

# Ball Valves

## Series BV2MB:

Body and endcaps are constructed of investment cast stainless steel, while stem is 316 SS. Seats and body seals are 15% glass reinforced PTFE providing broad media compatibility and bubble tight shutoff to 1000 psig (69 bar). Internally loaded, blowout-proof stem provides safety in the event of overpressure. Full port design allows for maximum Cv with minimal pressure drop. Integral actuator mounting pads allows for ease of automation.

### Specifications:

End Connections: 1/4" to 3" female NPT  
 Pressure Limits: 1000 psi (69 bar) WOG, 150 psi (10.3 bar) SWP  
 Temperature Limits: -20 to 450°F (-29 to 232°C)  
 Wetted Materials: Body, Ball, End Cap: CF8M SS; Stem: 316 SS; Seat, Thrust Washer: RTFE; End Gasket, Stem Packing: PTFE

Model	NPT Size	Cv	Price
BV2M100	1/4"	6	\$44
BV2M101	3/8"	7	\$44
BV2M102	1/2"	10	\$47
BV2M103	3/4"	24	\$66
BV2M104	1"	45	\$94
BV2M105	1-1/4"	90	\$124
BV2M106	1-1/2"	125	\$174
BV2M107	2"	190	\$244
BV2M108	2-1/2"	240	\$556
BV2M109	3"	425	\$751

## Series BV2MB:

Valve body, body cap, and ball are made of quality brass. Seats and stem packing are constructed of Teflon® for long lasting service. Blowout-proof stem provides safety in the event of overpressure. Full port design allows for maximum Cv and minimal pressure drop.

### Specifications:

End Connections: 1/4" to 3" female NPT  
 Pressure Limit: 1/4" to 1": 600 psi (41.4 bar)  
 1-1/4" to 2": 400 psi (27.6 bar)  
 2-1/2" to 3": 200 psi (13.8 bar)  
 Temperature Limit: 10 to 200°F (-12 to 93°C)  
 Wetted Materials: Body & body cap: forged brass; Ball & stem: brass; Seat & packing: Teflon®  
 Other Materials: Body seal: rubber; Handle: plated steel; Nut & gasket: brass

Model	NPT Size	Cv	Price
BV2MB00	1/4"	7.5	\$8
BV2MB01	3/8"	7.5	\$8
BV2MB02	1/2"	16	\$12
BV2MB03	3/4"	43	\$18
BV2MB04	1"	58	\$26
BV2MB05	1-1/4"	105	\$39
BV2MB06	1-1/2"	160	\$54
BV2MB07	2"	325	\$76
BV2MB08	2-1/2"	475	\$182
BV2MB09	3"	780	\$272

# Ball Valves

**NEW!**



### Features:

- True union design allows for easy removal from a piping system without breaking down piping connections
- Valve body can be lifted out of the line by unscrewing two assembly nuts
- All PVC construction means superior corrosion resistance
- Double O-ring stem seal for twice the leakage protection
- Full port design provides maximum CV with minimal pressure drop

### Specifications:

Wetted Materials: Ball, Stem, End Connector, Body Connector O-ring, Seal Carrier: PVC; Stem O-ring, Body O-ring, Dampener Seal, End: EPDM; Seat: HDPE  
 Other Materials: Handle: PP; Union Nut: PVC  
 Line Size: 1/2" to 4"  
 Process Connections: Socket or female NPT  
 Pressure Limits: 1/2" to 2": 240 psi (16.5 bar).  
 2-1/2" to 4": 150 psi (10.3 bar)  
 Temperature Limits: 32 to 110°F (0 to 43°C)

Model	NPT Size	Cv	Price
TBV-1102D	1/2"	7	\$34
TBV-1103D	3/4"	18	\$39
TBV-1104D	1"	32	\$48
TBV-1105D	1-1/4"	114	\$57
TBV-1106D	1-1/2"	203	\$74
TBV-1107D	2"	243	\$104

# Ball Valves

The **Series 2BVS** is an economical, stainless steel, ball valve ideal for chemical, pharmaceutical, and food and beverage applications. Three piece construction allows for in-line maintenance and cleaning. Valve body and endcaps are investment cast for exceptional quality and corrosion resistance. Teflon seats and body seals are glass reinforced for strength while providing excellent chemical compatibility, and bubble tight sealing to 1000 psi. Standard ISO 5211 mounting pad allows for easy automation. Full port design provides maximum Cv with minimal pressure drop.



## Specifications:

Body: Three-piece  
 Size: 1/4" thru 3"  
 End Connections: FNPT  
 Max. Pressure: 1000 WOG (1/4" - 2"); 800 WOG (2 1/2" - 3"); 150 SWP (1/4" - 3")  
 Material: Body/Endcap: SS (CF8M); Ball/Stem: 316SS; Seats/Packing: Reinforced PTFE  
 Temp. Range: -60 to 450°F

Model	Size	Cv	Price
2BVS3AT1000	1/4"	6	\$71
2BVS3BT1000	3/8"	15	\$71
2BVS3CT1000	1/2"	15	\$72
2BVS3ET1000	3/4"	25	\$101
2BVS3FT1000	1"	35	\$134
2BVS3GT1000	1 1/4"	46	\$212
2BVS3HT1000	1 1/2"	80	\$283
2BVS3JT1000	2"	110	\$380
2BVS3KT1000	2 1/2"	310	\$504
2BVS3MT1000	3"	360	\$738

# Ball Valves



These mini brass ball valves are ideal for use in small, confined spaces, where larger valves are inappropriate. Installation is made easy with a choice of female x female or male x female process connections. Pure PTFE ball seats provide broad media compatibility and bubble tight shutoff. Double seal system allows valve to be operated in both directions. Wedge handle and screwdriver style have a blowout-proof brass stem for maximum safety.

## Specifications:

Pressure Limits:  
**MV4:** -29"Hg to 200 psi (-736mmHg to 13.8 bar);  
**MV5:** -29"Hg to 450 psi (-736mmHg to 31 bar)

Temperature Limits:  
**MV4:** -4 to 200°F (-20 to 93°C);  
**MV5:** -4 to 250°F (-20 to 121°C)

Wetted Materials:  
 Body: Nickel-plated brass; Ball: Chrome-plated brass; Stem Seal: Viton®; Seat: PTFE

Handle Style	Pipe Size	Cv Value	Female x Female		Male x Female	
			Model	Price	Model	Price
Lever Handle	1/8"	5.3	MV4-LF1	\$16	MV4-LM1	\$16
	1/4"	6.6	MV4-LF2	\$14	MV4-LM2	\$14
	3/8"	6.6	MV4-LF3	\$14	MV4-LM3	\$14
	1/2"	11	MV4-LF4	\$17	MV4-LM4	\$17
Tee Handle	1/8"	5.3	MV4-TF1	\$16	MV4-TM1	\$16
	1/4"	6.6	MV4-TF2	\$14	MV4-TM2	\$14
	3/8"	6.6	MV4-TF3	\$14	MV4-TM3	\$14
	1/2"	11	MV4-TF4	\$17	MV4-TM4	\$17
Wedge Handle	1/8"	5.3	MV5-WF1	\$12	MV5-WM1	\$12
	1/4"	6.6	MV5-WF2	\$10	MV5-WM2	\$10
	3/8"	6.6	MV5-WF3	\$10	MV5-WM3	\$10
	1/2"	11	MV5-WF4	\$14	MV5-WM4	\$14
Screwdriver Slot	1/8"	5.3	MV5-SF1	\$16	MV5-SM1	\$16
	1/4"	6.6	MV5-SF2	\$14	MV5-SM2	\$14
	3/8"	6.6	MV5-SF3	\$14	MV5-SM3	\$14
	1/2"	11	MV5-SF4	\$19	MV5-SM4	\$19

# Butterfly Valves

## Features:

- Phenolic backed cartridge seat design
- Extended neck for insulation
- Machined flats attach disc/stem
- Valve features a retainer lip for dead end service
- Triple seal reduces possibility of external leakage
- Silicone-free



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 cycles. 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.

## Specifications:

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 w/ flanges that are ANSI 125 (B16.1) & ANSI Class 150 (B16.5) dimensions
Pressure Limit:	225 psi (15.5 bar) WOG
Temperature Limit:	EPDM: -50 to 250°F (-46 to 121°C); PTFE: 0 to 300°F (-18 to 149°C)
Wetted Materials:	Body: Ductile iron; Disc: 316SS; Seat & O-ring: EPDM or PTFE; Stem: 410SS
Operator:	2" to 6": 10-position locking hand lever; 8" to 12": manual gear

## Cv Values:

Size	Degree Opening									Full
	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	

## Operating Torque Values (in-lb) EPDM Seats:

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

## Operating Torque Values (in-lb) PTFE Seats:

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

Model	Description	Price
<b>BFV202WFB311HLO</b>	Valve, 2", EPDM, Wafer	<b>\$96</b>
<b>BFV202WFB341HLO</b>	Valve, 2", PTFE, Wafer	<b>\$169</b>
<b>BFV202LTB311HLO</b>	Valve, 2", EPDM, Lug	<b>\$165</b>
<b>BFV202LTB341HLO</b>	Valve, 2", PTFE, Lug	<b>\$179</b>
<b>BFV225WFB311HLO</b>	Valve, 2-1/2", EPDM, Wafer	<b>\$111</b>
<b>BFV225WFB341HLO</b>	Valve, 2-1/2", PTFE, Wafer	<b>\$203</b>
<b>BFV225LTB311HLO</b>	Valve, 2-1/2", EPDM, Lug	<b>\$187</b>
<b>BFV225LTB341HLO</b>	Valve, 2-1/2", PTFE, Lug	<b>\$231</b>
<b>BFV203WFB311HLO</b>	Valve, 3", EPDM, Wafer	<b>\$132</b>
<b>BFV203WFB341HLO</b>	Valve, 3", PTFE, Wafer	<b>\$236</b>
<b>BFV203LTB311HLO</b>	Valve, 3", EPDM, Lug	<b>\$139</b>
<b>BFV203LTB341HLO</b>	Valve, 3", PTFE, Lug	<b>\$272</b>
<b>BFV204WFB311HLO</b>	Valve, 4", EPDM, Wafer	<b>\$187</b>
<b>BFV204WFB341HLO</b>	Valve, 4", PTFE, Wafer	<b>\$336</b>
<b>BFV204LTB311HLO</b>	Valve, 4", EPDM, Lug	<b>\$201</b>
<b>BFV204LTB341HLO</b>	Valve, 4", PTFE, Lug	<b>\$367</b>
<b>BFV205WFB311HLO</b>	Valve, 5", EPDM, Wafer	<b>\$249</b>
<b>BFV205WFB341HLO</b>	Valve, 5", PTFE, Wafer	<b>\$425</b>

Model	Description	Price
<b>BFV205LTB311HLO</b>	Valve, 5", EPDM, Lug	<b>\$422</b>
<b>BFV205LTB341HLO</b>	Valve, 5", PTFE, Lug	<b>\$478</b>
<b>BFV206WFB311HLO</b>	Valve, 6", EPDM, Wafer	<b>\$311</b>
<b>BFV206WFB341HLO</b>	Valve, 6", PTFE, Wafer	<b>\$523</b>
<b>BFV206LTB311HLO</b>	Valve, 6", EPDM, Lug	<b>\$525</b>
<b>BFV206LTB341HLO</b>	Valve, 6", PTFE, Lug	<b>\$641</b>
<b>BFV208WFB312MG0</b>	Valve, 8", EPDM, Wafer	<b>\$643</b>
<b>BFV208WFB342MG0</b>	Valve, 8", PTFE, Wafer	<b>\$618</b>
<b>BFV208LTB312MG0</b>	Valve, 8", EPDM, Lug	<b>\$983</b>
<b>BFV208LTB342MG0</b>	Valve, 8", PTFE, Lug	<b>\$1204</b>
<b>BFV210WFB312MG0</b>	Valve, 10", EPDM, Wafer	<b>\$1019</b>
<b>BFV210WFB342MG0</b>	Valve, 10", PTFE, Wafer	<b>\$1358</b>
<b>BFV210LTB312MG0</b>	Valve, 10", EPDM, Lug	<b>\$1567</b>
<b>BFV210LTB342MG0</b>	Valve, 10", PTFE, Lug	<b>\$1749</b>
<b>BFV212WFB312MG0</b>	Valve, 12", EPDM, Wafer	<b>\$1421</b>
<b>BFV212WFB342MG0</b>	Valve, 12", PTFE, Wafer	<b>\$2178</b>
<b>BFV212LTB312MG0</b>	Valve, 12", EPDM, Lug	<b>\$2299</b>
<b>BFV212LTB342MG0</b>	Valve, 12", PTFE, Lug	<b>\$2822</b>