tyco
Flow Control

KEYSTONE

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

Features

- Splined, squared or key shaped disc/shaft connection internally in disc, resulting in a unique construction without any elements in contact with the line media. This unique construction eliminates the risk for corrosion of connecting elements, as well as leakage along the disc pins.
- Bed grooved seat construction for full rated pressure tight shut off for valve applications mounted in line and for end of line service.
- Self lubricating PTFE lined bearings for optimized support and minimum bearing friction.
- The field replaceable seat fully isolates the body and shaft from the media.
- A molded-in O-ring in the seat face gives additional flange sealing, eliminating the need for flange gaskets.
- Seal in actuator plate prevents moisture and dirt from penetrating into shaft guiding area.
- Actuator flange drilling according ISO 5211.
- High solid coating on body ensuring excellent corrosion resistance.
- Lenticular shaped disc to improve flow capacity.
- Valve bodies are equipped with lifting lugs or lifting holes for easy handling and mounting in the pipeline (size related).
- Valves available in wafer, lugged, mono flange and double flanged versions.
- Lifting lugs are also used as support feet.
- Suitable for severe vacuum applications and up to 25 bar bubble tight shut off (in function of valve size).
- Excellent performance in media with sedimentation and contamination.
- Suitable for Bördel and slip-on flanges. The specific seat design eliminates roll out of seat.
- One piece body design acc. ISO 5752 series 20 (DIN 3202 K1) in function of valve size and valve type.
- Dry shaft design.
- Wafer valves have body locating holes for proper installation and centering of the valve between flanges.
- Wafer valves have tapped body lugs for mounting on or between DIN or ANSI drilled flanges, or flanged at one side only for end of line service (size related).

General application

Water, food and beverage processing, dry bulk conveying, paper mills, slurry handling, etc.

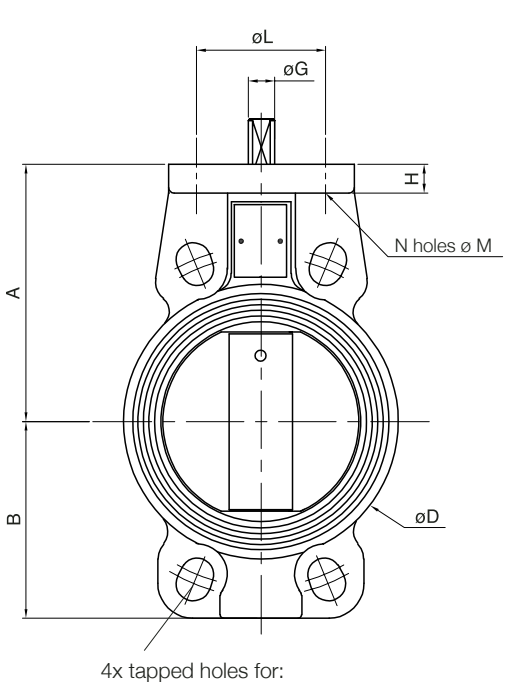
Approvals

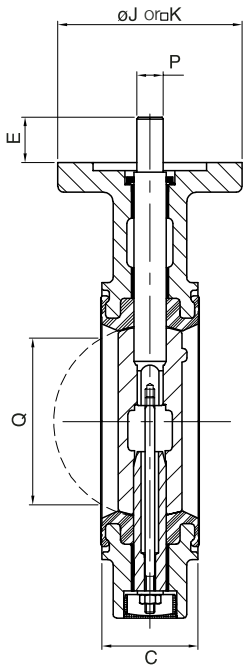
Veritas, KTW, SNCF, ADR, Lloyds Register of Shipping, EDF, DVGW, Town of Paris, VDS, Office of water authority of Hong Kong, Fire Services Hong Kong, DNV, WRC, Certificate of Foodstuff Quality Poitiers Laboratory-France and ABS.

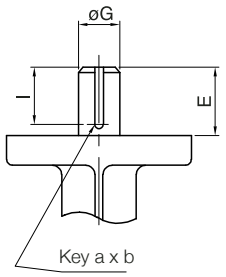
Technical data

Pressure (bar)	: 25 bar rating (see P/T diagram for details)
Temperature (°C)	: -15 to +130
Sizes (mm)	: 50-2400
Flange accommodation	: PN2,5 / PN6 / PN10 / PN16 / PN25 / ANSI150 / AWWA

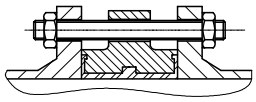
Tyco reserves the right to change the contents without notice EBPJV-0715-EN-0809



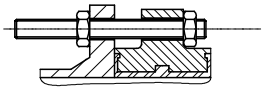




Size 250 to 1000



In line



End of line

4x tapped holes for:
PN10/16: sizes 450-500 (through), 700-800-900-1000 (blind)

Valve dimensions in mm

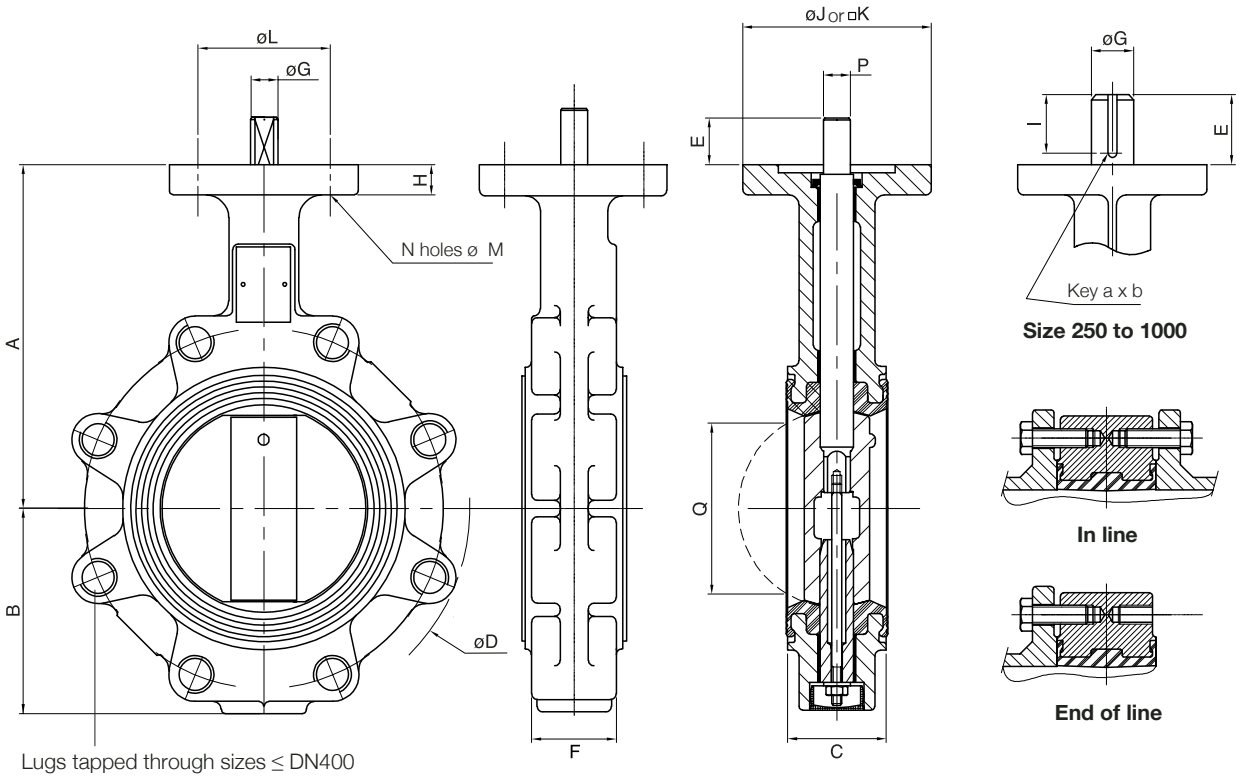
						Shaft dimensions					Actuator flange acc. ISO 5211							
DN	A	B	C	øD	Q	E	P	øG	I	Key size width x height	Type	øJ	□ K	H	øL	øM hole	N holes	Mass (kg)
50	110	74	43	94	35	25.5	11	14	-	-	F07	90	-	14	70	9	4	2.8
65	118	81	46	107	52	25.5	11	14	-	-	F07	90	-	14	70	9	4	3.3
80	125	93	46	126	69	25.5	11	14	-	-	F07	90	-	14	70	9	4	4
100	140	107	52	150	90	25.5	14	18	-	-	F10	-	100	16	102	11	4	6
125	160	122	56	179	114	25.5	14	18	-	-	F10	-	100	16	102	11	4	8.5
150	175	135	56	204	139	25.5	19	25	-	-	F10	-	100	17	102	11	4	11
200	206	170	60	259	191	25.5	19	25	-	-	F10	-	100	17	102	11	4	15
250	247	200	68	313	239	70	-	35	60	10 x 8	F12	-	132	17	125	14	4	23
300	277	233	78	369	289	70	-	35	60	10 x 8	F12	-	132	17	125	14	4	31
350	300	270	78	418	330	70	-	35	60	10 x 8	F12	-	132	17.5	125	14	4	39
400	345	300	102	467	377	90.5	-	40	73	12 x 8	F14	-	132	21	140	18	4	69
450	375	330	114	521	422	100	-	50	60	14 x 9	F14	-	140	22	140	18	4	83
500	425	375	127	571	469	100	-	60	80	18 x 11	F16	210	-	25	165	22	4	107
600	495	430	154	670	564	100	-	60	80	18 x 11	F16	210	-	25	165	22	4	145
700	570	510	165	776	658	110	-	80	100	22 x 14	F25	300	-	30	254	18	8	217
750	610	540	165*	843	715	110		80	100	22 x 14	F25	300		30	254	18	8	250
800	640	560	190	882	745	110	-	80	100	22 x 14	F25	300	-	30	254	18	8	310
900	700	665	203	1 000	853	110	-	100	100	28 x 16	F25	300	-	30	254	18	8	448
1000	750	715	216	1 105	952	110	-	100	100	28 x 16	F30	350	-	30	298	22	8	530

Maximum pressure rating (bar)

Valve size	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1 000
Wafer in line	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

1. Flange accommodation and pressure rating must be specified when ordering.
2. Specify size, product name, part name, material and flange accommodation when ordering spare parts.
3. C = FTF ISO 5752 series 20 (table 5 wafer style) - NF E 29305 series 20 - MSS SP 67 - API 609 - BS 5155.
4. Q = minimum inside diameter of connecting pipe without clearance.
5. * Not according ISO 5752.



Valve dimensions in mm

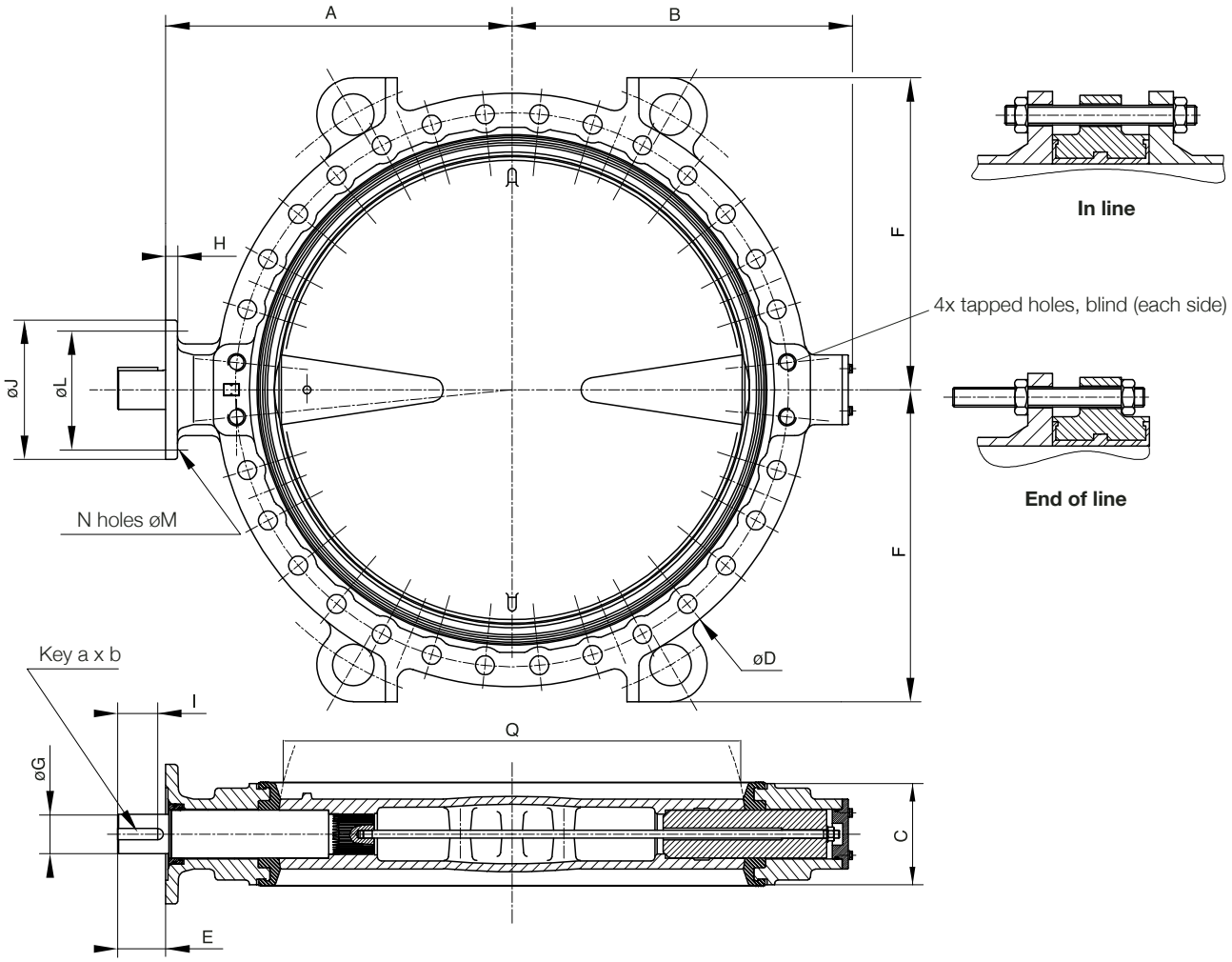
							Shaft dimensions					Actuator flange acc. ISO 5211							
DN	A	B	C	øD	F	Q	E	P	øG	I	Key size width x height	Type	øJ	□ K	H	øL	øM hole	N holes	Mass (kg)
50	152	76	43	153	38	35	25.5	11	14	-	-	F07	90	-	14	70	9	4	3.7
65	159	84	46	173	40	52	25.5	11	14	-	-	F07	90	-	14	70	9	4	4.2
80	166	90	46	188	40	69	25.5	11	14	-	-	F07	90	-	14	70	9	4	7.1
100	182	109	52	219	45	90	25.5	14	18	-	-	F10	-	100	16	102	11	4	8.7
125	193	120	56	252	48	114	25.5	14	18	-	-	F10	-	100	16	102	11	4	11
150	217	140	56	278	48	139	25.5	19	25	-	-	F10	-	100	17	102	11	4	15
200	242	167	60	335	52	191	25.5	19	25	-	-	F10	-	100	17	102	11	4	22
250	280	203	68	400	60	239	70	-	35	60	10 x 8	F12	-	132	17	125	14	4	33
300	310	228	78	470	70	289	70	-	35	60	10 x 8	F12	-	132	17	125	14	4	44
350	350	270	78	520	70	330	70	-	35	60	10 x 8	F12	-	132	17.5	125	14	4	67
400	375	300	102	588	90	377	90.5	-	40	73	12 x 8	F14	-	132	21	140	18	4	104
450	400	330	114	633	100	422	100	-	50	60	14 x 9	F14	-	140	22	140	18	4	136
500	425	375	127	704	113	469	100	-	60	80	18 x 11	F16	210	-	25	165	22	4	180
600	495	430	154	828	140	564	100	-	60	80	18 x 11	F16	210	-	25	165	22	4	260
700	570	510	165	895	150	658	110	-	80	100	22 x 14	F25	300	-	30	254	18	8	280
750	610	540	165*	972	150	715	110		80	100	22 x 14	F25	300		30	254	18	8	370
800	640	560	190	1 010	170	745	110	-	80	100	22 x 14	F25	300	-	30	254	18	8	400
900	700	640	203	1 148	190	853	110	-	100	100	28 x 16	F25	300	-	30	254	18	8	550
1000	750	690	216	1 240	190	952	110	-	100	100	28 x 16	F30	350	-	30	298	22	8	660

Maximum pressure rating (bar)

Valve size	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800	900	1 000
Lugged in line	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Lugged end of line	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16

Notes

1. Flange accommodation and pressure rating must be specified when ordering.
2. Specify size, product name, part name, material and flange accommodation when ordering spare parts.
3. C = FTF ISO 5752 series 20 (table 5 wafer style) - NF E 29305 series 20 - MSS SP 67 - API 609 - BS 5155.
4. Q = minimum inside diameter of connecting pipe without clearance.
5. * Not according ISO 5752.



Valve dimensions in mm

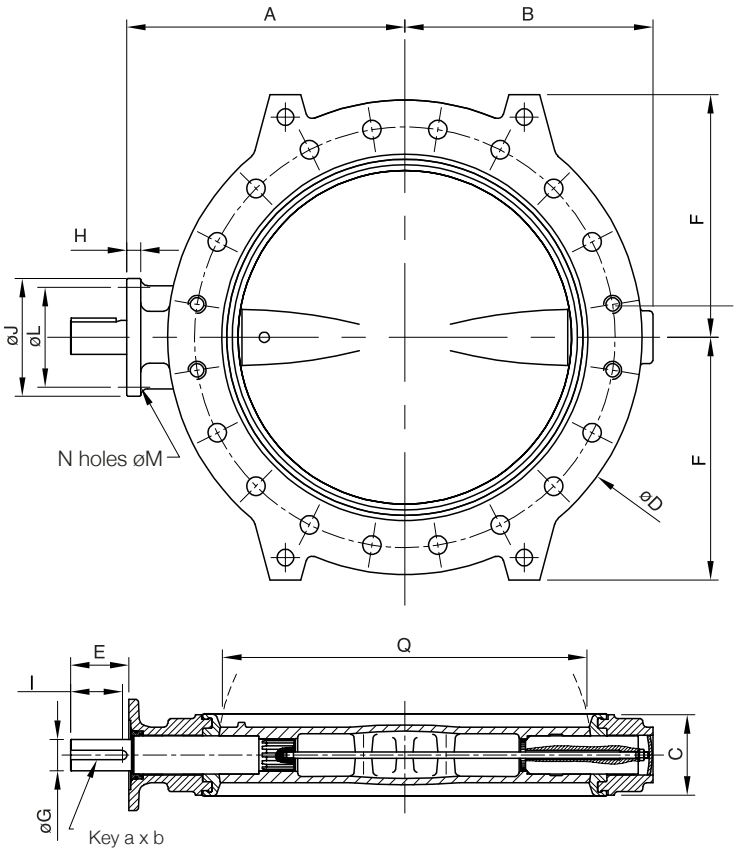
							Shaft dimensions				Actuator flange acc. ISO 5211						
DN	**A**	**B**	**C**	**øD**	**F**	**Q**	**E**	**øG**	**I**	**Key size width x height**	**Type**	**øJ**	**H**	**øL**	**øM hole**	**N holes**	**Mass (kg)**
1 050	780	770	254	1 340	695	979	140	100	120	28 x 16	F30	350	30	298	22	8	1 090
1 100	820	805	254	1 400	710	1 050	140	100	120	28 x 16	F30	350	30	298	22	8	1 000
1 200	870	830	254	1 490	760	1 150	140	100	120	28 x 16	F30	350	30	298	22	8	1 160
1 300	960	935	254	1 625	835	1 252	140	120	130	32 x 18	F35	415	40	356	32	8	1 520
1 350	987	965	254	1 685	865		140	120	130	32 x 18	F35	415	40	356	32	8	1 560
1 400	1 015	1 000	254	1 690	865	1 364	140	120	130	32 x 18	F35	415	40	356	32	8	1 590
1 500	1 130	1 090	254	1 855	950	1 466	180	130	160	32 x 18	F40	475	50	406	38	8	1 940
1 600 (10)	1 170	1 135	254	1 930	980	1 567	180	130	160	32 x 18	F40	475	50	406	38	8	2 010
1 600 (16)	1 200	1 165	356	1 930	980	1 537	200	150	170	36 x 20	F40	475	50	406	38	8	2 800
1 650	1 230	1 200	356	2 035	1040		200	150	170	36 x 20	F40	475	55	406	38	8	3 280
1 800	1 290	1 250	356	2 115	1080	1 705	200	150	170	36 x 20	F40	475	55	406	38	8	3 490
2 000	1 463	1 390	356	2 340	1200	1 907	200	200	170	45 x 25	F48	560	55	483	38	12	4 150
2 100	1 532	1 460	356	2 535	1290	2 052	200	200	170	45 x 25	F48	560	55	483	38	12	4 900
2 200	1 566	1 500	356	2 545	1300	2 115	200	200	170	45 x 25	F48	560	55	483	38	12	4 600
2 400	1 672	1 590	356	2 755	1425	2 327	200	200	170	45 x 25	F48	560	55	483	38	12	5 400

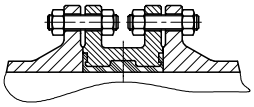
Maximum pressure rating (bar)

Valve size	**1 050 - 1 600**	**1 650 - 2 000**	**2 100 - 2 400**
Mono flanged in line	16	10	6
Mono flanged end of line	10	6	4

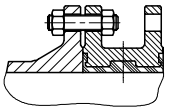
Notes

1. Flange accommodation must be specified when ordering.
2. Specify size, figure number, part name, material and flange accommodation when ordering spareparts.
3. Valve size shown is DN1200 (mono flanged version).
4. Q = minimum inside diameter of connecting pipe without clearance.





In line



End of line

Valve dimensions in mm

							Shaft dimensions				Actuator flange acc. ISO 5211						
DN	**A**	**B**	**C**	**øD**	**F**	**Q**	**E**	**øG**	**I**	**Key size width x height**	**Type**	**øJ**	**H**	**øL**	**øM hole**	**N holes**	**Mass (kg)**
500	425	375	127	730	375	469	100	60	80	18 x 11	F16	210	25	165	22	4	167
600	495	430	154	845	432	564	100	60	80	18 x 11	F16	210	25	165	22	4	203
700	570	510	165	940	480	658	110	80	100	22 x 14	F25	300	30	254	18	8	292
750	610	540	165*	984	505	715	110	80	100	22 x 14	F25	300	30	254	18	8	400
800	640	560	190	1 060	542	745	110	80	100	22 x 14	F25	300	30	254	18	8	403
850	700	665	203*	1 168	597	804	110	100	100	28 x 16	F25	300	30	254	18	8	450
900	700	665	203	1 160	597	853	110	100	100	28 x 16	F25	300	30	254	18	8	493
1 000	750	704	216	1 290	660	952	110	100	100	28 x 16	F30	350	30	298	22	8	583
1 050	780	770	254*	1 340	695	979	140	100	120	28 x 16	F30	350	30	298	22	8	1 100
1 100	820	805	254*	1 400	710	1 050	140	100	120	28 x 16	F30	350	30	298	22	8	1 199
1 200	870	830	254*	1 490	760	1 150	140	100	120	28 x 16	F30	350	30	298	22	8	1 276
1 300	960	935	254*	1 625	835	1 252	140	120	130	32 x 18	F35	415	40	356	32	8	1 672
1 350	987	965	254*	1 685	865		140	120	130	32 x 18	F35	415	40	356	32	8	1 716
1 400	1 015	1 000	254*	1 690	865	1 364	140	120	130	32 x 18	F35	415	40	356	32	8	1 749
1 500	1 130	1 090	254*	1 855	950	1 466	180	130	160	32 x 18	F40	475	50	406	38	8	2 134
1 600 (10)	1 170	1 135	254*	1 930	980	1 567	180	130	160	32 x 18	F40	475	50	406	38	8	2 211
1 600 (16)	1 200	1 165	356*	1 930	980	1 537	200	150	170	36 x 20	F40	475	50	406	38	8	3 001
1 650	1 230	1 200	356*	2 035	1040		200	150	170	36 x 20	F40	475	55	406	38	8	3 608
1 800	1 290	1 250	356*	2 115	1080	1 705	200	150	170	36 x 20	F40	475	55	406	38	8	3 839
2 000	1 463	1 390	356*	2 340	1200	1 907	200	200	170	45 x 25	F48	560	55	483	38	12	4 565
2 100	1 532	1 460	356*	2 535	1290	2 060	200	200	170	45 x 25	F48	560	55	483	38	12	5 390
2 200	1 566	1 500	356*	2 545	1300	2 115	200	200	170	45 x 25	F48	560	55	483	38	12	5 060
2 400	1 672	1 590	356*	2 755	1425	2 327	200	200	170	45 x 25	F48	560	55	483	38	12	5 940

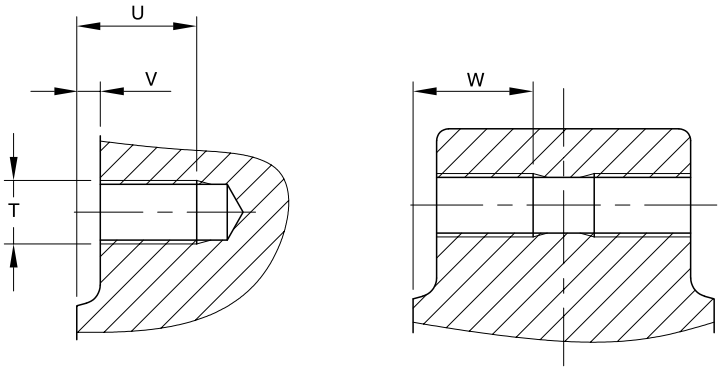
Notes

1. Flange accommodation and pressure rating must be specified when ordering.
2. Specify size, product name, part name, material and flange accommodation when ordering spare parts.
3. C = FTF ISO 5752 series 20 (table 5 wafer style) - NF E 29305 series 20 - MSS SP 67 - API 609 (sizes DN500 - DN1200 only)
4. Valve size shown is DN500.

Maximum pressure rating (bar)

Valve size	**500 - 1 000**	**1 050 - 1 600**	**1 650 - 2 000**	**2 100 - 2 400**
Double flanged in line	25	16	10	6
Double flanged end of line	16	10	6	4

5. * Not according ISO 5752.



Wafer Valve - Dimensions of tapped flange locating holes (in mm)

DN	PN6		PN10		PN16		PN25		Class 150**		
	T	U	T	U	T	U	T	U	T*	U	V
700	M24	52.5	M27	52.5	M33	52.5	M39	48.5	1 1/4"	47.5	7.5
750	-	-	-	-	-	-	-	-	1 1/4"	47.5	7.5
800	M27	65	M30	65	M36	70	M45	60	1 1/2"	60	10
900	-	-	M30	61.5	M36	58.5	M45	54.5	1 1/2"	56.5	6.5
1000	-	-	M33	73	M39	73	M52	63	1 1/2"	53	13

Double Flanged Valve - Dimensions of tapped flange locating holes (in mm)

DN	PN6		PN10		PN16		PN25		Class 150**		
	T	U	T	U	T	U	T	U	T*	U	V
700	M24	49.5	M27	49.5	M33	49.5	M39	49.5	1 1/4"	47.5	4.5
750	-	-	-	-	-	-	-	-	1 1/4"	49	4
800	M27	65	M30	65	M36	65	M45	65	1 1/2"	60	5
900	M27	64.5	M30	59.5	M36	56.5	M45	52.5	1 1/2"	54.5	4.5
1000	M27	64.5	M33	64.5	M39	64.5	M52	64.5	1 1/2"	59.5	4.5
1100	M30	64.5	M33	64.5	M39	64.5	M52	64.5	1 1/2"	58.5	4.5
1200	M27	63	M36	63	M45	63	-	-	-	-	3
1400	M33	60	M39	60	M45	60	-	-	-	-	5
1500	-	-	M39	64.5	M52	59.5	M56	59.5	1 3/4"	52.5	4.5
1600	M33	60	M45	78	M52	75	M56	75	-	-	5
1800	M36	72	M45	75	M52	85	-	-	-	-	10
2200	M39	70	M52	70	M56	65	-	-	-	-	5

Mono Valve - Dimensions of tapped flange locating holes (in mm)

DN	PN6		PN10		PN16		PN25		Class 150**		
	T	U	T	U	T	U	T	U	T*	U	V
1050	-	-	-	-	-	-	-	-	1 1/2"	52	12
1100	-	-	M33	67	M39	67	-	-	-	-	12
1200	M27	72	M36	72	M45	72	-	-	1 1/2"	67	12
1300	M33	72	M39	72	M45	72	-	-	1 3/4"	62	12
1600	M33	60	M45	60	M52	60	-	-	-	-	10
2000	M39	68	M45	68	-	-	-	-	-	-	8

Lugged Valve - Dimensions of tapped flange locating holes (in mm)

DN	PN6		PN10		PN16		PN25		Class 150**			
	T	U	T	U	T	U	T	U	T*	U	V	W
700	M24	52.5	M27	52.5	M33	52.5	M39	52.5	-	-	7.5	70
750	-	-	-	-	-	-	-	-	1 1/4"	49.5	7.5	65
800	M27	65	M30	65	M36	70	M45	70	-	-	10	70
900	-	-	M30	61.5	M36	58.5	-	-	1 1/2"	51.5	6.5	70
1000	-	-	M33	73	M39	73	-	-	1 1/2"	56	13	80

Notes

1. T = thread type, U = full thread blind + V, V = raised face, W = full thread through + V
2. For raised face flanges only
3. 4x tapped at each side of the body
4. DN1600 double flanged only 16 bar version mentioned
5. For other sizes or flange drillings contact factory

* Denotes: standard type UNC

** Denotes: according MSS SP44

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
20°	3	6	10	13	30	45	68	128	197	265	345	449	566	828	1 161	1 358	1 653
30°	9	17	26	37	60	90	162	257	394	531	690	899	1 131	1 656	2 323	2 715	3 300
40°	21	40	63	86	150	225	270	429	661	880	1 134	1 498	1 881	2 750	3 850	4 538	5 504
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	9 905
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	15 416
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	29 165
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	50 031
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	55 037

	850	900	1 000	1 050	1 100	1 200	1 300	1 350	1 400	1 500	1 600	1 650	1 800	2 000	2 100	2 200	2 400
20°	1 866	2.092	2 583	2 847	3 093	3 722	4 099	4 520	4 940	5 504	6 452	6 654	8 165	10 080	11 113	12 197	14 515
30°	3 725	4.176	5 156	5 684	6 186	7 428	7 613	8 335	9 056	10 287	11 828	12 198	14 969	18 480	20 374	22 361	26 611
40°	6 214	6 966	8 600	9 482	10 310	12 390	14 202	15 539	16 876	19 190	22 042	22 731	27 897	34 440	37 970	41 672	49 594
50°	11 182	12 536	15 477	17 063	18 558	22 300	25 770	28 074	30 377	34 818	39 676	40 916	50 213	61 992	68 346	75 010	89 268
60°	17 403	19 510	24 087	26 556	28 868	34 703	40 016	43 364	47 252	54 067	61 717	63 646	78 110	96 432	106 316	116 683	138 862
70°	32 925	36 912	45 570	50 241	54 643	65 657	75 640	82 389	89 318	102 198	116 660	120 306	147 647	182 280	200 964	220 559	262 483
80°	56 480	63 320	78 173	86 186	93 718	112 630	129 815	141 548	153 280	175 396	200 203	206 459	253 381	312 816	344 879	378 507	450 455
90°	62 132	69 656	85 995	94 809	103 100	123 900	146 240	159 556	172 872	197 830	225 792	232 848	292 572	361 200	398 223	437 052	520 128

Notes

Rated K_V = the volume of water in m^3/hr that will pass through a given valve opening at a pressure drop of 1 bar.

Maximum allowable shaft torques in Nm

Shaft material \ Size in mm	50	65	80	100	125	150	200	250	300	350	400	450	500	550	600	650	700	750
Stainless Shaft 13% Cr.	122	122	122	297	297	743	743	2 128	2 128	4 000	4 000	8 693	16 000	16 000	16 000	41 300	24 226	24 226

800	850	900	1 000	1 050	1 100	1 200	1 300	1 400	1 500	1 600 (10)	1 600 (16)	1 800	2 000	2 100	2 200	2 400
22 672	34 608	34 608	34 608	41 328	41 328	41 328	58 968	58 968	68 248	68 248	90 356	90 356	157 809	157 809	157 809	157 809

Notes

1. The given maximum allowable torques are applicable for standard type valves.

Actuator sizing torques

Size in mm	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	750	800
Rating	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
Torque	15	26	40	68	115	170	320	480	720	950	1 350	1 700	2 300	3 200	4 500	5 200	6 000
Reduced rating	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Torque	10	17	26	44	75	110	208	312	468	660	900	1 130	1 530	2 130	3 000	3 800	4 000

Size In mm	850	900	1000	1050	1100	1200	1300	1350	1400	1500	1600	1650	1800	2000	2100	2200	2400
Rating	25	25	25	16	16	16	16	16	16	16	16	10	10	10	6	6	6
Torque	7 000	8 000	10 500	11 000	12 000	15 000	22 500	27 000	31 000	38 000	46 000	50 000	65 000	85 000	95 000	105 000	125 000
Reduced rating	10	10	10														
Torque	4 600	5 300	7 000														

Notes

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

* Rating in bar

** Torque in Nm

Material selection

Seat	Disc	Shaft	Body			Notes
			Ductile Iron	Carbon Steel	Stainless Steel	
EPDM	Ductile Iron CTD	Stainless Steel	646	686	*	-
	Stainless Steel	Stainless Steel	112	141	059	-
	NiAlBz	Stainless Steel	135	140	*	-
	DI/Ebonite rubber covered	Stainless Steel	760	762	*	Valve sizes above DN300
	DI/EPDM rubber covered	Stainless Steel	113	311	*	Valve sizes up to DN300
	DI/NBR rubber covered	Stainless Steel	681	*	*	Valve sizes up to DN300
NBR	Ductile Iron CTD	Stainless Steel	673	687	*	-
	Stainless Steel	Stainless Steel	116	145	063	-
	NiAlBz	Stainless Steel	137	144	757	-
	DI/Ebonite rubber covered	Stainless Steel	761	763	*	Valve sizes above DN300
	DI/EPDM rubber covered	Stainless Steel	*	*	*	Valve sizes up to DN300
	DI/NBR rubber covered	Stainless Steel	682	*	*	Valve sizes up to DN300

Other materials and trim numbers available on request. Contact factory.

Pressure-Temperature Diagram

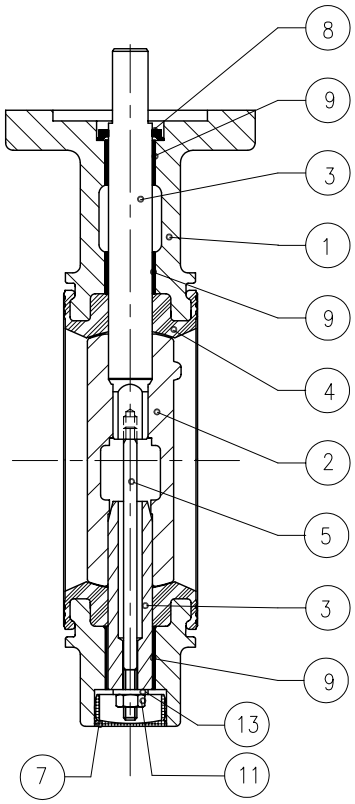
Seat material	Disc material	Body material	Body style	Size range DN (mm)	Valve function Wafer/End of Line	Temperature in °C -40 -30 -20 -15 0 50 80 100 130 150	Notes
EPDM	All	All	Wafer	50-600	W/EOL	25 Bar / * Bar	1-2-3
				700-1000	W/EOL	25 Bar / 0 Bar	1-2-3
			Lugged	50-600	W/EOL	25 Bar / 16 Bar	1-2-3
				700-1000	W/EOL	25 Bar / 16 Bar	1-2-3
			Mono flanged	1050-1600	W/EOL	16 Bar / 10 Bar	1-2-3
				1650-2000	W/EOL	10 Bar / 6 Bar	1-2-3
				2100-2400	W/EOL	6 Bar / 4 Bar	1-2-3
			Double flanged	500-600	W/EOL	25 Bar / 16 Bar	1-2-3
				700-1000	W/EOL	25 Bar / 16 Bar	1-2-3
				1050-1600	W/EOL	16 Bar / 6 Bar	1-2-3
				1650-2000	W/EOL	10 Bar / 6 Bar	1-2-3
				2100-2400	W/EOL	6 Bar / 4 Bar	1-2-3
NBR	All	All	Wafer	50-600	W/EOL	25 Bar / * Bar	4-5-6
				700-1000	W/EOL	25 Bar / 0 Bar	4-5-6
			Lugged	50-600	W/EOL	25 Bar / 16 Bar	4-5-6
				700-1000	W/EOL	25 Bar / 16 Bar	4-5-6
			Mono flanged	1050-1600	W/EOL	16 Bar / 10 Bar	4-5-6
				1650-2000	W/EOL	10 Bar / 6 Bar	4-5-6
				2100-2400	W/EOL	6 Bar / 4 Bar	4-5-6
			Double flanged	500-1000	W/EOL	25 Bar / 16 Bar	4-5-6
				1050-1600	W/EOL	16 Bar / 6 Bar	4-5-6
				1650-2000	W/EOL	10 Bar / 6 Bar	4-5-6
				2100-2400	W/EOL	6 Bar / 4 Bar	4-5-6

Pressure-Temperature Diagram

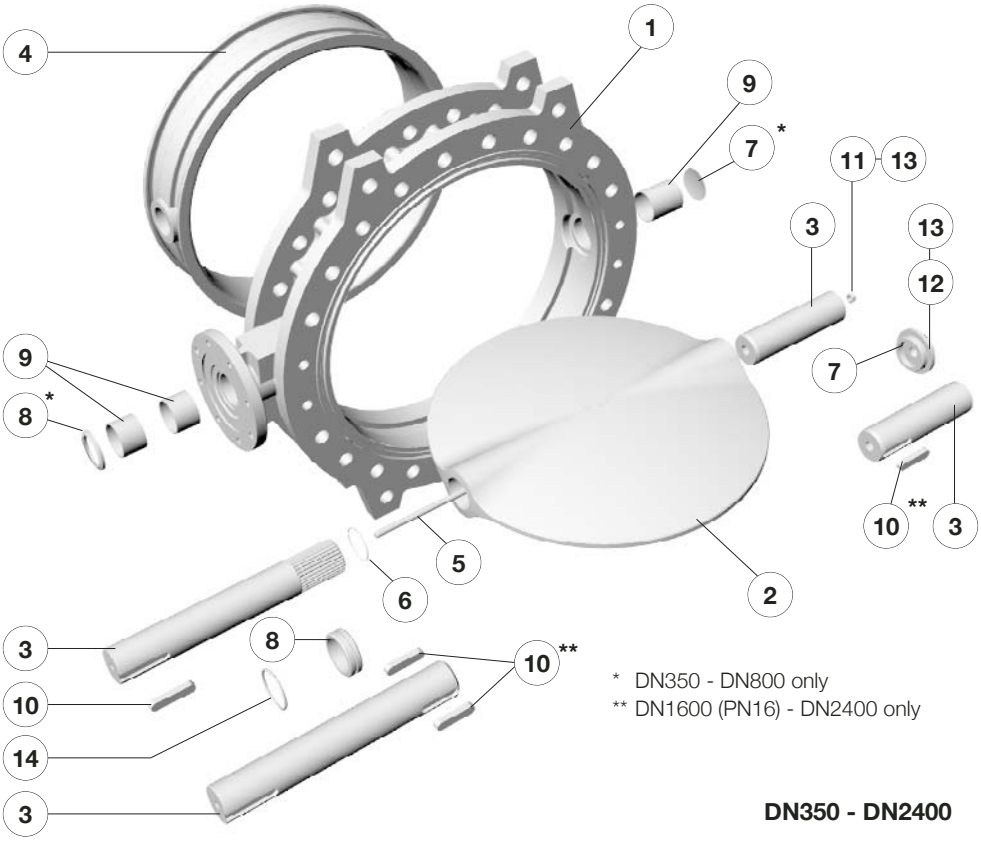
Notes	Trims			
1	112	135	646	760
2	140	141	686	762
3	059			
4	116	137	673	761
5	144	145	687	763
6	063	757		

Note

* See page 2 maximum differential pressure table.



DN50-DN300



* DN350 - DN800 only
** DN1600 (PN16) - DN2400 only

DN350 - DN2400

Part nr	Part name	Material	EN designation	EN material number	Equivalent designation	Remarks
1	Body	Ductile Iron	GJS-400-15	JS-1030		Siloxane coated
		Ductile Iron	GJS-400-18	JS-1020	ASTM A536 Gr. 60.40.18	Siloxane coated
		Carbon Steel	GP240GH	1.0619	ASTM A216 WCB	Siloxane coated
		Stainless Steel	GX5CrNiMo19-11-2	1.4408	ASTM A351 Gr. CF8M	
		Stainless Steel	GX2CrNiMo19-11-2	1.4409	ASTM A351 Gr. CF3M	
		NiAlBz	CuAl10Fe5Ni5-(B or C)		ASTM B148 Gr. 958	
2	Disc	Ductile Iron CTD	GJS-400-15	JS-1030		Epoxy coated
		Ductile Iron CTD	GJS-400-18	JS-1020	ASTM A536 Gr. 60.40.18	Epoxy coated
		Stainless Steel	GX2CrNiMo19-11-2	1.4409	ASTM A351 Gr. CF3M	Polished on request
		Stainless Steel	GX5CrNiMo19-11-2	1.4408	ASTM A351 Gr. CF8M	Polished on request
		NiAlBz	CuAl10Fe5Ni5-(B or C)		ASTM B148 Gr. 958	Polished on request
		DI/Ebonite rubber covered				sizes above DN300
		DI/EPDM rubber covered				sizes up to DN300
		DI/NBR rubber covered				sizes up to DN300
		Brass	CuZn40Pb2			
		Uranus B6®				
		Monel 400®				
		Alternative disc coatings: Epoxy, Rilsan®, Halar®				
3	Shaft	Stainless Steel	X20Cr13	1.4021	ASTM A276-420	
		Stainless Steel	X5CrNiCuNb16-4	1.4542	ASTM A276-630 (17-4 PH)	
		NiAlBz				
		Monel K500®	DIN NiCu30Al	DIN 2.4375		
		Inconel®				
4	Seat	EPDM				White EPDM on request
		EPDM-S				
		NBR				
		X-NBR				Carboxylated nitrile
		FKM				Fluoro-elastomer
		Hypalon®				Chlorosulphonated polyethylene
		Therban®				Hydrogenated NBR
		Silicon				
		Other seat materials on request				
5	Thru Bolt	Steel zinc plated				Optional stainless steel
6	Circlip	Stainless Steel				
7	Cover / Plug	Steel or Polyethylene				
8	Gasket Holder or Seal	Bronze or NBR				
9	Bearing	Reinforced PTFE lined				DU type
10	Key	Carbon Steel				
11	Locking Nut	Steel zinc plated				Optional stainless steel
12	Screw	Steel zinc plated				
13	Washer	Steel zinc plated				
14	O-rings	Nitrile				

Note: Contact factory for exact material specification and product availability.