

BUTTERFLY VALVES

Model A271
Lined butterfly valve
Wafer, lugged or flanged

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 etc.



PARTS

Nr	Parts	Material		
1	Body	A216 WCB	A351 CF8 A351 CF8M	A351 CF3 A351 CF3M
2	Stem		SS410 SS420 17-4PH	
3	Shaft sleeve		SS304	
4	O-ring		VITON VITON+FEP VITON+PFA	
5	Disc	A216 WCB + Lining material	CF8/CF8M + Lining material	CF3/CF3M + Lining material
6	Seat		PTFE RPTFE PFA FEP GXPO	
7	Elastomer backing		Silicon rubber VITON	
8	Body bolt	A193 B7	A320 B8	A193 B8M
9	Bolt	A193 B7	A320 B8	A193 B8M

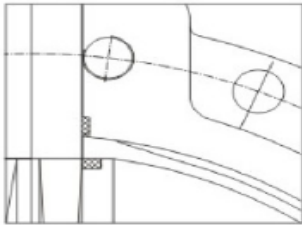


TECHNICAL SPECIFICATION

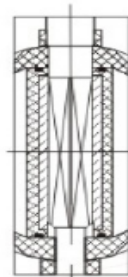
Design & manufacture standard		HG/T 3704, GB/T	12238	API 608
Face-to-face dimensions		HG/T 3704, GB/T	12221	ASME B16.10
Flange standard		HG/T 20592, GB/T	9119	ASME B16.5 JIS B2220
Inspection & test standard		GB/T 13927, JB/T	9092	API 598
Nominal pressure (MPa)		1.0	1.6	150 lbs
Pressure test (MPa)	Shell test	1.5	1.5	1.5
	High pressure sealing	1.1	1.1	1.1
	Low 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.

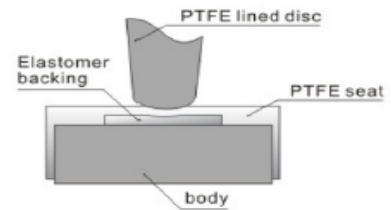
STRUCTURE FEATURES



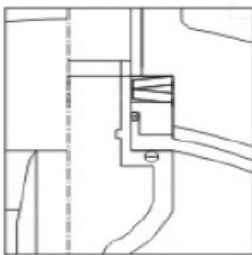
Fully lined design, all the wetted parts are completely isolated by lining, to prevent the metal parts from corrosion.



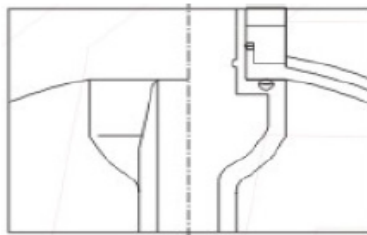
Square stem enhance the strenght and reduce the opening gap.



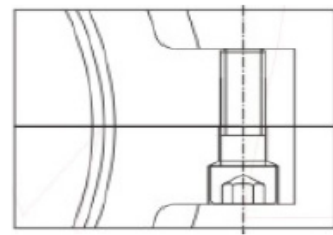
The disc sealing face is hemispherical after polishing, to reduce the operation torque. The elastomer backing provides a resilient and uniform pressure onto sealing surface for positive tight shut-off.



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.

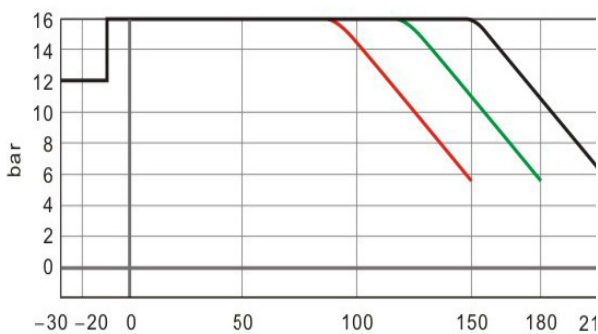


It adopts one disc and stem design, which prevents the stem from blow-out to reduce the installation gap.



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).

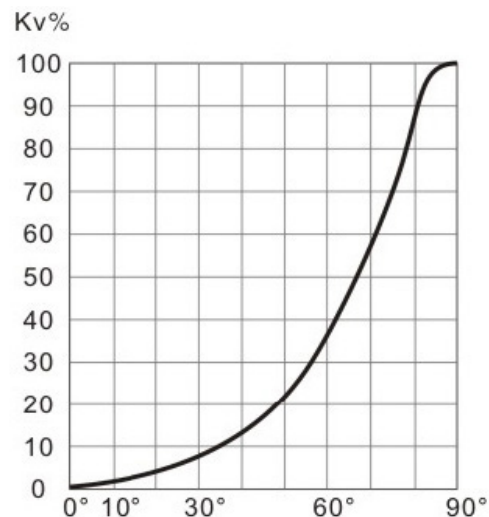
PRESSURE-TEMPERATURE CURVE

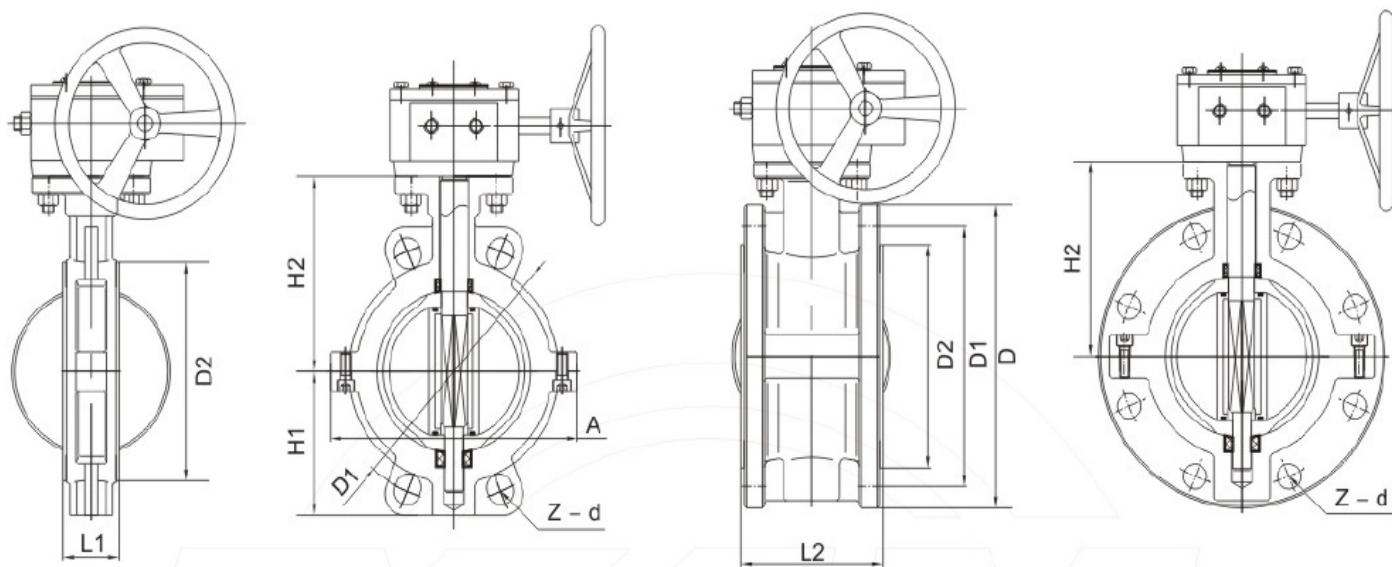


Vacuum
0.1mbar

Note: — PFA — PTFE — FEP

FLOW CHARACTERISTICS



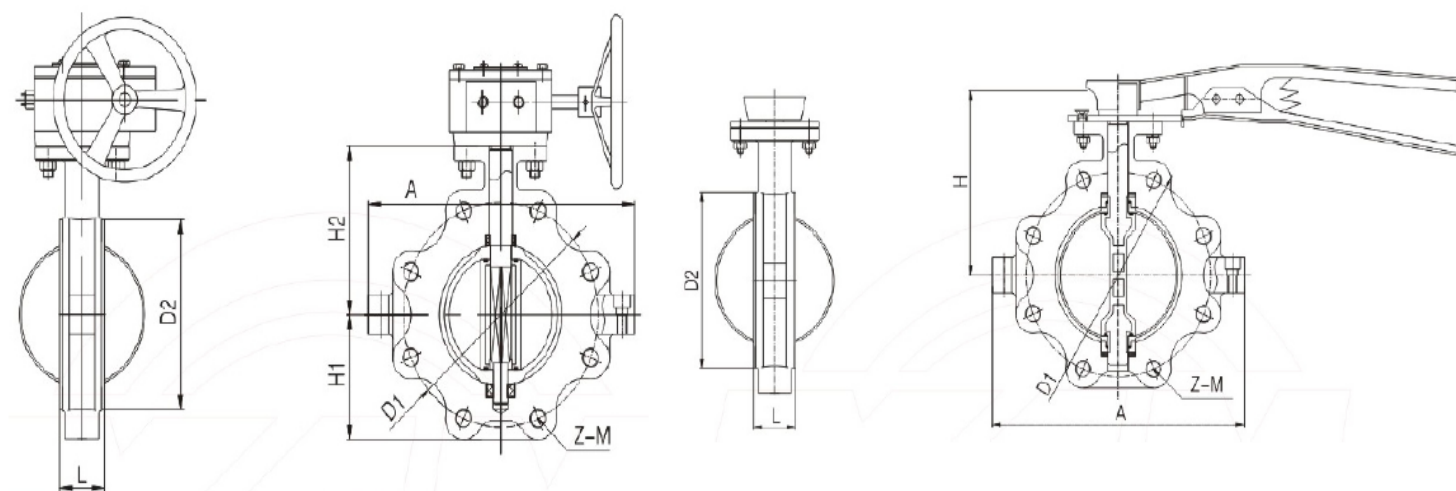


YFM D371F4

YFM D341F4

DIMENSIONS - HG/T 20592 / ASME B16.5

DN	NPS	L1	L2	PN10			PN16			Class 150			D2	H1	H2	A
		Wafer	Flan-	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	130	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	360	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	496



YFM TD371
PN10, PN16

YFM TD71
Class 150All

DIMENSIONS - HG/T 20592 / ASME B16.5

DN	NPS	L	PN10			PN16			Class 150			D2	H1	H2	A
			D	D1	Z-d	D	D1	Z-d	D	D1	Z-d				
50	2	43	165	125	4-M16	165	125	4-M16	150	120,1	4-M16	90	70	112	96
65	2 1/2	46	185	145	4-M16	185	145	4-M16	180	139,5	4-M16	110	80	125	112
80	3	46	200	160	8-M16	200	160	8-M16	190	152,5	4-M16	130	89	135	130
100	4	52	220	180	8-M16	220	180	8-M16	230	190,5	8-M16	148	105,5	142	150
125	5	56	250	210	8-M16	250	210	8-M16	255	216	8-M20	181	121	165	178
150	6	56	285	240	8-M20	285	240	8-M20	280	241,5	8-M20	202	145	180	206
200	8	60	340	295	8-M20	340	295	12-	345	298,5	8-M20	263	177	228	260
250	10	68	395	350	12-	405	355	12-	405	362	12-	313	205	278	317
300	12	78	445	400	12-	460	410	12-	485	432	12-	368	235	295	367
350	14	78	505	460	16-	520	470	16-	535	476	12-	415	360	341	466
400	16	102	565	515	16-	580	525	16-	595	540	16-	484	299	390	495
450	18	114	615	565	20-	640	585	20-	635	578	16-	519	320	442	630
500	20	127	670	670	20-	715	650	20-	700	635	20-	596	352,5	470	694