



## HMP™\_12B PN10 / 16 Concentric Wafer Type Butterfly Valves with coated discs

### Overview:

The HMP™\_12B PN10 / 16 Concentric Wafer Type Butterfly Valves with coated discs are widely used in low pressure applications below 1.6 MPa such as water treatment, water distribution, mining, food and beverage, pulp and paper, chemical, and power plants. With its EDPM cartridge type seat (rubber liner) and streamlined disc, not a lot of force is needed for the closing of the valve. The main benefits of using the HMP™\_12B PN16 Wafer Type Butterfly Valve is that it is very cost effective, small, easy to install, dirt are scraped from seat during closing operation and no gaskets are required to seal flange connections.

### DN50 / 2" to DN600 / 24":

Lever Operated



Gearbox Operated



### DN700 / 28" to DN2000 / 80":





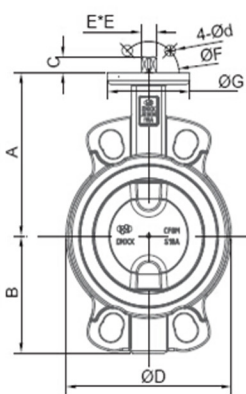
# HMP™ 12B PN10 / 16 Concentric Wafer Type Butterfly Valves with coated discs

### Features:

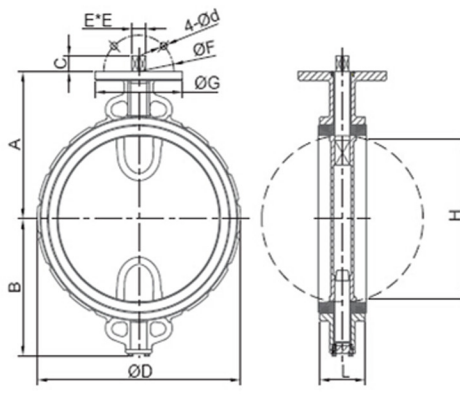
- Media: Potable water, service water, wastewater, seawater, HVAC, Air, Vapour, food, pharmaceutical, oils, acid and Alkalis.
- Temperature range: -37 °C to + 150 °C / 35 °F to + 302 °F (depending on pressure, medium and material).
- Diameter nominal: DN50 – DN2000 / 2" – 80"
- Operating pressure: 1.6Mpa / 232 psi for DN50-DN600 / 2"-24", 1Mpa / 145 psi for DN350-DN2000 / 14"-80".
- Operation: Hand lever, gearbox, pneumatic actuator, electric actuator or hydraulic actuator.
- Mounting flange design: ISO5211
- Safety feature: Stem anti-blowout design.
- Connection: Wafer, lug design enables the valve to be installed between various flange standards and no gaskets are required to seal flange connections.

### Materials Of Construction:

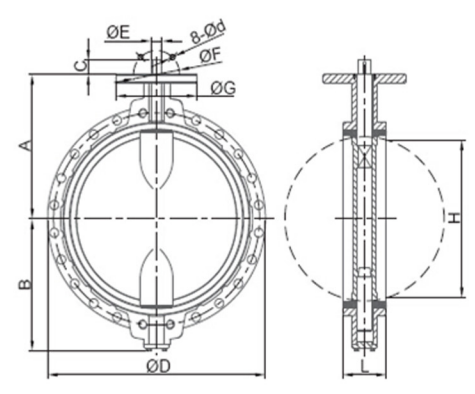
No	Part name	Specification	Specification - Optional					
			Ductile iron	Aluminium	Carbon steel			
1	Body	Cast Iron	Ductile iron	Aluminium	Carbon steel			
2	Disc	Ductile iron - Plated	Ductile iron - Nylon	Ductile iron - PTFE	Carbon steel - Plated	Corban steel - Nylon	Carbon steel - PTFE	Aluminium bronze
3	Shaft	SS 410	SS 304	SS 316	Monel			
4	Bush	Lubricated bronze	PTFE	Fibreglass backed PTFE				
5	Key	Key steel						
6	O-Ring	Nitrile (Buna)						
9	Lever	Cast Iron						
10	Gearbox housing	Cast Iron						
12	Handwheel	Cast Iron						
13	Seat	EDPM	Bona-N	PTFE	Neoprene	NBR	Hypalon	VITON
Seat temperature rating ( °C)		-25 °C to 95 °C	-37 °C to 121 °C	-10 °C to 150 °C	-7 °C to 93 °C	-12 °C to 82 °C	-18 °C to 135 °C	-23 °C to 150 °C
Seat temperature rating ( °F)		-13 F to 203 F	-35 F to 250 F	14 F to 302 F	19 F to 199 F	10 F to 180 F	0 F to 275 F	-9 F to 302 F



DN50-DN300



DN350-DN600



DN700-DN2000

### Maximum Torque Requirement:

Valve Size		PN10	145 psi	PN16	232 psi	Valve Size		PN10	145 psi	PN16	232 psi
(DN)	(inch)	(N.m)	(ft.lbf)	(N.m)	(ft.lbf)	(DN)	(inch)	(N.m)	(ft.lbf)	(N.m)	(ft.lbf)
50	2"	9,5	7,0	12,7	9,4	250	10"	164	121,0	262	193,2
65	2 1/2"	12	8,9	15	11,1	300	12"	203	149,7	264	194,7
80	3"	16	11,8	21	15,5	350	14"	232	171,1	562	414,5
100	4"	23	17,0	30	22,1	400	16"	622	458,8	870	641,7
125	5"	41	30,2	53	39,1	450	18"	829	611,4	1161	856,3
150	6"	53	39,1	59	43,5	500	20"	1036	764,1	1451	1070,2
200	8"	68	50,2	100	73,8	600	24"	1314	969,2	1840	1357,1



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### Dimensions:

Valve Size		Face to face (L)		Centre to top flange (A)		Centre to bottom (B)		Top flange to top of shaft (C)		Diameter of body (D)		Diameter of shaft (E)		PCD (Ø) of mounting flange (F)		Mounting flange hole diameter (d), number of holes & ISO 5211 flange type (flg type)				Diameter of disk (G or H)		Mass	
(DN)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	hole no	flg type	(mm)	(inch)	(kg)	(lbs)
50	2"	42	1,65	161	6,34	80	3,15	32	1,26	120	4,72	12,6	0,50	70	2,76	9	0,35	4	F07	31	1,22	2,5	5,51
65	2 1/2"	45	1,77	175	6,89	89	3,50	32	1,26	136	5,35	12,6	0,50	70	2,76	9	0,35	4	F07	45	1,77	3,2	7,05
80	3"	45	1,77	181	7,13	95	3,74	32	1,26	160	6,30	12,6	0,50	70	2,76	9	0,35	4	F07	64	2,52	3,6	7,94
100	4"	52	2,05	200	7,87	114	4,49	32	1,26	185	7,28	15,77	0,62	70	2,76	9	0,35	4	F07	91	3,58	4,6	10,14
125	5"	55	2,17	213	8,39	127	5,00	32	1,26	215	8,46	18,92	0,74	70	2,76	9	0,35	4	F07	110	4,33	7	15,43
150	6"	56	2,20	226	8,90	139	5,47	32	1,26	238	9,37	18,92	0,74	70	2,76	9	0,35	4	F07	146	5,75	7,8	17,20
200	8"	61	2,40	260	10,24	175	6,89	45	1,77	295	11,61	22,1	0,87	102	4,02	11	0,43	4	F10	193	7,60	13,2	29,10
250	10"	66	2,60	292	11,50	203	7,99	45	1,77	357	14,06	28,45	1,12	102	4,02	11	0,43	4	F10	241	9,49	19,2	42,33
300	12"	77	3,03	337	13,27	242	9,53	45	1,77	407	16,02	31,6	1,24	102	4,02	11	0,43	4	F10	292	11,50	32,5	71,65
350	14"	77	3,03	368	14,49	267	10,51	45	1,77	467	18,39	31,6	1,24	125	4,92	13	0,51	4	F12	329	12,95	41,3	91,05
400	16"	87	3,43	400	15,75	309	12,17	72	2,83	525	20,67	33,15	1,31	125	4,92	13	0,51	4	F12	376	14,80	61	134,48
450	18"	106	4,17	422	16,61	328	12,91	72	2,83	585	23,03	38	1,50	140	5,51	18	0,71	4	F14	425	16,73	79	174,16
500	20"	132	5,20	480	18,90	361	14,21	82	3,23	650	25,59	41,15	1,62	140	5,51	18	0,71	4	F14	475	18,70	128	282,19
550	22"	154	6,06	510	20,08	397	15,63	82	3,23	715	28,15	50,65	1,99	140	5,51	18	0,71	4	F14	507	19,96	140	308,65
600	24"	154	6,06	562	22,13	459	18,07	82	3,23	816	32,13	50,65	1,99	165	6,50	22	0,87	4	F16	573	22,56	188	414,47
650	26"	165	6,50	580	22,83	470	18,50	82	3,23	825	32,48	63,35	2,49	165	6,50	22	0,87	4	F16	606	23,86	215	473,99
700	28"	165	6,50	624	24,57	520	20,47	82	3,23	895	35,24	63,35	2,49	165	6,50	22	0,87	4	F16	674	26,54	252	555,56
750	30"	165	6,50	660	25,98	564	22,20	90	3,54	894	35,20	63,35	2,49	254	10,00	18	0,71	8	F25	727	28,62	290	639,34
800	32"	188	7,40	672	26,46	591	23,27	82	3,23	1015	39,96	63,35	2,49	254	10,00	18	0,71	8	F25	771	30,35	368	811,30
900	36"	203	7,99	720	28,35	656	25,83	118	4,65	1115	43,90	75	2,95	254	10,00	18	0,71	8	F25	839	33,03	465	1025,15
950	38"	216	8,50	760	29,92	690	27,17	118	4,65	1195	47,05	75	2,95	254	10,00	18	0,71	8	F25	889	35,00	550	1212,54
1000	40"	216	8,50	800	31,50	721	28,39	142	5,59	1230	48,43	85	3,35	254	10,00	18	0,71	8	F25	939	36,97	606	1336,00
1100	44"	255	10,04	826	32,52	771	30,35	142	5,59	1404	55,28	94,7	3,73	298	11,73	22	0,87	8	F30	1036	40,79	805	1774,72
1200	48"	276	10,87	941	37,05	874	34,41	150	5,91	1511	59,49	107,7	4,24	295	11,61	22	0,87	8	F30	1137	44,76	900	1984,16
1400	56"	279	10,98	1000	39,37	940	37,01	175	6,89	1685	66,34	139,9	5,51	356	14,02	32	1,26	8	F35	1351	53,19	1158	2552,95
1600	64"	318	12,52	1155	45,47	1085	42,72	195	7,68	1930	75,98	160	6,30	356	14,02	32	1,26	8	F35	1548	60,94	1685	3714,78
1800	72"	356	14,02	1200	47,24	1170	46,06	195	7,68	2170	85,43	174,5	6,87	406	15,98	39	1,54	8	F40	1703	67,05	2645	5831,22
2000	80"	406	15,98	1363	53,66	1360	53,54	245	9,65	2345	92,32	199	7,83	406	15,98	39	1,54	8	F40	1938	76,30	4000	8818,48

### Fitment Of Actuators:

The HMP™ 12B PN10 / 16 Concentric Wafer Type Butterfly Valves have an S05211 mounting flange suitable to directly fit any type of electric, pneumatic or hydraulic actuator.

### Design Standards:

The HMP™ 12B PN10 / 16 Concentric Wafer Type Butterfly Valves are designed in accordance with various international standards as set out below:

ANSI B16.34

API 609

ISO 5208

Multi-standard alignment holes suitable for various standard of flanges allowing the valve to be fit between the following flange standards:

ANSI B16.1 Class 125

ANSI B16.5 Class 150

BS 10 / AS2129 Table D and E

BS 4504 / D.I.N. T10 and T16

EN1092 PN10 and PN16

JIS B2239 5K and 10K

SANS 1123 T1000 and T1600