F25	300	254	8 x 18
900	100	Ø 80	22	14	30	F30	350	298	8 x 22
1000	100	Ø 80	22	14	30	F30	350	298	8 x 22
(1100)	100	Ø 80	22	14	30	F30	350	298	8 x 22
1200	120	Ø 100	28	16	30	F30	350	298	8 x 22
1400	120	Ø 120	32	18	35	F30	350	298	8 x 22
1600	155	Ø 130	32	18	40	F35	418	356	8 x 33,5

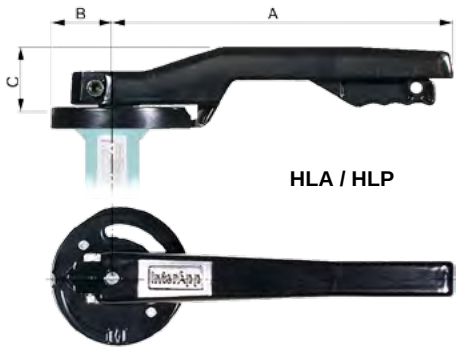
En montajes al final de la línea tenga en cuenta:

- Tipo del cuerpo	**D3** posible sin contra brida
	D4 solo con contra brida
- Material de cuerpo	**2A** (EN-GJS-400-15)
- Medio	solo liquidos, 10÷30ºC
- Presión de trabajo max (con disco 16 bar)	DN25-200 10 bar
	DN250-600 6 bar
	DN700-1400 2,5 bar
- Golpes de ariete no permitidos !!!	

Observe por favor nuestra documentación de tablas para bridas

Dimensiones

Palanca (DN25-300)



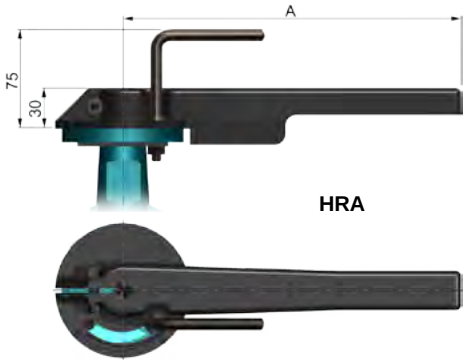
HLA / HLP

Aluminio, recubrimiento Epoxi

DN		A	B	C	[kg]
25-40	**HLA.F0708.180**	180	45,5	41	0,4
50-65	**HLA.F0711.180**	180	45,5	41	0,4
80-100	**HLA.F0711.240**	243	45,5	43	0,5
125-150	**HLA.F0714.340**	340	45,5	51	0,6
200	**HLA.F0717.340**	340	45,5	51	0,6
250-300	**HLA.F1222.500**	500	77,5	40	2,2

Polyamida PA6 con 30% de fibra larga

DN		A	B	C	[kg]
25-40	**HLP.F0708.240**	243	45,5	41	0,3
50-65	**HLP.F0711.240**	243	45,5	41	0,3
80-100	**HLP.F0711.240**	243	45,5	43	0,3
125-150	**HLP.F0714.340**	340	45,5	51	0,5
200	**HLP.F0717.340**	340	45,5	51	0,5

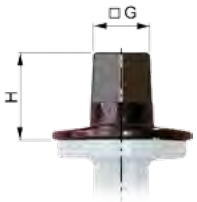


HRA

Aluminio, recubrimiento Epoxi

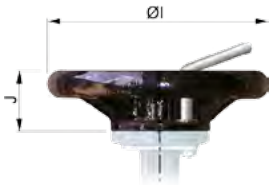
DN		A	[kg]
25-40	**HRA.F0708.180**	180	0,4
50-65	**HRA.F0711.180**	180	0,4
80-100	**HRA.F0711.250**	250	0,5
125-150	**HRA.F0714.340**	340	0,6
200	**HRA.F0717.340**	340	0,6

Mando fontanero (DN25-200)



DN		G	H
25-40	**PO.F0708.30**	30	65
50-100	**PO.F0711.30**	30	65
125-150	**PO.F0714.30**	30	65
200	**PO.F0717.30**	30	65

Volante (DN25-150)

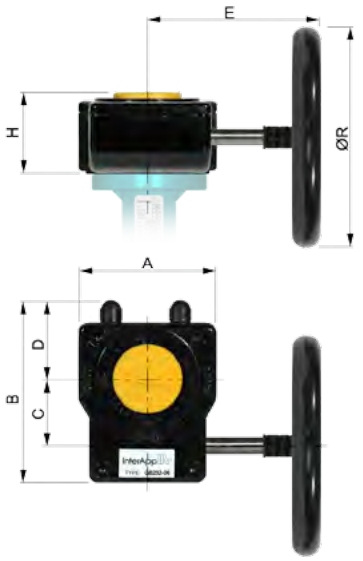


DN		I	J
25-40	**HW.F0708.200**	200	52
50-100	**HW.F0711.200**	200	52
125-150	**HW.F0714.250**	250	52

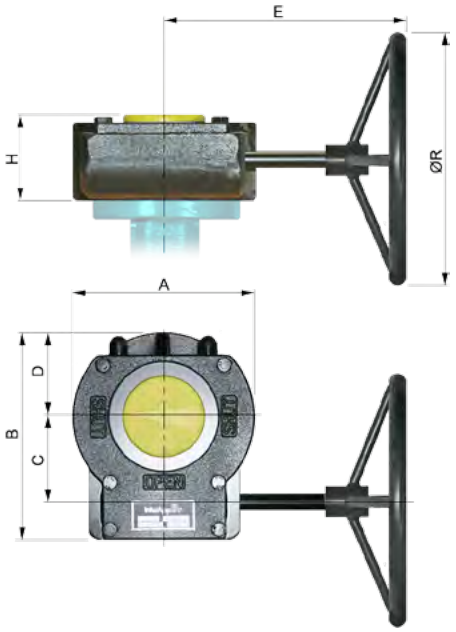
Dimensiones

Reductores

GB 232



GB1250-6800



Para liquidos p_{max} DN25-300 ...16 bar, DN350-1600 ... 10 bar

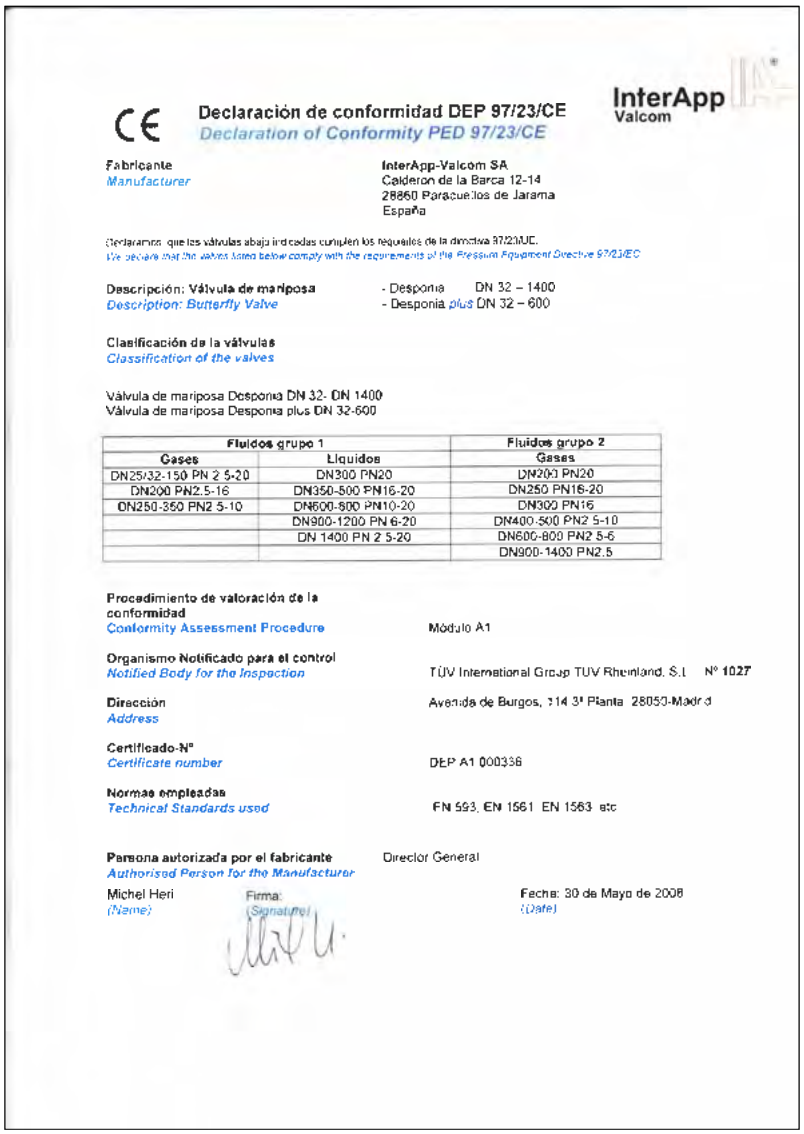
DN		A	B	C	D	E	H	ØR	n*	[kg]
25-40	**GB232-05.F05-F0711.100(R08)**	80	114	42,5	48	121	53	100	10	0,8
50-100	**GB232-05.F05-F0711.100**	80	114	42,5	48	121	53	100	10	0,8
125-150	**GB232-05.F05-F0714.100**	80	114	42,5	48	121	53	100	10	0,8
200	**GB232-06.F05-F0717.160**	80	114	42,5	48	180	59	160	10	0,9
250-300	**GB232-08.F07-F1022.250**	100	131	50	56	216	67	250	9,25	1,55
350	**GB232-13.F10-F1222.300**	175	209	80	83	361	84	300	10	5,4
400	**GB232-13.F10-F1227.500**	175	209	80	83	396	84	500	10	5,4
450	**GB232-14.F1445.600**	175	209	80	83	396	84	600	10	5,4
500	**GB1250N.F1445.500**	220	258	105	110	347	100	500	13,75	22
600	**GB1250N.F1665.700-SH100**	220	258	105	110	447	100	700	13,75	22
700	**GB1950N/HR.F2570.600**	285	402,5	211	142,5	387	155	600	21	32
750	**GB1950N/HR.F2570.700-SH100**	285	402,5	211	142,5	487	155	600	21	32
800	**GB1950N/HR.F2570.700-SH100**	285	402,5	211	142,5	487	155	700	21	32
900	**GB6800N/SP4.F3080.500**	370	482	263	170	500	160	500	79,25	70
1000	**GB6800N/SP4.F3080.500**	370	482	263	170	500	160	500	79,25	70
1100	**GB6800N/SP4.F3080.500**	370	482	263	170	500	160	500	79,25	70
1200	**GB6800N/SP4.F30100.500**	370	482	263	170	500	160	500	79,25	70
1400	**GBA250G/SP9.F30120.800**	510	725	431	235	629	169	800	176	225
1600	**GBA250G/SP9.F35130.800**	510	725	431	235	629	169	800	176	225

* n = Vueltas del volante de apertura/cierre

Material:
GB232 :Aluminio,recubrimiento de poliuretano
GB880-GB6800 :Fundindo, recubrimiento de poliuretano

Mas documentación

Actuadores neumáticos, Actuadores eléctricos, Accesorios en hojas separados.
Instrucciones de instalación, Instrucciones de mantenimiento, Tablas de bridas: Observe por favor estas instrucciones para la instalación y mantenimiento de nuestras válvulas.



CE

Declaración de conformidad DEP 97/23/CE
Declaration of Conformity PED 97/23/CE

InterApp Valcom

Fabricante
Manufacturer

InterApp-Valcom SA
Calderon de la Barca 12-14
28860 Paracuellos de Jarama
España

Declaramos que las válvulas abajo indicadas cumplen los requisitos de la directiva 97/23/UE.
We declare that the valves listed below comply with the requirements of the Pressure Equipment Directive 97/23/EC

Descripción: Válvula de mariposa
Description: Butterfly Valve

- Desponia DN 32 – 1400
- Desponia *plus* DN 32 – 600

Clasificación de la válvulas
Classification of the valves

Válvula de mariposa Desponia DN 32- DN 1400
Válvula de mariposa Desponia plus DN 32-600

Fluidos grupo 1		Fluidos grupo 2
Gases	Líquidos	Gases
DN25/32-150 PN 2.5-20	DN300 PN20	DN200 PN20
DN200 PN2.5-16	DN350-500 PN16-20	DN250 PN16-20
DN250-350 PN2.5-10	DN600-800 PN10-20	DN300 PN16
	DN900-1200 PN 6-20	DN400-500 PN2.5-10
	DN 1400 PN 2.5-20	DN600-800 PN2.5-6
		DN900-1400 PN2.5

Procedimiento de valoración de la conformidad
Conformity Assessment Procedure
Módulo A1

Organismo Notificado para el control
Notified Body for the Inspection
TÜV International Group TUV Rheinland, S.L Nº 1027

Dirección
Address
Avenida de Burgos, 114 3ª Planta 28050-Madrid

Certificado-Nº
Certificate number
DEP A1 000336

Normas empleadas
Technical Standards used
EN 593, EN 1561 EN 1563 etc

Persona autorizada por el fabricante
Authorised Person for the Manufacturer
Director General

Michel Heri
(Name)

Firma:
(Signature)

Fecha: 30 de Mayo de 2008
(Date)

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avk@avkvalvulas.com

DESPONIA plus - Válvula de mariposa DN 25 - 600

Descripción

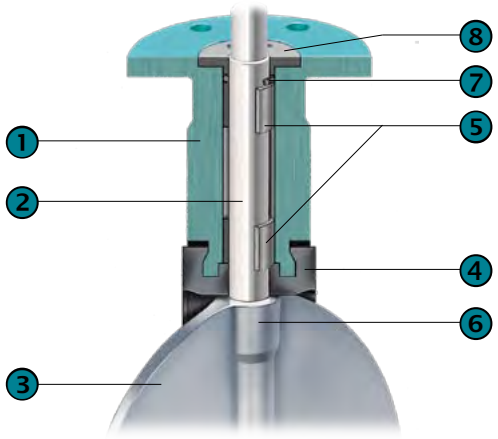
Válvula de mariposa de eje centrado con elastómero, para líquidos y gases de la industria, servicios generales, tratamiento de agua.

Características del Producto

• Construcción del Cuerpo	DP1 Wafer DN 25-600 DP3 Lug DN 50-400
• Dimensiones „cara a cara“	según ISO 5752/20, EN 558-1/20
• Brida superior	de acuerdo a EN ISO 5211
• Presión maxima de trabajo	16/20 bar
• Norma de Brida	PN6, PN10, PN16, PN25, ANSI cl. 150
• Rango de Temperatura	Standard -40°C ÷ 200°C según material
• Test de Estanqueidad	índice A de fuga de agua, según EN 12266-1/P12.
CE	Las válvulas de mariposa DESPONIA plus están sujetas a los requisitos de seguridad de la Directiva de Equipos a Presión 97/23/EC (PED) apéndice 1 para fluidos de los grupos 1 y 2.
SIL	Válvulas DESPONIA plus se pueden utilizar en sistemas relacionados con la seguridad según IEC 61508 / 61511, Nivel de Integridad de Seguridad SIL 2

DP1

DP3



Construcción

1	Cuerpo (cuello largo que permite el aislamiento de la válvula)
2	Seguro de no expulsión del eje con indicador de posición
3	Disco
4	Asiento intercambiable con ranuras de sellado en la zona de contacto con bridas.
5	Casquillo del eje autolubricante
6	Arrastre del disco mediante cuadradillo
7	Sellado exterior del eje
8	Collar de retención del eje

Codificación de la válvula

DP1	100	. 3	3 .	2AE	. 4A	. 2AR	. E
❶	❷	❸	❹	❺	❻	❼	❽

❶	**Tipo de Cuerpo**	DP1	Wafer		DN25-600
		DP3	Lug		DN50-400
❷	**Diámetro Nominal**	025-600	mm		
❸	**Presión de Trabajo**	→	1 = 6 bar, 2 = 10bar, 3 = 16bar, 4 = 20bar (solo con cuerpo en 3HE ó 4C0)		
❹	**Norma de Brida**	→	1 = PN6, 2 = PN10, 3 = PN16, A = ANSI cl. 150, 5 = PN25 bajo demanda		
❺	**Cuerpo**	2AE	Fundición Nodular EN-GJS-400-15, recubrimiento Polyurethan 70µ	< 140°C	DP1+DP3, DN25-400
		3HE	Fundición de Acero GP240GH, 1.0619, recubrimiento Polyurethan 70µ	< 140°C	DP1 DN50-600, DP3 DN50-300
		4C0	Acero Inoxidable 1.4408, AISI316		DP1 DN50-600, DP3 DN50-300
❻	**Eje**	4A	Acero Inoxidable 1.4021, AISI420		
		4L	Acero Inoxidable 1.4542 / 17-4PH		
❼	**Disco**	2AR	Fundición Nodular EN-GJS-400-15, recubrimiento Rilsan 250µ	< 90°C	DN25-400
		2AE	Fundición Nodular EN-GJS-400-15, recubrimiento Polyurethan 70µ	< 120°C	DN25-400
		3HE	Fundición de Acero GP240GH, 1.0619, recubrimiento Polyurethan 70µ	< 120°C	DN250-600
		3OD	Acero 1.0552 / GS52.3, encapsulado en Ultralene Coating ™ < 80°C, pmax. 10 ≤ DN400 / 6 bar > DN400		DN80-300, 800–1400
		4C0	Acero Inoxidable 1.4408, AISI316		DN25-600
		4CP	Acero inoxidable 1.4408, AISI316, pulido		
		4S0	Acero Super austenitic 1.4588		DN40-400
		5C0	Bronce-Aluminio ASTM B148 C95800 / G-Cu Al 10 Ni		DN25-600
		7H0	Hastelloy ASTM A494 CW-12MW		DN40-400
❽	**Asiento**	→	E = EPDM < 95°C	EC = EPDM HT < 130°C	V = FPM (Viton) < 200°C
			N = Nitril (NBR) < 100°C	H = CSM (Hypalon) < 125°C	
			Asientos en otros materiales bajo demanda		S = MVQ (Silicon) <200°C <6bar

Los limites de temperatura y presión están sujetas a las condiciones de trabajo.

Al montar la válvula al final de una línea por favor tenga en cuenta:

- Tipo de Cuerpo	DP3	
- Medio	Sólo líquidos 10-30°C	
- Presión Máxima de trabajo	DN25-200	10 bar
(con Disco a 16 bar)	DN250-600	6 bar
- Sin golpe de Ariete !!!		

Por favor consulte nuestro documento de Bridas

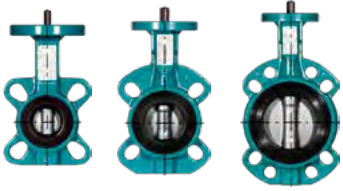
InterApp®

Fluids under control.

Dimensiones

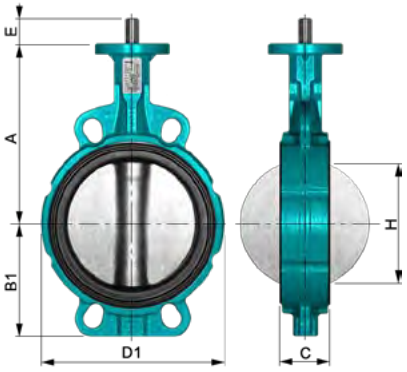
DP1 Wafer, DN 25-600

DN25/32 DN40/50/65 DN80/100



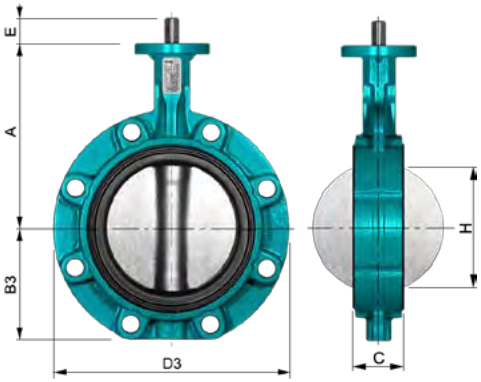
DN250-400 DN450-600

DN125/150/200



DN	A	B1	C	D1	E	H*	x*	[kg]
25/32	110	51	30	101	19	19	3	1,4
40	130	54	33	108	19	28	6	2,0
50	135	72	43	120	19	32	6	3,0
65	150	82	46	138	19	50	11	3,6
80	160	92	46	142	19	69	19	4,0
100	180	102	52	162	19	88	26	5,5
125	195	120	56	189	19	115	36	7,5
150	210	133	56	214	19	141	48	8,6
200	240	166	60	270	25	194	72	12,7
250	279	201	68	324	32	240	91	22,2
300	315	234	78	378	32	290	112	30,8
350	330	268	80	425	40	330	130	41,5
400	365	299	102	475	40	377	145	57,2
450	397	355	113	538	65	425	164	95,0
500	437	393	126	595	65	474	182	125
600	522	464	153	695	80	569	218	180

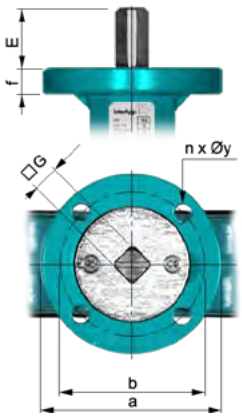
DP3 LUG, DN 50-400



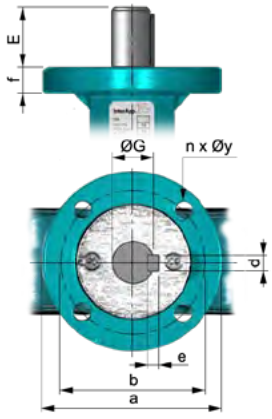
DN	A	B3	C	D3	E	H*	x*	[kg]
50	135	72	43	116	19	32	6	3,2
65	150	82	46	131	19	50	11	4,0
80	160	88	46	188	19	69	19	6,1
100	180	102	52	219	19	88	26	8,5
125	195	116	56	248	19	115	36	10,0
150	210	128	56	274	19	141	48	11,0
200	240	161	60	332	25	194	72	19,6
250	279	199	68	402	32	240	91	28,7
300	315	234	78	472	32	290	112	41,2
350	330	258	80	520	40	330	130	55,0
400	365	290	102	584	40	377	145	75,0

Brida superior según EN ISO 5211

DN 25-400



DN 450-600



DN	E	G	d	e	f	ISO	a	b	n x øy
25/32	19	□ 8	-	-	12	F07	90	70	4 x 9
40	19	□ 8	-	-	12	F07	90	70	4 x 9
50	19	□ 11	-	-	12	F07	90	70	4 x 9
65	19	□ 11	-	-	12	F07	90	70	4 x 9
80	19	□ 11	-	-	12	F07	90	70	4 x 9
100	19	□ 11	-	-	12	F07	90	70	4 x 9
125	19	□ 14	-	-	12	F07	90	70	4 x 9
150	19	□ 14	-	-	12	F07	90	70	4 x 9
200	25	□ 17	-	-	12	F07	90	70	4 x 9
250	32	□ 22	-	-	18	F10/F12	155	102/125	4 x 10 / 4 x 13
300	32	□ 22	-	-	18	F10/F12	155	102/125	4 x 10 / 4 x 13
350	40	□ 22	-	-	18	F12	155	125	4 x 13
400	40	□ 27	-	-	18	F12	155	125	4 x 13
450	65	ø 45	14	9	25	F14	175	140	4 x 18
500	65	ø 45	14	9	25	F14	175	140	4 x 18
600	80	ø 70	20	12	25	F16	220	165	4 x 22

Documentación adicional

Actuadores neumáticos, eléctricos y accesorios según hojas de datos separadas. **Instrucciones de Instalación, Instrucciones de mantenimiento, Bridas:** Por favor consulte estas instrucciones para la instalación y mantenimiento de nuestras válvulas de mariposa.

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BIANCA - Válvulas de mariposa con asiento de ULTRAFLON®

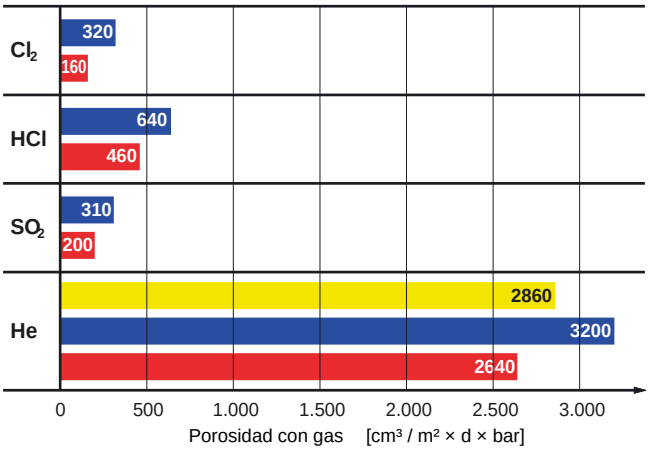
Máxima resistencia a la difusión. Para larga vida útil y mayor seguridad de servicio

Ácidos altamente concentrados y gases agresivos pueden difundir por los asientos usuales de PTFE y, tras un breve período de aplicación, atacar e incluso destruir el empaque de estanquiedad así como la parte interior de la caja. El proceso de difusión se acelera, sobre todo, en combinación con temperaturas elevadas.

Las consecuencias son; falta de estanqueidad en el eje así como pares de apriete más elevados de la válvula por el efecto del endurecimiento del asiento. La seguridad funcional deja de ser garantizada. Con el nuevo asiento **ULTRAFLON®** que puede suministrarse como opción en la **válvula de mariposa BIANCA**, gracias a la estructura polimérica más densa, se impide eficazmente la difusión de ácidos concentrados y gases agresivos, garantizándose un funcionamiento perfecto de la válvula con, una vida útil más prolongada. El usuario se beneficia de más alta seguridad de servicio al tratar productos agresivos y ultra puros.

Porosidad con gas

Comparación de ULTRAFLON® - PTFE - PFA
(Espesor de la placa de ensayo 1mm)



Fluencia en frío más reducida - Garantiza una estanqueidad permanente

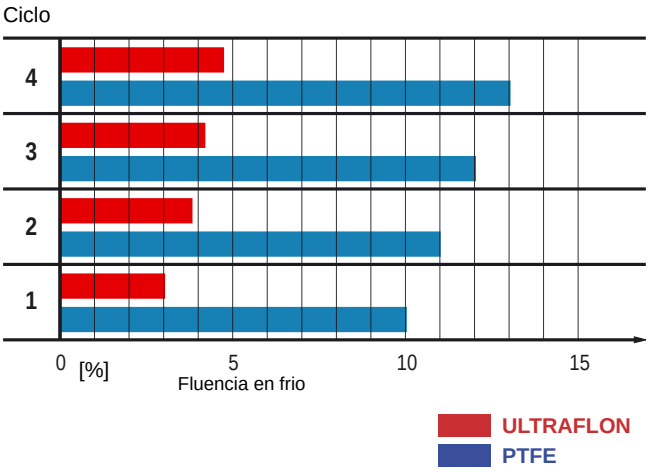
Por el efecto de la compresión de las superficies de estanqueidad exteriores de un asiento fabricado completamente de PTFE entre las caras de cierre de la brida, el PTFE usual tiene la tendencia a "fluir" en la zona menos sujeta a carga. Este proceso se designa como fluencia en frío. La parte no peinada del asiento en la caja (si es que existe) fluye hacia el exterior radial con respecto a la línea. Se requieren reaprietes a intervalos regulares de las bridas a fin evitar fugas hacia el exterior. El reapriete repetido de las bridas, sin embargo, puede conducir al cizallamiento del asiento. Elevados ciclos de maniobras producen adicionalmente una fluencia en frío en el contorno interior del asiento en dirección hacia el manguito de soporte. El plano de estanqueidad se deforma en un contorno cóncavo. Las consecuencias de ello son fugas en la línea de tuberías así como hacia el exterior.

El nuevo asiento de **ULTRAFLON®** que puede adquirirse como opción en la **válvula de mariposa BIANCA**, gracias a la mayor densidad polimérica, ofrece una deformación fría claramente reducida. Con ello se aminora eficazmente la fluencia en frío y queda garantizado un perfecto funcionamiento de la válvula con, simultáneamente, una vida útil más prolongada. Gracias a la alta estabilidad del asiento ULTRAFLON®, el mismo se recomienda en el sector de aplicaciones de vacío. El usuario se beneficia de una incrementada seguridad de servicio en el manejo de productos agresivos y ultra puros.

Deformación

bajo repetición de carga “fluencia en frio”

Carga : 15 N/mm², 4 ciclos
Duración : 100 horas por ciclo
Temperatura : 23°C (73°F)
Deformación residual después de 24h



InterApp®

Fluids under control.

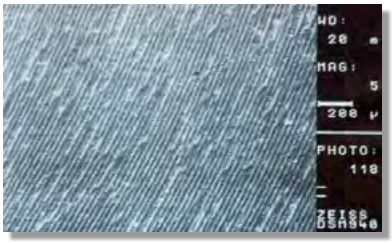
Las mejores propiedades de fricción, desgaste significativamente inferior

El nuevo asiento de **ULTRAFLON®** (opcional) sobresale por una estructura polimérica más densa así como por una dureza Shore más alta y, tras el procesamiento mecánico, resulta en una superficie significativamente más lisa que los asientos usuales de PTFE. Tiene una mejor resistencia al desgarre y a la tracción. El asiento sinterizado subraya las óptimas características mecánicas en aplicaciones con temperaturas elevadas, elevados ciclos de maniobras y, sobre todo, en aplicaciones del sector High-Purity. Al mismo tiempo se conserva sin modificar la elevada estabilidad térmica y resistencia química.
En combinación con las más severas tolerancias de fabricación, la válvula de mariposa **Bianca** con el asiento de **ULTRAFLON®** ofrece la más reducida fricción de material entre el asiento y disco. Ensayos continuos demuestran que la disolución de partículas de fricción en el producto queda intensamente reducida. El desgaste, significativamente menor, conduce a una vida útil más duradera de la válvula y garantiza con ello una seguridad de servicio más elevada con simultánea reducción de los costes de mantenimiento.

La superficie de un
asiento de PTFE
sin mecanizado aumentada 25 veces

La superficie de un
asiento de ULTRAFLON®
sin mecanizado aumentada 25 veces

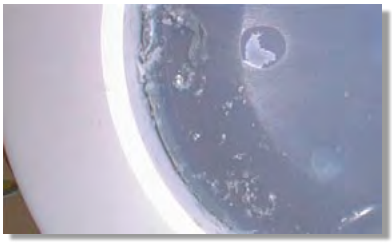
La limitación de partículas tras la sinterización puede todavía reconocerse claramente en el material PTFE. La superficie del manguito de ULTRAFLON® muestra tras el sinterizado una estructura homogénea sin limitación de partículas.



La superficie de un
asiento de PTFE
mecanizado y aumentado 50 veces

La superficie de un
asiento de ULTRAFLON®
mecanizado y aumentado 50 veces

Tras la mecanización, el asiento de ULTRAFLON® tiene una superficie significativamente más lisa que el manguito de PTFE. La naturaleza de la superficie reduce adicionalmente la fricción.



Desgaste en asientos usuales
de PTFE

Desgaste mínimo en asientos
de ULTRAFLON®

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