

BUTTERFLY VALVES

KKY-W/F/L-VIII/FEP/FEP
Lined butterfly valve,
Wafer, lugged or flanged



PARTS

No.	Part	Material		
1	Body	A216 WCB + lining	A351 C8 A351 CF8M + lining	A351 CF3 A351 CF3M + lining
2	Stem	SS410 SS420 17-4PH		
3	Shaft sleeve	SS304		
4	O-ring	VITON VITON + FEP VITON + PFA		
5	Disc	A216 WCB + lining	CF8/CF8M + lining	CF3/CF3M + lining
6	Seat	PTFE, RPTFE, PFA, FEP, GXPO		
7	Elomaster backing	Silicon rubber VITON		
8	Body bolt	A 193 B7	A320 B8	A193 B8M
9	Bolt	A193 B7	A320 B8	A193 B8M

TECHNICAL SPECIFICATION

Design and manufacture standard		HG/T 3704, GB/T 12238		API 608
Face-to-face dimensions		HG/T 3704, GB/T 12221		ASME B16.10
Flange standard		HG/T 20592, GB/T 9119		ASME B16.5 JIS B2220
Inspection and test standard		GB/T 13927, JB/T 9092		API 598
Nominal pressure(MPa)		1.0	1.6	Class 150
Pressure test (MPa)	Shell test	1.5	1.5	1.5
	High pressure sealing	1.1	1.1	1.1
	High pressure sealing	0.6	0.6	0.6
Temperature range (°C)		PTFE: -30~180, PFA: -30~200, FEP: -30~150, GXPO: -10~80		
Applicable medium		Strong corrosive medium i.e hydrochloric acid, nitric acid, hydrofluoric acid, liquid chlorine, sulfuric acid and aqua regia etc.		

NB! Test standard refers to general valve standard, high pressure should be customised for processing

PRODUCT DESCRIPTION

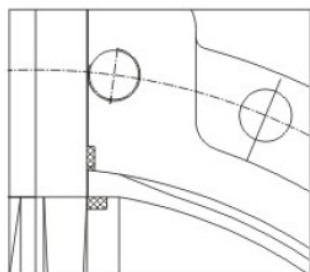
- » The lined butterfly valves bi-directional flow is possible at maximum operating pressure. Since the valve port corresponds to the piping diameter, a high flow capacity is guaranteed.
- » It features ease of maintenance, repeatable on-off, long life durability.
- » The concentric design is commonly used in the power generation, brewing, water and food industries and is suitable for both gaseous and liquid service. Typically applied in chemical/petrochemical process, food and beverage, and pulp and paper etc.
- » Operation methods: manual, worm gear, electric, pneumatic and hydraulic actuator.
- » Available as per the needs of applications in additional sizes and other than standard materials.
- » Lining material: PTFE, PFA, FEP, GXPO, yms.

BUTTERFLY VALVES

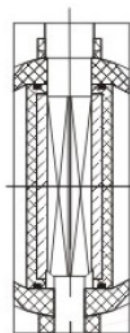
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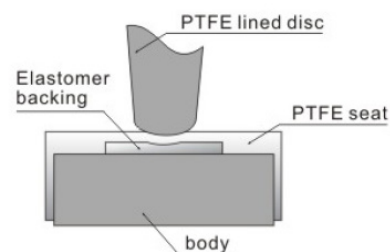
STRUCTURAL FEATURES



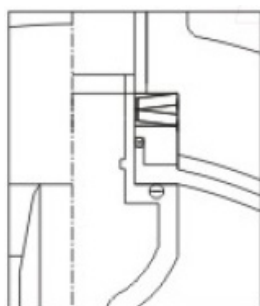
Fully lined design, all the wetted parts are completely isolated by lining, to prevent the metal parts from corrosion.



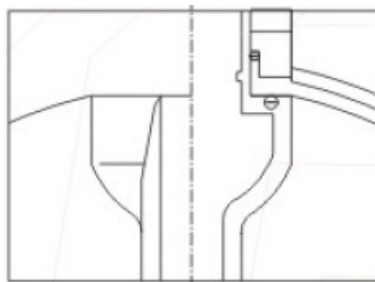
Square stem enhance the strenght and reduce the opening gap.



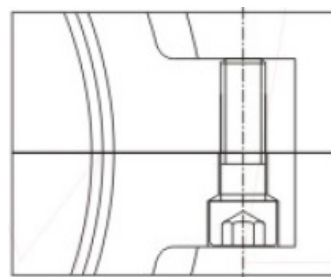
The disc sealing face is hemispherical after polishing, to reduce the operation torque. The elastomer backing provides a resilient and uniform pressure onto sealing surface for positive tight shut-off.



Four O-ring with Viton in the middle, combined with the prestress transmitted from Belleville spring washer, makes Viton expand to strengthen the sealing performance.

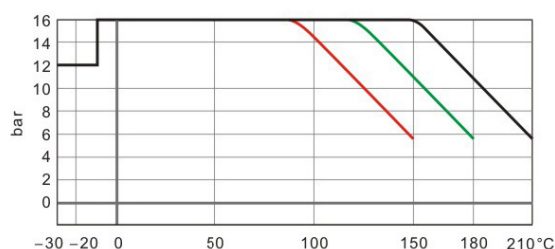


It adopts one disc and stem design, which prevents the stem from blow-out to reduce the installation gap.



The body is splitted and connected by hexagonal screw. After long valve operation time, or if the fluorine plastic has worn or shrunk, adjust the inner hexagonal screw and tighten the sealing to achieve the equal effect of a new valve (1-3mm reserved).

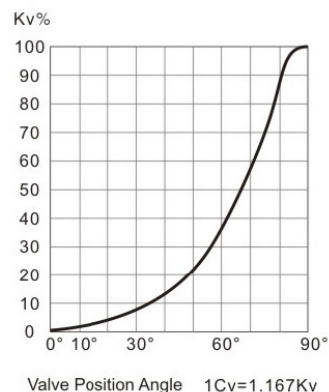
PRESSURE-TEMPERATURE CURVE



Vacuum
0.1mbar

Note: — PFA — PTFE — FEP

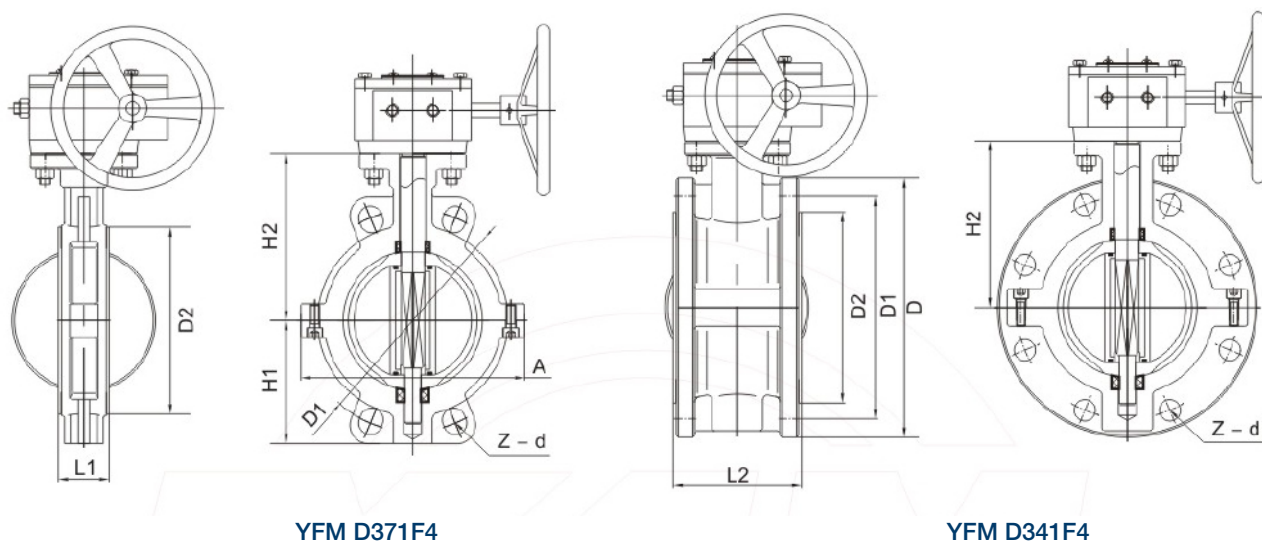
FLOW CHARACTERISTICS



BUTTERFLY VALVES

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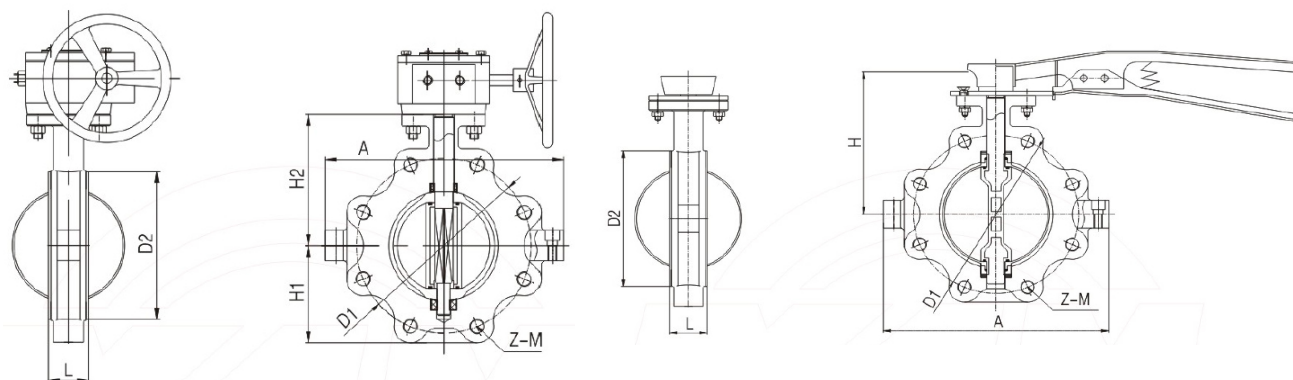


DIMENSIONS - HG/T 20592 / ASME B16.5

DN	NPS	L1	L2	PN10			PN16			Class 150			D2	H1	H2	A
		Wafer	Flanged	D	D1	Z-d	D	D1	Z-d	D	D1	Z-d				
40	1 1/2	40	106	150	110	4-18	150	110	4-18	140	105	4-19	70	60	90	78
50	2	43	108	165	125	4-18	165	125	4-18	155	120	4-19	90	70	112	96
65	2 1/2	46	112	185	145	4-18	185	145	4-18	175	140	4-19	110	80	125	112
80	3	46	114	200	160	8-18	200	160	8-18	185	150	8-19	120	89	135	130
100	4	52	127	220	180	8-18	220	180	8-18	210	175	8-19	148	105,5	142	150
125	5	56	140	250	210	8-18	250	210	8-18	250	210	8-23	181	121	165	178
150	6	56	140	285	240	8-22	285	240	8-22	280	240	8-23	202	145	180	206
200	8	60	152	340	295	8-22	340	295	12-22	330	290	12-23	263	177	228	260
250	10	68	165	395	350	12-22	405	355	12-26	400	355	12-25	313	205	278	317
300	12	78	178	445	400	12-22	460	410	12-26	445	400	16-25	368	235	295	367
350	14	78	190	505	460	16-22	520	470	16-26	490	445	16-25	415	260	341	466
400	16	102	216	565	515	16-26	580	525	16-30	560	510	16-27	484	299	390	495
450	18	114	222	615	565	20-26	640	585	20-30	620	565	20-27	519	320	442	630
500	20	127	229	670	620	20-26	715	650	20-33	675	620	20-27	569	352,5	470	694

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Lined butterfly valve,
Lugged



YFM TD371
PN10, PN16

YFM TD71
Class 150

DIMENSIONS - HG/T 20592 / ASME B16.5

DN	NPS	L	PN10			PN16			Class 150			D2	H1	H2	A
			D	D1	Z-M	D	D1	Z-M	D	D1	Z-M				
50	2	43	165	125	4-M16	150	125	4-M16	150	120,5	4-M16	90	70	112	96
65	2 1/2	46	185	145	4-M16	180	145	4-M16	180	139,5	4-M16	110	80	125	112
80	3	46	200	160	8-M16	190	160	4-M16	190	152,5	4-M16	130	89	135	130
100	4	52	220	180	8-M16	230	180	8-M16	230	190,5	8-M16	148	105,5	142	150
125	5	56	250	210	8-M16	255	210	8-M20	255	216	8-M20	181	121	165	178
150	6	56	285	240	8-M20	280	240	8-M20	280	241,5	8-M20	202	145	180	206
200	8	60	340	295	12-M20	345	295	8-M20	345	298,5	8-M20	263	177	228	260
250	10	68	395	350	12-M24	405	355	12-M24	405	362	12-M24	313	205	278	317
300	12	78	445	400	12-M24	485	410	12-M24	485	432	12-M24	368	235	295	367
350	14	78	505	460	16-M24	535	470	12-M27	535	476	12-M27	415	260	341	466
400	16	102	565	515	16-M27	595	525	16-M27	595	540	16-M27	484	299	390	495
450	18	114	615	565	20-M27	635	585	16-M30	635	578	16-M30	519	320	442	630
500	20	127	670	620	20-M30	700	650	20-M30	700	635	20-M30	569	352,5	470	694