



Series  
BFV

# Butterfly Valve

Low Cost, Lever Operated, Lug or Wafer Pattern, 225 psig

**Dimensions (in)**

Size	A	B	C	n, WF	n, LT	Cv	Weight	Size	A	B	C	n, WF	n, LT	Cv	Weight
2"	6.34	3.15	1-3/4	4	4	135	5.5	6"	8.9	5.47	2-1/4	8	8	1579	17.2
2-1/2"	6.89	3.5	1-7/8	4	4	220	7.05	8"	10.24	6.89	2-1/2	8	8	3136	29.1
3"	7.13	3.74	1-7/8	4	4	302	7.93	10"	11.5	7.99	2-3/4	12	12	5340	42.33
4"	7.87	4.49	2-1/8	4	8	600	10.8	12"	13.27	9.53	3-1/8	12	12	8250	71.65
5"	8.39	5	2-1/4	8	8	1022	15.43								

**Series BFV Butterfly Valves**

- Phenolic backed cartridge seat design for extended service and ease of replacement. Can be used for vacuum service.
- Extended neck for insulation - no fabricated extensions required.
- Machined flats attach disc/stem - no pins.
- Valve features a retainer lip for dead end service.
- Triple seal reduces possibility of external leakage.
- Silicone free from the factory - no aftermarket cleaning required.

The most critical aspect of the Series BFV Butterfly Valves is the cartridge seat design, which alleviates installation problems associated with common "dove tail design" seats. Valve torque is lower and more consistent because the seat dynamics do not rely on being mated between two flanges. Precision machining of the disc and body allow the cartridge design to maintain a tighter disc to seat tolerance, providing a perfect low torque seal each and every time the valve is cycled. Seat to disc seal is independent of flange support and capable of full rated dead end service. Select from wafer or lug patterns with either a 10-position locking handle lever or manual gear operator. Standard valves provide bubble tight sealing to 225 psi (15.5 bar) and are designed to comply with MSS-SP-67 and API-609.

**Cv Values**

Size	Degree Opening									Full Open
	10°	20°	30°	40°	50°	60°	70°	80°	90°	
2"	0.1	5	12	24	45	64	90	125	135	
2-1/2"	0.2	8	20	37	65	98	144	204	220	
3"	0.3	12	22	39	70	116	183	275	302	
4"	0.5	17	36	78	139	230	364	546	600	
5"	0.8	29	61	133	237	392	620	930	1022	
6"	2	45	95	205	366	605	958	1437	1579	
8"	3	89	188	408	727	1202	1903	2854	3136	
10"	4	151	320	694	1237	2047	3240	4859	5340	
12"	5	234	495	1072	1911	3162	5005	7505	8250	

Cv is the number of U.S. GPM of 60°F water that will pass through the valve with a 1 PSI pressure drop.

Size	Liner	Model	Size	Liner	Model
2"	EPDM	BFV202WFB311HL0	5"	EPDM	BFV205LTB311HL0
	PTFE	BFV202WFB341HL0		PTFE	BFV205LTB341HL0
	EPDM	BFV202LTB311HL0	6"	EPDM	BFV206WFB311HL0
	PTFE	BFV202LTB341HL0		PTFE	BFV206WFB341HL0
2-1/2"	EPDM	BFV225WFB311HL0	8"	EPDM	BFV208WFB312MG0
	PTFE	BFV225WFB341HL0		PTFE	BFV208WFB342MG0
	EPDM	BFV225LTB311HL0	10"	EPDM	BFV210WFB312MG0
	PTFE	BFV225LTB341HL0		PTFE	BFV210WFB342MG0
3"	EPDM	BFV203WFB311HL0	12"	EPDM	BFV212WFB312MG0
	PTFE	BFV203WFB341HL0		PTFE	BFV212WFB342MG0
	EPDM	BFV203LTB311HL0		EPDM	BFV212LTB312MG0
	PTFE	BFV203LTB341HL0		PTFE	BFV212LTB342MG0
4"	EPDM	BFV204WFB311HL0			
	PTFE	BFV204WFB341HL0			
	EPDM	BFV204LTB311HL0			
	PTFE	BFV204LTB341HL0			
5"	EPDM	BFV205WFB311HL0			
	PTFE	BFV205WFB341HL0			

BFV202WEB311HL0 WF=Wafer Pattern LT=Lug Pattern

**SPECIFICATIONS**

**VALVE BODY**

**Service:** Compatible liquids, gases, and steam.

**Line Size:** 2" to 12".

**Body Style:** 2-way, wafer or lug butterfly.

**End Connections:** Flange, to be used with flanges that are ANSI Class 125 (B16.1) and ANSI Class 150 (B16.5) dimensions.

**Pressure Limit:** 225 psi (15.5 bar) WOG.

**Wetted Materials:**

Body material: Ductile iron;  
Disc: 316 SS;  
Seat and O-ring: EPDM or PTFE;  
Stem: 410 SS.

**Temperature Limits:** Disc: EPDM: -50 to 250°F (-46 to 121°C); PTFE: 0 to 300°F (-18 to 149°C).

**Bearings:** Nylatron.

**Flow Rate:** See Cv chart.

**Operator:** 2 to 6": 10-position locking hand lever; 8 to 12": manual gear.

**APPLICATIONS**

- Perfect for on-off or throttling service
- Ideal for shut-off of water in chillers, cooling towers, and thermal storage systems
- Irrigation systems
- Tank trucks
- Sewage systems, waste water treatment

**Operating Torque Valves (inch lb)**

EPDM Seats	Size (inches)									
	2	2-1/2	3	4	5	6	8	10	12	
Service Pressure										
50 psi	86	126	179	295	540	750	1440	2466	3510	
100 psi	108	144	195	310	610	780	1490	2910	4100	
150 psi	126	150	210	335	699	847	1549	3360	5560	
200 psi	150	198	297	400	725	940	1800	3890	7558	

  

PTFE Seats	Size (inches)									
	2	2-1/2	3	4	5	6	8	10	12	
Service Pressure										
50 psi	125	130	195	390	650	890	1690	3699	5265	
100 psi	130	145	210	430	690	940	1710	4365	6150	
150 psi	142	160	248	443	720	974	1770	5040	8340	
200 psi	180	220	340	490	795	1020	1890	5835	11367	

VALVES

Valves, Butterfly