

Butterfly Valve EUROSTOP - Buried type



Flanged Butterfly Valve (flange-flange) with joint in the automatic butterfly (JPA) with double eccentricity and long spacing between the flanges.

Ductile iron body and butterfly covered with blue epoxy powder thickness 250 microns mini average according prescriptions of EN 14901-1 (PECB).

Range from DN150 to DN2000mm for pressures of PFA10 to 25 bar.

The EUROSTOP butterfly valve is available in different configuration: manual, buried service, motorized and motorizable (for this three last configuration see the specific TDS).

Version with gearbox without mechanical position indicator but with watertight seal cover.

DN (mm)	Closing direction	Version	PN 10		PN 16		PN 25	
			Mass (kg)	References	Mass (kg)	References	Mass (kg)	References
150	Clockwise	Bare shaft	35.00	RPB15NFCH	35.00	RPB15NFCH	39.00	RPB15NFDH
200	Clockwise	Bare shaft	46.00	RPB20NFBH	46.00	RPB20NFAH	63.00	RPB20NFDH
250	Clockwise	Bare shaft	67.00	RPB25NFBH	67.00	RPB25NFAH	88.00	RPB25NFDH
300	Clockwise	Bare shaft	86.00	RPB30NFBH	88.00	RPB30NFAH	120.00	RPB30NFDH
350	Clockwise	Bare shaft	111.00	RPB35NFBH	132.00	RPB35NFAH	174.00	RPB35NFDH
400	Clockwise	Bare shaft	139.00	RPB40NFBH	145.00	RPB40NFAH	221.00	RPB40NFDH
450	Clockwise	Bare shaft	183.00	RPB45NFBH	207.00	RPB45NFAH	300.00	RPB45NFDH
500	Clockwise	Bare shaft	215.00	RPB50NFBH	265.00	RPB50NFAH	348.00	RPB50NFDH

DN (mm)	Closing direction	Version	PN 10		PN 16		PN 25	
			Mass (kg)	References	Mass (kg)	References	Mass (kg)	References
600	Clockwise	Bare shaft	302.00	RPB60NFBH	385.00	RPB60NFAH	515.00	RPB60NFDH
700	Clockwise	Bare shaft	453.00	RPB70NFBH	543.00	RPB70NFAH	715.00	RPB70MFDH
800	Clockwise	Bare shaft	580.00	RPB80NFBH	986.00	RPB80MFAH	1243.00	RPB80MFDH
900	Clockwise	Bare shaft	861.00	RPB90MFBH	910.00	RPB90MFAH	1693.00	RPB90MFDH
1000	Clockwise	Bare shaft	1249.00	RPC10MFBH	1479.00	RPC10MFAH		
1200	Clockwise	Bare shaft	1831.00	RPC12MFBH	2357.00	RPC12MFAH		
1400	Clockwise	Bare shaft	2515.00	RPC14MFBH				
1500	Clockwise	Bare shaft	2873.00	RPC15MFBH				
1600	Clockwise	Bare shaft	3470.00	RPC16MFBH				
1800	Clockwise	Bare shaft	4.97	RPC18MFBH				

Version with gearbox without mechanical position indicator but with watertight seal cover

DN (mm)	Closing direction	Version	PN 10		PN 16		PN 25	
			Mass (kg)	References	Mass (kg)	References	Mass (kg)	References
150	Anti-Clockwise	Cap	36.00	223968	36.00	223968	43.00	224006
150	Anti-Clockwise	Bare shaft	36.00	RPB15NRAH	36.00	RPB15NRAH		
200	Anti-Clockwise	Cap	49.00	223994	49.00	223982	73.00	224007
200	Anti-Clockwise	Bare shaft	49.00	RPB20NRBH	49.00	RPB20NRAH	73.00	RPB20NRDH
250	Anti-Clockwise	Cap	81.00	223995	81.00	223983	93.00	224008
250	Anti-Clockwise	Bare shaft	81.00	RPB25NRBH	81.00	RPB25NRAH	93.00	RPB25NRDH
300	Anti-Clockwise	Cap	101.00	223996	101.00	223984	138.00	224009
300	Anti-Clockwise	Bare shaft	101.00	RPB30NRBH	101.00	RPB30NRAH	138.00	RPB30NRDH
350	Anti-Clockwise	Cap	123.00	223997	150.00	223985	213.00	224010
350	Anti-Clockwise	Bare shaft	123.00	RPB35NRBH	150.00	RPB35NRAH	213.00	RPB35NRDH
400	Anti-Clockwise	Cap	159.00	223998	216.00	223986	249.00	224011
400	Anti-Clockwise	Bare shaft	159.00	RPB40NRBH	216.00	RPB40NRAH	249.00	RPB40NRDH
450	Anti-Clockwise	Cap	223.00	223999	252.00	223987	280.00	224012
450	Anti-Clockwise	Bare shaft	223.00	RPB45NRBH	252.00	RPB45NRAH	280.00	RPB45NRDH
500	Anti-Clockwise	Cap	254.00	224000	307.00	223988	404.00	224013
500	Anti-Clockwise	Bare shaft	254.00	RPB50NRBH	307.00	RPB50NRAH	404.00	RPB50NRDH
600	Anti-Clockwise	Cap	319.00	224001	476.00	223989	636.00	224014
600	Anti-Clockwise	Bare shaft	319.00	RPB60NRBH	476.00	RPB60NRAH	636.00	RPB60NRDH
700	Anti-Clockwise	Cap	497.00	224002	675.00	223990	975.00	224016
700	Anti-Clockwise	Bare shaft	497.00	RPB70NRBH	675.00	RPB70NRAH	975.00	RPB70MRDH

DN (mm)	Closing direction	Version	PN 10		PN 16		PN 25	
			Mass (kg)	References	Mass (kg)	References	Mass (kg)	References
800	Anti-Clockwise	Cap	793.00	224003	986.00	223991	1243.00	224015
800	Anti-Clockwise	Bare shaft	793.00	RPB80NRBH	986.00	RPB80MRAH	1243.00	RPB80MRDH
900	Anti-Clockwise	Cap	861.00	224004	1152.00	223992	1693.00	224017
900	Anti-Clockwise	Bare shaft	861.00	RPB90MRBH	1152.00	RPB90MRAH		
1000	Anti-Clockwise	Cap	1249.00	224005	1479.00	223993	2091.00	224018
1000	Anti-Clockwise	Bare shaft	1249.00	RPC10MRBH			2091.00	203188
1200	Anti-Clockwise	Cap	1831.00	266337	2357.00	266338		
1200	Anti-Clockwise	Bare shaft	1831.00	RPC12MRBH			3400.00	203199

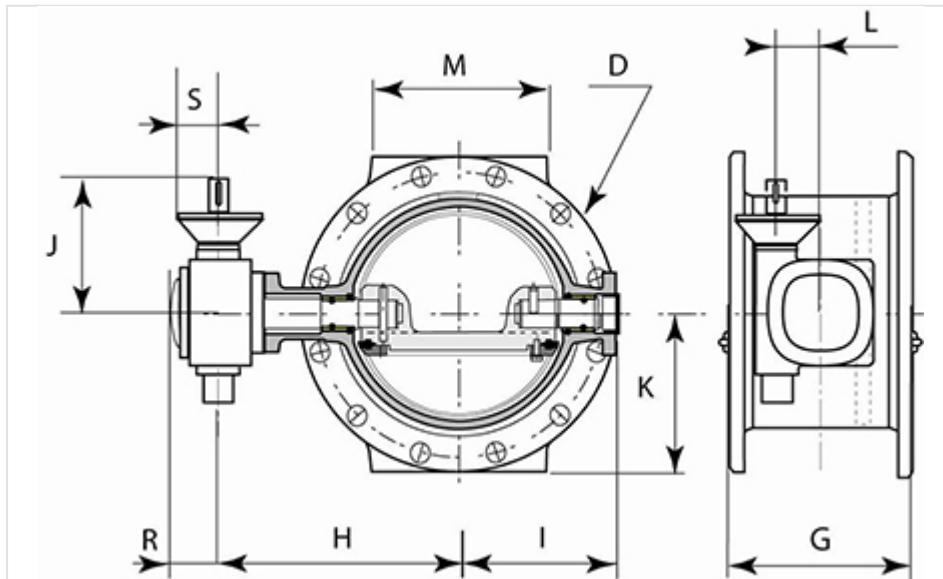
General dimensions

DN (mm)	PN	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	M (mm)	D (mm)	R (mm)	S (mm)	References
150	10 16	210	217	142.9	165	143	63	150	285	62	62.5	223968
150	25	210	219	147.9	165	150	63	150	300	62	62.5	224006
150	10 16	210	217	142.9	165	143	63	150	285	62	62.5	RPB15NFCH
150	25	210	219	147.9	165	150	63	150	300	62	62.5	RPB15NFDH
150	10 16	210	217	142.9	165	143	63	150	285	62	62.5	RPB15NRAH
200	10	230	241	171	165	170	63	180	340	62	62.5	223994
200	16	230	241	171.9	165	170	63	180	340	62	62.5	223982
200	25	230	219	190.3	165	180	63	180	360	62	62.5	224007
200	10	230	241	171	165	170	63	180	340	62	62.5	RPB20NFBH
200	16	230	241	171.9	165	170	63	180	340	62	62.5	RPB20NFAH
200	25	230	219	190.3	165	180	63	180	360	62	62.5	RPB20NFDH
200	10	230	241	171	165	170	63	180	340	62	62.5	RPB20NRBH
200	16	230	241	171.9	165	170	63	180	340	62	62.5	RPB20NRAH
200	25	230	219	190.3	165	180	63	180	360	62	62.5	RPB20NRDH
250	10	250	294	215.3	165	200	63	230	400	62	62.5	223995
250	16	250	294	215.3	165	200	63	230	400	62	62.5	223983
250	25	250	297	214.3	162	213	63	230	425	62	62.5	224008
250	10	250	294	215.3	165	200	63	230	400	62	62.5	RPB25NFBH
250	16	250	294	215.3	165	200	63	230	400	62	62.5	RPB25NFAH
250	25	250	297	214.3	162	213	63	230	425	62	62.5	RPB25NFDH
250	10	250	294	215.3	165	200	63	230	400	62	62.5	RPB25NRBH
250	16	250	294	215.3	165	200	63	230	400	62	62.5	RPB25NRAH
250	25	250	297	214.3	162	213	63	230	425	62	62.5	RPB25NRDH

DN (mm)	PN	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	M (mm)	D (mm)	R (mm)	S (mm)	References
300	10	270	318	239.3	165	228	63	250	455	62	62.5	223996
300	16	270	318	239.3	162	228	63	250	455	62	62.5	223984
300	25	270	321	260.4	162	243	63	250	485	62	62.5	224009
300	10	270	318	239.3	165	228	63	250	455	62	62.5	RPB30NFBH
300	16	270	318	239.3	162	228	63	250	455	62	62.5	RPB30NFAH
300	25	270	321	260.4	162	243	63	250	485	62	62.5	RPB30NFDH
300	10	270	318	239.3	165	228	63	250	455	62	62.5	RPB30NRBH
300	16	270	318	239.3	162	228	63	250	455	62	62.5	RPB30NRAH
300	25	270	321	260.4	162	243	63	250	485	62	62.5	RPB30NRDH
350	10	290	340	258.3	162	253	63	260	505	62	62.5	223997
350	16	290	340	280.4	162	260	63	260	520	62	62.5	223985
350	25	290	376	290.4	170	278	80	310	555	66	62.5	224010
350	10	290	340	258.3	162	253	63	260	505	62	62.5	RPB35NFBH
350	16	290	340	280.4	162	260	63	260	520	62	62.5	RPB35NFAH
350	25	290	376	290.4	170	278	80	310	555	66	62.5	RPB35NFDH
350	10	290	340	258.3	162	253	63	260	505	62	62.5	RPB35NRBH
350	16	290	340	280.4	162	260	63	260	520	62	62.5	RPB35NRAH
350	25	290	376	290.4	170	278	80	310	555	66	62.5	RPB35NRDH
400	10	310	371	311.4	162	283	63	310	565	62	62.5	223998
400	16	310	407	322.4	66	290	80	310	580	66	62.5	223986
400	25	310	425	321.4	230	310	100	310	620	84	62.5	224011
400	10	310	371	311.4	162	283	63	310	565	62	62.5	RPB40NFBH
400	16	310	407	322.4	66	290	80	310	580	66	62.5	RPB40NFAH
400	25	310	425	321.4	230	310	100	310	620	84	62.5	RPB40NFDH
400	10	310	371	311.4	162	283	63	310	565	62	62.5	RPB40NRBH
400	16	310	407	322.4	66	290	80	310	580	66	62.5	RPB40NRAH
400	25	310	425	321.4	230	310	100	310	620	84	62.5	RPB40NRDH
450	10	330	427	342.4	170	308	80	340	615	66	62.5	223999
450	16	330	427	342.4	66	320	80	340	640	66	62.5	223987
450	25	330	471	371.4	299	335	100	340	670	84	62.5	224012
450	10	330	427	342.4	170	308	80	340	615	66	62.5	RPB45NFBH
450	16	330	427	342.4	66	320	80	340	640	66	62.5	RPB45NFAH
450	25	330	471	371.4	299	335	100	340	670	84	62.5	RPB45NFDH
450	10	330	427	342.4	170	308	80	340	615	66	62.5	RPB45NRBH

DN (mm)	PN	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	M (mm)	D (mm)	R (mm)	S (mm)	References
450	16	330	427	342.4	66	320	80	340	640	66	62.5	RPB45NRAH
450	25	330	471	371.4	299	335	100	340	670	84	62.5	RPB45NRDH
500	10	350	452	367.5	170	335	80	320	670	66	62.5	224000
500	16	350	470	367.4	230	358	100	320	715	84	62.5	223988
500	25	350	498	398.5	299	365	100	320	730	84	62.5	224013
500	10	350	452	367.4	170	335	80	320	670	66	62.5	RPB50NFBH
500	16	350	470	367.4	230	358	100	320	715	84	62.5	RPB50NFAH
500	25	350	498	398.5	299	365	100	320	730	84	62.5	RPB50NFDH
500	10	350	452	367.4	170	335	80	320	670	66	62.5	RPB50NRBH
500	16	350	470	367.4	230	358	100	320	715	84	62.5	RPB50NRAH
500	25	350	498	398.5	299	365	100	320	730	84	62.5	RPB50NRDH
600	10	390	524	421.4	230	390	100	300	780	84	62.5	224001
600	16	390	550	451.5	299	420	100	300	840	84	62.5	223989
600	25	390	581	474.5	304	423	125	380	845	88	62.5	224014
600	10	390	524	421.4	230	390	100	300	780	84	62.5	RPB60NFBH
600	16	390	550	451.5	299	420	100	300	840	84	62.5	RPB60NFAH
600	25	390	581	474.5	304	423	125	380	845	88	62.5	RPB60NFDH
600	10	390	524	421.4	230	390	100	300	780	84	62.5	RPB60NRBH
600	16	390	550	451.5	299	420	100	300	840	84	62.5	RPB60NRAH
600	25	390	581	474.5	304	423	125	380	845	88	62.5	RPB60NRDH
700	10	430	594	495.5	299	448	100	440	895	84	62.5	224002
700	16	430	627	521.5	304	455	125	440	910	88	62.5	223990
700	25	430	665	552	335	480	160	470	960	116	62.5	224016
700	10	430	594	495.5	299	448	100	440	895	84	62.5	RPB70NFBH
700	16	430	627	521.5	304	455	125	440	910	88	62.5	RPB70NFAH
700	25	430	665	552	335	480	160	470	960	116	62.5	RPB70MFDH
700	10	430	594	495.5	299	448	100	440	895	84	62.5	RPB70NRBH
700	16	430	627	521.5	304	455	125	440	910	88	62.5	RPB70NRAH
700	25	430	665	552	335	480	160	470	960	116	62.5	RPB70MRDH
800	10	470	675	569.5	304	508	125	480	1015	88	62.5	224003
800	16	470	713	602	335	513	160	480	1025	116	62.5	223991
800	25	470	713	645	420	543	200	480	1085	121	62.5	224015
800	10	470	675	569.5	304	508	125	480	1015	88	62.5	RPB80NFBH
800	16	470	713	602	335	513	160	480	1025	116	62.5	RPB80MFAH

DN (mm)	PN	G (mm)	H (mm)	I (mm)	J (mm)	K (mm)	L (mm)	M (mm)	D (mm)	R (mm)	S (mm)	References
800	25	470	713	645	420	543	200	480	1085	121	62.5	RPB80MFDH
800	10	470	675	569.5	304	508	125	480	1015	88	62.5	RPB80NRBH
800	16	470	713	602	335	513	160	480	1025	116	62.5	RPB80MRAH
800	25	470	713	645	420	543	200	480	1085	121	62.5	RPB80MRDH
900	10	510	724	623	304	558	125	570	1115	88	62.5	224004
900	16	510	764	653	335	563	160	570	1125	116	62.5	223992
900	25	510	788	695	420	593	200	570	1185	121	62.5	224017
900	10	510	724	623	304	558	125	570	1115	88	62.5	RPB90MFBH
900	16	510	764	653	335	563	160	570	1125	116	62.5	RPB90MFAH
900	25	510	788	695	420	593	200	570	1185	121	62.5	RPB90MFDH
900	10	510	724	623	304	558	125	570	1115	88	62.5	RPB90MRBH
900	16	510	764	653	335	563	160	570	1125	116	62.5	RPB90MRAH
1000	10	550	815	707	335	615	160	620	1230	116	62.5	224005
1000	16	550	815	748	420	628	200	620	1255	121	62.5	223993
1000	25	550	856	756	500	660	250	620	1320	146	87.5	224018
1000	10	550	815	707	335	615	160	620	1230	116	62.5	RPC10MFBH
1000	16	550	815	748	420	628	200	620	1255	121	62.5	RPC10MFAH
1000	10	550	815	707	335	615	160	620	1230	116	62.5	RPC10MRBH
1000	25	550	856	756	500	660	250	620	1320	146	87.5	203188
1200	10	630	909	842	420	728	200	750	1455	121	62.5	266337
1200	16	630	950	852	500	743	250	750	1485	146	87.5	266338
1200	10	630	909	842	420	728	200	750	1455	121	62.5	RPC12MFBH
1200	16	630	950	852	500	743	250	750	1485	146	87.5	RPC12MFAH
1200	10	630	909	842	420	728	200	750	1455	121	62.5	RPC12MRBH
1200	25	630	1024	872	725	765	315	750	1530	200	62.5	203199
1400	10	710	1051	953	500	838	250	850	1675	146	87.5	RPC14MFBH
1500	10	750	1102	1004	500	893	250	900	1785	146	87.5	RPC15MFBH
1600	10	790	1154	1056	500	958	250	950	1915	146	87.5	RPC16MFBH
1800	10	870	1331	1179	725	1058	315	1000	2115	200	62.5	RPC18MFBH



Field of application

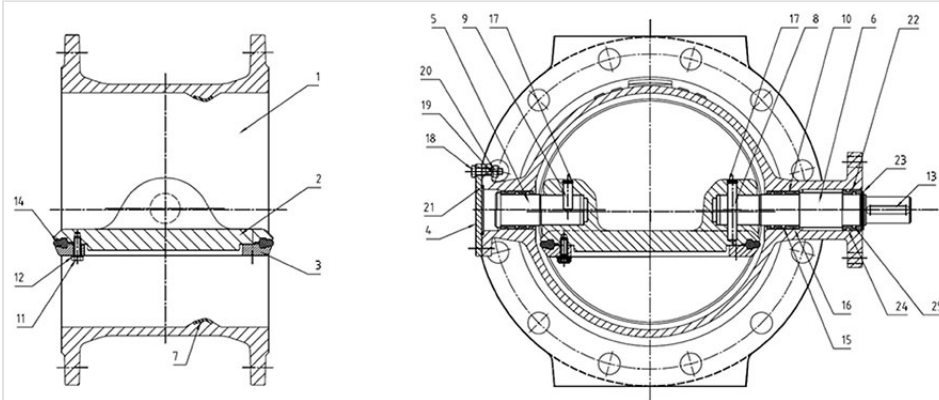
Butterfly valves are isolating valves used on water supply networks, in the interconnections of network, in the factories, in pumping stations, on the general networks and on the fire protection networks in the industrial sites.

Butterfly valves are compatible with drinking water and raw water with grid filtration. They will be installed on water networks in factories, in valves chambers or buried.

Their main advantages are:

- Low pressure loss
- Good performance thanks to the choice of the materials, the coatings and the design
- Easy operation per mechanism of the worm type/without end
- Mechanisms equipped with a standardized flange carry-accessory for buried version and motorizable version

Material and coating



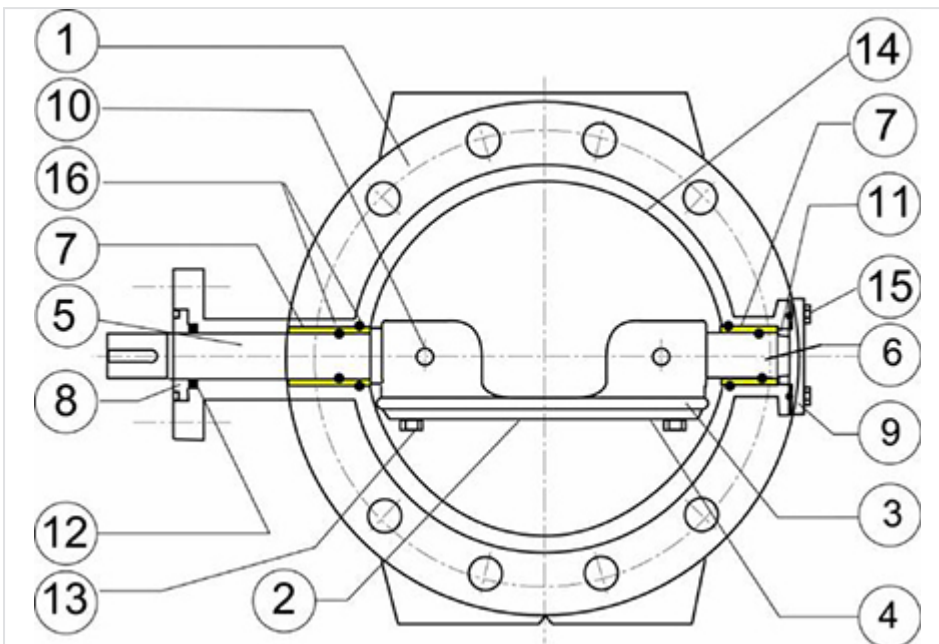
Versions DN150-800 PN10 - DN150-700 PN16 - DN150-600 PN25

Item	Description	Material	Coating
1	Body	Ductile iron GS500-7	Blue epoxy powder thickness 250 microns mini average according prescriptions of EN 14901-1
2	Disc	Ductile iron GS500-7	
3	Retaining ring (*)	Carbon Steel SR235JR	-
4	Cover	Stainless steel X2CrNiMo17-12-2	-
5	Rear shaft	Stainless steel EN 10088 X30Cr13 (420)	-
6	Drive shaft		-
7	Seat ring	Stainless steel EN 10088-2 X2CrNiMo 17,12,2 (316L)	-
8	Cylindrical pin (rear shaft)	Stainless steel EN 10088-3 X5CrNiCuNb 16-4 (630)	-
9	Cylindrical pin (drive shaft)		-
10	Bearing	Bronze EN 1982 CuSn12	-
11	Screw	Stainless steel A2	-
12	Spring washer	Stainless steel A2	-
13	Feather key	Steel C40	-
14	Gasket	EPDM	-
15-16	O-ring	EPDM	-
17	Circular circlips	Stainless steel EN 10088-3 X5CrNi 18-10	-
18	Screw	Stainless steel EN 10088-3 X5CrNi 18-10	-

Item	Description	Material	Coating
19	Spring washer	Stainless steel EN 10088-3 X5CrNi 18-10	-
20	Nut	Stainless steel EN 10088-3 X5CrNiMo 17-12	-
21	O-ring	EPDM	-
22	Bush	POM-C	-
23	External circlip	Stainless steel EN 10088-3 X5CrNi 18-10	-
24-25	O-ring	EPDM	-

(*) DN150-200 : Stainless steel AISI 316L

Material and coating



Versions DN900-2000 PN10 - DN800-2000 PN16 - DN700-2000 PN25

Item	Description	Material	Coating
1	Body	Ductile Iron GS500-7	Blue epoxy powder thickness 250 microns mini average according prescriptions of EN 14901-1
2	Disc	Ductile Iron GS500-7	
3	Sealing ring	EPDM	-
4	Retaining ring	Carbon Steel SR235JR	-
5	Shaft	Stainless steel EN 10088 X30Cr13 (420)	-

Item	Description	Material	Coating
6	Spindle	-	
7	Bearings	Bronze EN 1982 CuSn12	-
8	Ring	Gunmetal EN 1982 CuSn5Zn5Pb5	-
9	Rear cover	Carbon Steel SR235JR	Blue epoxy powder thickness 250 microns mini average according prescriptions of EN 14901-1
10	Taper pin	Stainless steel EN 10088-3 X5CrNiCuNb 16-4 (630)	-
11	Lock nut	Gunmetal EN 1982 CuSn5Zn5Pb5	-
12	Sealing element	PTFE	-
13	Internal Screw	Stainless steel type A2	-
14	Body seat ring	Stainless steel EN 10088-2 X2CrNiMo 17,12,2 (316L)	-
15	External Screw	- up to M20: Stainless steel EN 10088-3 - > M20: Steel class 8.8	-
16	O-ring gasket	EPDM	-

Gearbox type

Buried type PN10

DN mm	Gearbox AUMA type	Number of turns at 90°	ISO 5210	Operating torque Nm
150	GS 63.3 - F10	12,75	F 10	8
200	GS 63.3 - F10	12,75	F 10	13
250	GS 63.3 - F10	12,75	F 10	21
300	GS 63.3 - F10	12,75	F 10	31
350	GS 63.3 - F12	12,75	F 10	40
400	GS 63.3 - F12	12,75	F 10	61
450	GS 80.3 - F14	13,25	F 10	79
500	GS 80.3 - F14	13,25	F 10	101
600	GS 100.3 - F16	13	F 10	133
700	GS 100.3+VZ4.3 - F16	52	F 10	52
800	GS 125.3+VZ4.3 - F25	52	F 10	77
900	GS 125.3+GZ160.3 - F25	52	F 10	100

DN mm	Gearbox AUMA type	Number of turns at 90°	ISO 5210	Operating torque Nm
1000	GS 160.3+GZ160.3 - F30	110,5	F 10	65
1200	GS 200.3+GZ200.3 - F30	216	F 10	74
1400	GS 250.3+GZ250.3 - F35	212	F 14	93
1500	GS 250.3+GZ250.3 - F35	212	F 14	110
1600	GS 250.3+GZ250.3 - F35	212	F 14	130
1800	GS 315+GZ30 - F40	424	F 10	75
2000	GS 400+GZ35 - F48	432	F 14	117

Gearbox type

Buried type PN16

DN mm	Gearbox AUMA type	Number of turns at 90°	ISO 5210	Operating torque Nm
150	GS 63.3 - F10	12,75	F 10	8
200	GS 63.3 - F10	12,75	F 10	17
250	GS 63.3 - F10	12,75	F 10	30
300	GS 63.3 - F12	12,75	F 10	43
350	GS 63.3 - F12	12,75	F 10	60
400	GS 80.3 - F14	13,25	F 10	93
450	GS 80.3 - F14	13,25	F 10	112
500	GS 100.3 - F14	13	F 10	125
600	GS 100.3+VZ4.3 - F16	52	F 10	59
700	GS 125.3+VZ4.3 - F25	52	F 10	84
800	GS 160.3+GZ160.3 - F30	110,5	F 10	64
900	GS 160.3+GZ160.3 - F30	110,5	F 10	83
1000	GS 200.3+GZ200.3 - F30	216	F 10	65
1200	GS 250.3+GZ250.3 - F35	212	F 14	104
1400	GS 315+GZ30 - F40	424	F 10	65
1500	GS 315+GZ30 - F40	424	F 10	77
1600	GS 315+GZ30 - F40	424	F 14	94
1800	GS 400+GZ35 - F48	432	F 14	126
2000	GS 400+GZ35 - F48	432	F 14	161

Gearbox type

Buried type PN25

DN mm	Gearbox AUMA type	Number of turns at 90°	ISO 5210	Operating torque Nm
150	GS 63.3 - F10	12,75	F 10	13
200	GS 63.3 - F10	12,75	F 10	29
250	GS 63.3 - F12	12,75	F 10	45
300	GS 63.3 - F12	12,75	F 10	71
350	GS 80.3 - F14	13,25	F 10	98
400	GS 100.3 - F14	13	F 10	122
450	GS 100.3+VZ4.3 - F16	52	F 10	45
500	GS 100.3+VZ4.3 - F16	52	F 10	59
600	GS 125.3+VZ4.3 - F25	52	F 10	100
700	GS 160.3+GZ160.3 - F30	110,5	F 10	70
800	GS 160.3+GZ160.3 - F30	216	F 10	65
900	GS 200.3+GZ200.3 - F35	216	F 10	84
1000	GS 250.3+GZ250.3 - F35	212	F 14	115
1200	GS 315+GZ30 - F40	424	F 10	74
1400	GS 315+GZ30 - F40	424	F 14	110
1500	GS 400+GZ35 - F48	432	F 14	133
1600	GS 400+GZ35 - F48	432	F 14	153

Applicable Standards

Hydraulic test

Every single butterfly valve is subjected to hydraulic final test with the purpose of verifying the accordance with the prescriptions ISO 5208:

- Body test at 1,5 time the PFA (open valve);
- Seat test at 1,1 time the PFA (closed valve).

Product test

- Control of manoeuvre torque (MOT and mST) as defined in the EN1074
- Control of coating: test of thickness, holiday test, impact test, MIBK test

Conformity to the standards

Product:

- EN 1074 - 1 and 2

- EN 593
- ISO 10631

Plant test:

- ISO 5208

Flanges dimension:

- ISO 5752 series 14

Flanges drilling:

- EN 1092-2
- ISO 7005-2

Suitability for potable water:

- Italian CM 102 of 02/12/78
- Conformity to foreign norms: KTW (Germany), WRC (U.K.), ACS (France)

Marking



On the body like EN19:

- Nominal diameter in mm (DN);
- Nominal pressure in bar (PN);
- Type of ductile iron;
- Manufacturer's logo;
- Model code;
- Fusion date.

On the label like EN19:

- Nominal diameter in mm (DN);
- Nominal pressure in bar (PN);
- Maximum operating pressure (PFA);
- Closing direction;
- Model code;
- Manufacturing order, Order confirmation;
- Manufacturer's logo.

On the disc:

- Nominal diameter in mm (DN);

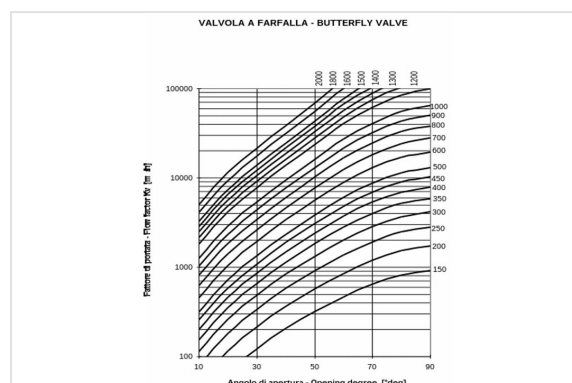
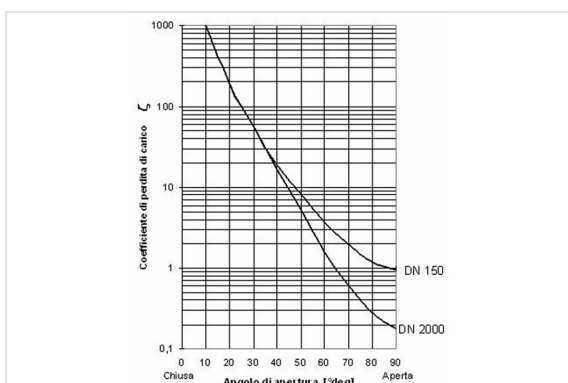
- Nominal pressure in bar (PN);
- Type of ductile iron;
- Manufacturer's logo;
- Model code.

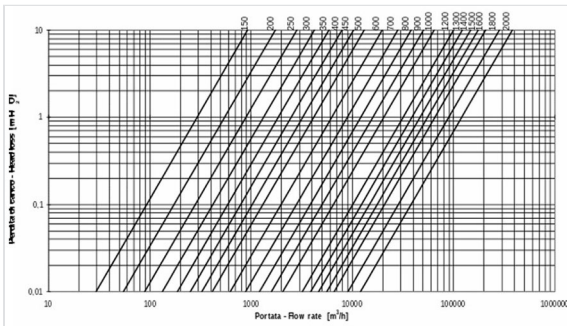
The marking of the valves manufactured by Saint-Gobain refers to the EN 1074-2 and EN 19 international standards.

Markings are either integral markings, cast in the body, or markings made on plates, securely fixed to the body, in accordance with the EN 19 standard specifications.

Specifications EN19		Requirements	Saint-Gobain valves process
Table1-Valve markings			
1	DN		Integral
2	PN	EN 19 § 4.2.1	Integral
3	Material	Mandatory markings Shall be integral markings or on a marking plate	Integral
4	Manufacturer's name or trade mark		Plate
11	Reference to Standard		Integral
12	Melt identification	EN 19 § 4.3	Integral
16	Quality test	Supplementary markings	Printed on body
18	Manufacturing date	Items 7 to 21 in Table 1 are optional	Plate
21	Closing direction		Plate + sticker on body

Hydraulic features





The head loss Δh are variable in function of valve open degree and can be calculated with the following expression:

with Δh = head loss (m), ζ = head loss coefficient (dimensional), v = nominal speed (m/s), $g = 9,81$ (m/s²)

$$\Delta H = \frac{\zeta \cdot v^2}{2 \cdot g}$$

The head loss coefficient can be estimated from the diagram attached.

Determinates the head loss Δh it's possible to calculate the flow rate Q in m³/h with the following expression (the same expression can be used to, having the project flow rate Q , to determinate the head loss Δh without using the head loss coefficient):

$$Q = K_v \sqrt{\frac{\Delta h}{10,2}}$$

in which 10,2 is a corrective factor in meters, and K_v is the flow rate coefficient in m³/h, determinable from the following diagram in function of valve open degree:

Example: Valve DN600 mm - $\Delta h = 3$ m

From the diagram with valve open to 100% the coefficient K_v is 20000 m³/h. Using this date in the flow rate expression:

Otherwise it's possible to calculate the head loss with valve completely open, having the project flow rate Q , in function of DN, using the following diagram:

$$Q = 2000 \times \sqrt{\frac{3}{10,2}} = 10850 \text{ m}^3/\text{h}$$

Cavitation

If the butterfly valve is used only like isolating device there's not cavitation risk.

In the particular case in which it's used like regulating device, this can be possible only respecting the following parameters:

- The valve open degree have to be between 30° and 90° (valve completely open)
- The downstream pressure P2 have to be: $P \geq 0,7 \cdot P - 2,8$ with P upstream pressure.

Instructions for use

Storage

The butterfly valve will have to be held (if possible) in covered places, the most possible protected from the sun (maximum allowable temperature 70°C in accordance to EN 1074), from the rain and generally from the atmospheric agents. Moreover it will have to be avoided that the seal of the same air valves come to contact with powder or earth.

Installation

The butterfly valves are generally installed with retaining ring mounted in the opposite way respect to the direction of flow rate to permit the substitution of gasket without dismounting the valve from pipeline. In any case it is possible to install the butterfly valve with flow rate in opposite direction and also, if required, in vertical position. We recommend to install the butterfly with the operating device on the hydraulic right side of pipeline. It's possible to install the butterfly valve both in chamber valve that underground (choosing the right configuration).

We recommend to insert a dismounting joint for the operation of maintenance.

Maintenance

The butterfly valve does not require a particular maintenance, all parts subjected to wear are perfectly auto-lubricating. In any case, if for a long time will be not used, it is necessary to evaluate the functioning of valve doing (at least one time for year) some manoeuvre of opening-closing.

All the maintenance operation have to be do after the total emptying of pipeline (no flow rate and pressure) to avoid every risk to the people during this operation.

In presence of particularly exercise condition or damage due to external cause, it will be necessary some maintenance operation. In this case the particular shape of EUROSTOP butterfly valve permits the simple gasket substitution without the dismounting of valve from pipeline (if the dismounting joint is present).

Accessories

To adapt the butterfly valves to the different exercise and installation conditions required, they can be equipped with particular accessories used in combination with control devices: please refer to data sheet for accessories.

The technical features in this document are not contractual and can be changed without preliminary notification due to the continuous technical progress of product.

Valve selection

The butterfly valves are generally used as isolating devices type on/off. In some particular case, in which there's low differences of pressure and low flow rate variation can be used like regulating devices, considering the hydraulic parameters necessary to avoid the cavitation risk.

To do the right dimensioning of butterfly valve it's necessary to know the followings parameters:

- Upstream hydrostatic pressure (that is the hydrostatic pressure with valve in closed position)
- The maximum speed in water pipe (generally expressed in l/s) or the nominal diameter and the project flow rate from which it is gained the speed $V=Q/A$

Moreover it's necessary to control that the maximum speed in water pipe have to be equal or inferior to 5m/s, and the exercise temperature have to be between 0°C and 40 °C.

Linked products



Operation and
maintenance instructions
for Eurostop butterfly valve

The information on this sketch is, to the best of our knowledge correct at the time of printing. However Saint-Gobain are constantly looking at ways of improving their products and services therefore reserve the right to change without prior notice, any of the data shown. Any orders placed will be subject to our Standard Conditions of Sale, available on request.