

The ParaSeal range features a proven disc shaft and seat arrangement, to be used in high pressure and high velocity applications.

Features

- The field replaceable seat fully isolates the body and shaft from the media.
- An additional back seat O-ring provides and secures increased valve performance.
- In addition the improved seat design provides elevated dead end shutoff performance.
- Suitable for severe vacuum applications and up to 25 bar bubble tight shut off.
- Suitable for high line velocities up to 8 m/s for liquids.
- Improved performance in media with sedimentation and contamination.
- Suitable for Bördel and slip-on flanges. The reinforcement eliminates roll out of seat.
- Wafer type, one piece body design acc. ISO 5752 series 20 (DIN 3202 K1).
- Actuator flange acc. ISO 5211.
- Thin disc stem for excellent flow characteristics and bi directional shut off.
- Dry shaft design.
- Body locating holes for proper installation and centering of the valve between flanges.
- Tapped body lugs are provided for mounting on or between DIN or ANSI drilled flanges, or flanged at one side only for end of line service.
- Top and bottom shaft bushing absorbs side thrust loads.
- A dirtscraper prevents moisture penetrating into the shaft area.
- Double flanged (U-section) body patterns available from DN500-DN1000.



General application

Food and beverage processing, dry bulk conveying, paper mills, slurry handling, vacuum desulphurization plants etc.

Technical data

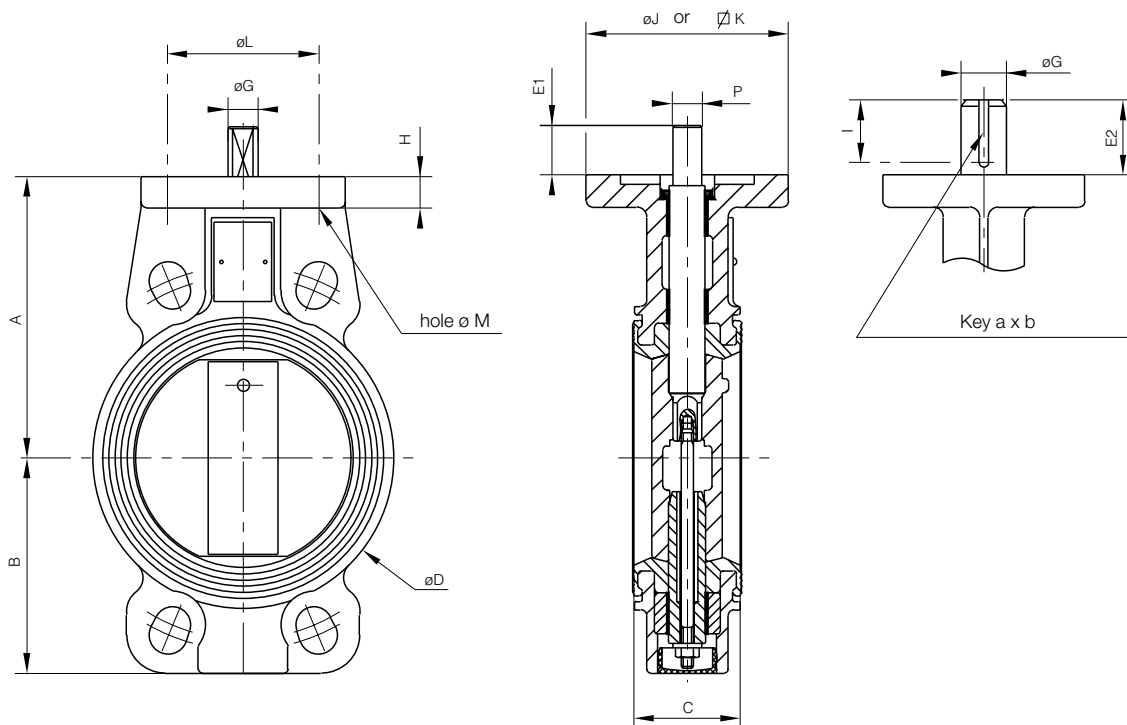
Pressure (bar)	: 25 bar rating
Temperature (°C)	: -15 – +130
Sizes (mm)	: 50-1000
Flange accommodation	: PN 25

Approvals

Veritas, KTW, SNCF, ADR, Lloyds Register of Shipping, EDF, DVGW, Town of Paris, VDS, Office of water authority of Hong Kong, Fire Services Hong Kong, DNV, WRC, Certificate of Foodstuff Quality Poitiers Laboratory-France and ABS.

Butterfly Valve ParaSeal range - Wafer

50-1000 mm



Valve dimensions in mm

DN	A	B	C	øD	E1	P	E2	øG	H	J	K	L	Nb	M	a	b	l	mass/weight (kg)
50	110	74	43	94	25,5	11	-	14	14	90	-	70	4	9	-	-	-	2,8
65	118	81	46	107	25,5	11	-	14	14	90	-	70	4	9	-	-	-	3,3
80	125	93	46	126	25,5	11	-	14	14	90	-	70	4	9	-	-	-	4
100	140	107	52	150	25,5	14	-	18	16	-	100	102	4	11	-	-	-	6
125	160	122	56	179	25,5	14	-	18	16	-	100	102	4	11	-	-	-	8,5
150	175	135	56	204	25,5	19	-	25	17	-	100	102	4	11	-	-	-	11
200	206	170	60	259	25,5	19	-	25	17	-	100	102	4	11	-	-	-	15
250	247	200	68	313	-	-	70	35	17	-	132	125	4	14	10	8	60	23
300	277	233	78	369	-	-	70	35	17	-	132	125	4	14	10	8	60	31
350	300	270	78	418	-	-	70	35	17,5	-	132	125	4	14	10	8	60	39
400	345	300	102	467	-	-	90,5	40	21	-	132	140	4	18	12	8	73	69
450	375	330	114	521	-	-	100	50	22	-	140	140	4	18	14	9	60	83
500	425	375	127	571	-	-	100	60	25	210	-	165	4	22	18	11	80	107
600	495	430	154	670	-	-	100	60	25	210	-	165	4	22	18	11	80	145
700	570	510	165	776	-	-	110	80	30	300	-	254	8	18	22	14	100	217
750	610	540	165	843	-	-	110	80	30	300	-	254	8	18	22	14	100	250
800	640	560	190	882	-	-	110	80	30	300	-	254	8	18	22	14	100	310
900	700	665	203	1000	-	-	110	100	30	300	-	254	8	18	28	16	100	448
1000	750	715	216	1105	-	-	110	100	30	350	-	298	8	22	28	16	100	530

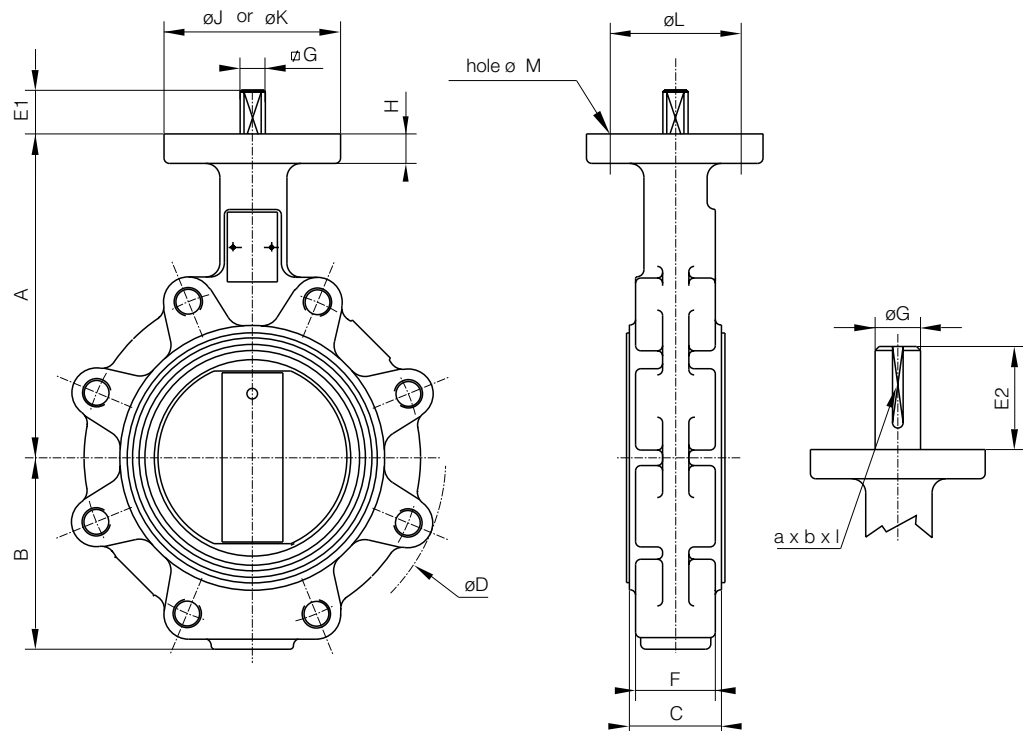
Maximum differential pressure (bar)

Valve size	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
Wafer between flanges	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Wafer end of line	10	10	5	5	5	4	4	2	2	2	2	1	1	1	0	0	0	0	0

Notes

- Flange accommodation must be specified when ordering.
- Specify size, product name, part name, material and flange accommodation when ordering spareparts.
- C = FTF ISO 5752 series 20 - NF E 29305 series 20 - MSS SP 67 - API 609 – BS 5155
- Outside dims of the shafts are standard.
- For other dimensions see specific datasheets.

Butterfly Valve ParaSeal range - Lugged 50-1000 mm



Valve dimensions in mm

DN	A	B	C	øD	E1	P	F	E2	øG	H	J	K	L	Nb	M	a	b	I	mass/weight (kg)
50	152	76	43	153	25,5	11	38	-	14	14	90	-	70	4	9	-	-	-	3,7
65	159	84	46	173	25,5	11	40	-	14	14	90	-	70	4	9	-	-	-	4,2
80	166	90	46	188	25,5	11	40	-	14	14	90	-	70	4	9	-	-	-	7,1
100	182	109	52	219	25,5	14	45	-	18	16	-	100	102	4	11	-	-	-	8,7
125	193	120	56	252	25,5	14	48	-	18	16	-	100	102	4	11	-	-	-	11
150	217	140	56	278	25,5	19	48	-	25	17	-	100	102	4	11	-	-	-	15
200	242	167	60	335	25,5	19	52	-	25	17	-	100	102	4	11	-	-	-	22
250	280	203	68	400	-	-	60	70	35	17	-	132	125	4	14	10	8	60	33
300	310	228	78	470	-	-	70	70	35	17	-	132	125	4	14	10	8	60	44
350	350	270	78	520	-	-	70	70	35	17,5	-	132	125	4	14	10	8	60	67
400	375	300	102	588	-	-	90	90,5	40	21	-	140	140	4	18	12	8	73	104
450	400	330	114	633	-	-	100	100	50	22	-	140	140	4	18	14	9	60	136
500	425	375	127	704	-	-	113	100	60	25	210	-	165	4	22	18	11	80	180
600	495	430	154	828	-	-	140	100	60	25	210	-	165	4	22	18	11	80	260
700	570	510	165	895	-	-	150	110	80	30	300	-	254	8	18	22	14	100	280
750	610	540	165	972	-	-	150	110	80	30	300	-	254	8	18	22	14	100	370
800	640	560	190	1010	-	-	170	110	80	30	300	-	254	8	18	22	14	100	400
900	700	640	203	1148	-	-	190	110	100	30	300	-	254	8	18	28	16	100	550
1000	750	690	216	1240	-	-	190	110	100	30	350	-	298	8	22	28	16	100	660

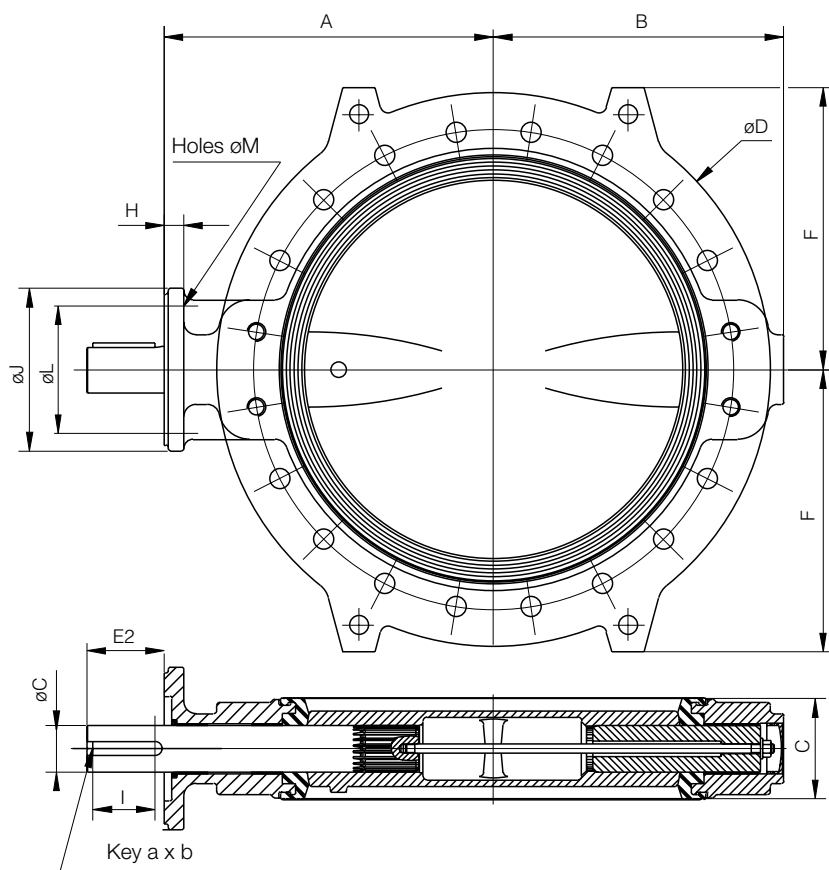
Maximum differential pressure (bar)

Valve size	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
Lugged between flanges	25	25	25	25	25	25	25	25	25	25	25	25	25	25	20	20	20	20	20
Lugged end of line	25	25	25	25	25	25	25	25	25	25	25	25	25	25	16	16	16	16	16

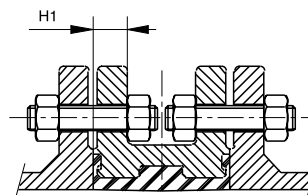
Notes

- C = ISO 5752 / NFE 29305 / DIN 3202 / BS 5155 / API 609 / MSS SP67
- DN750 only according MSS SP44

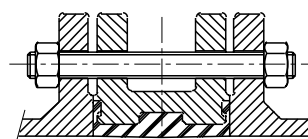
Butterfly Valve ParaSeal range – Double flanged (U-Section) 500-1000 mm



Double flange installation



Wafer installation



Valve dimensions in mm

DN	A	B	C	H1	øD	E2	F	øG	H	J	L	Nb	M	a	b	l	mass/weight (kg)
500	425	375	127	29,5	730	100	375	60	25	210	165	4	22	18	11	80	167
600	495	430	154	36,0	845	100	432	60	25	210	165	4	22	18	11	80	203
700	570	510	165	40,5	940	110	480	80	30	300	254	8	18	22	14	100	292
750	610	540	165	40,5	984	110	505	80	30	300	254	8	18	22	14	100	400
800	640	560	190	44,0	1060	110	542	80	30	300	254	8	18	22	14	100	403
900	700	665	203	42,5	1160	110	597	100	30	300	254	8	18	28	16	100	493
1000	750	715	216	44,5	1290	110	660	100	30	350	298	8	22	28	16	100	583

Maximum differential pressure (bar)

Valve size	500	600	700	750	800	900	1000
Double flanged between flanges	25	25	25	25	25	25	25
Double flanged end of line	16	16	16	16	16	16	16

Note

C = Face to face ISO 5752 series 20 –
NF E 29305 series 20 – MSS SP 67 –
API 609

K _v values																				
disc opening	size in mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
20°		3	6	10	13	30	45	68	128	197	265	345	449	566	828	1.161	1.358	1.540	1.970	2.460
30°		9	17	26	37	60	90	162	257	394	531	690	899	1.131	1.656	2.323	2.715	3.080	3.940	4.910
40°		21	40	63	86	150	225	270	429	661	880	1.134	1.498	1.881	2.750	3.850	4.538	5.148	6.570	8.190
50°		39	73	115	152	249	375	486	772	1.183	1.595	2.070	2.697	3.395	4.969	6.969	8.168	9.266	11.800	14.740
60°		65	124	195	268	439	660	756	1.201	1.841	2.479	3.218	4.195	5.280	7.730	10.813	12.703	14.410	18.370	22.940
70°		93	178	280	457	747	1.123	1.431	2.273	3.486	4.692	6.096	7.942	9.997	14.630	20.515	24.049	27.280	34.770	43.400
80°		105	201	316	573	927	1.393	2.457	3.904	5.985	8.057	10.465	13.636	17.160	25.124	35.233	41.290	46.838	59.630	74.450
90°		110	210	330	610	1.000	1.500	2.700	4.300	6.600	8.900	11.500	15.000	18.800	27.600	38.600	45.400	51.500	65.600	81.900

Note: ated K_v = the volume of water in m³/hr that will pass through a given valve opening at a pressure drop of 1 bar.

Maximum allowable shaft torques in Nm																				
shaft mat.	size in mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
Stainless Shaft 13% Cr		122	122	122	297	297	743	743	1804	1804	1804	3004	4277	8921	8921	15250	15250	15250	50085	50085

Notes

1. The given maximum allowable torques are applicable for standard type valves.
2. In ISO 5211/2 a table is listed representing the maximum torques which can be transmitted through the mounting flange. These values are based upon specific criteria and can be lower than the maximum allowable shaft torques. In this case the criteria can be changed in order to reach the maximum allowable shaft torques.
3. Other sizes: contact factory

Actuator sizing torques in Nm																				
ΔP in bar	size in mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1000
At full rating		15	26	40	68	115	170	320	480	720	950	1.350	1.700	2.300	3.200	4.500	5.200	6.000	8.000	10.500
At 6 bar		10	17	26	44	75	110	208	312	468	660	900	1.130	1.530	2.130	3.000	3.800	4.000	8.000	10.500

Note: Torques valid for fresh water at ambient temperature. Please specify differential pressure at ordering.

Material selection

Body	Disc	Shaft	Seat	Trim no.	Sizes (mm)
Ductile Iron GGG 40	Ductile Iron (Epoxy)	Stainless Steel	EPDM	646	DN 50-1000
			NBR	649	DN 50-1000
	Stainless Steel	Stainless Steel	EPDM	112	DN 50-1000
			NBR	116	DN 50-1000
	NiAlBz	Stainless Steel	EPDM	135	DN 50-1000
Carbon Steel *			NBR	137	DN 50-1000
	Ductile Iron (Epoxy)	Stainless Steel	EPDM	686	DN 50-1000
			NBR	687	DN 50-1000
	Stainless Steel	Stainless Steel	EPDM	141	DN 50-1000
			NBR	145	DN 50-1000
	NiAlBz	Stainless Steel	EPDM	140	DN 50-1000
			NBR	144	DN 50-1000

Note: * For wafer and lugged styles only.

Pressure-Temperature Diagram																				
Seat material	Disc material	Body material	Size range DN (mm)	Valve function Wafer/End of Line	Temperature in °C															
EPDM	all	all	50 - 600	Wafer	-40	-30	-20	-15	0	50	80	100	130	150	160					
			700 - 1000	Wafer							25 Bar									
			50 - 200	Lugged							16 Bar									
			250 - 400	Lugged							20 Bar									
			450 - 1000	Lugged							16 Bar									
											10 Bar									
NBR	all	all	50 - 600	Wafer																
			700 - 1000	Wafer							25 Bar									
			50 - 200	Lugged							16 Bar									
			250 - 400	Lugged							20 Bar									
			450 - 1000	Lugged							16 Bar									
											10 Bar									