Hikelok®
Solution Provider For Fluid Systems

General Application Ball Valves

BV5 Series

- Maximum working pressure up to 1000 psig (68.9 bar)
- Working temperature from -20°F to 450°F (-28°C to 232°C)
- Orifice sizes from 4.8 mm to 50 mm
- Pneumatic and electric actuation are available

Features

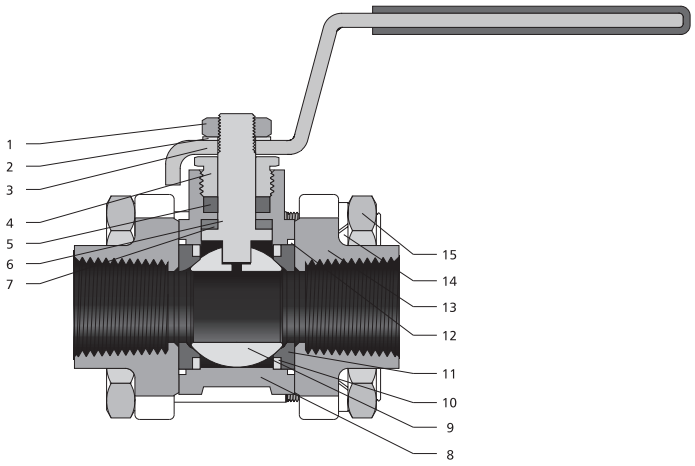
- Maximum working pressure: 1000 psig (68.9 bar)
- Working temperature from -20°F to 450°F (-28°C to 232°C)
- Orifice sizes: 4.8 mm to 50 mm
- Blowout-proof stem
- Pneumatic and electric actuation are available

Pressure vs. Temperature

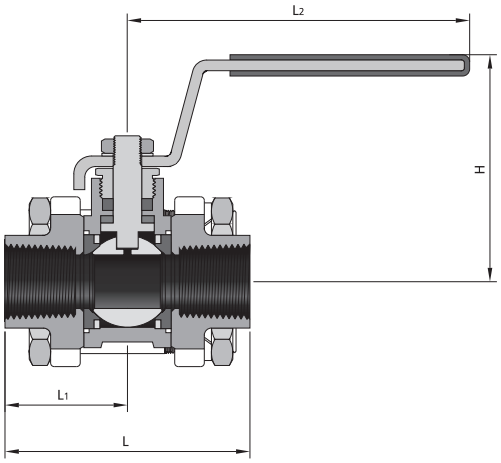
Body Material	CF3M	CF8M	CF3	CF8
Seat Material	PTFE			
Temperature,℉ (℃)	Working Pressure, psig(bar)			
-20(-28) to 100 (37)	1000 (68.9)			
150 (65)	1000 (68.9)			
200 (93)	1000 (68.9)			
250 (121)	1000 (68.9)			
300 (148)	800 (55.1)			
350 (176)	560 (38.5)			
400 (204)	330 (22.7)			
450 (232)	100 (6.8)			

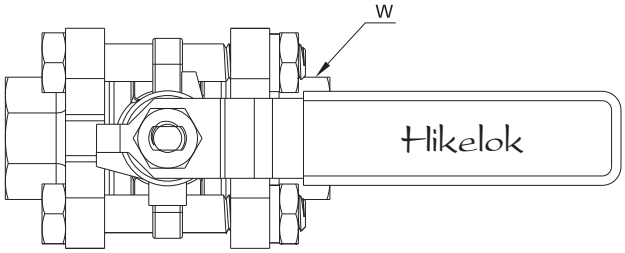
Standard Materials of Construction

Item	Component	Valve Body Material			
		CF8M/ A351	CF3M/ A351	CF8/ A351	CF3/ A351
1	Stem Nut	Gr. 8M/A194			
2	Gasket	304 S.S.			
3	Handle	304 S.S./A240 (with vinyl sleeve)			
4	Gland	316 S.S./A479 or 304 S.S./A479			
5	Stem Packing	Graphite			
6	Stem	316 S.S./A479			
7	Stem Bearing	Graphite			
8	Body	CF8M/A351	CF3M/A351	CF8/A351	CF3/A351
9	Body Bolt	Gr. B8M/A193			
10	Ball	316 S.S./A479			
11	Support Ring	316 S.S./A479			
12	Seat	PTFE/D1710			
13	Flange Seal	PTFE/D1710			
14	Flange	CF8M/A351	CF3M/A351	CF8/A351	CF3/A351
15	Gasket	304 S.S.			
16	Nut	Gr. 8M/A194			



Dimensions





Basic Ordering Number	Connection Type and Size	Orifice in. (mm)	Cv	Dimension, in. (mm)				
				L	L_1	W	H	L_2
BV5-FNPT2-05-	1/8 Female NPT	0.188 (4.8)	1.2	2.57 (65.2)	1.28 (32.6)	0.93 (23.5)	3.94 (100.0)	2.15 (54.7)
BV5-FBT2-05-	1/8 Female BSPT							
BV5-PBW4-05-	1/4 PBW							
BV5-F4-05-	1/4" Hikelok							
BV5-M6-05-	6 mm Hikelok			3.17 (80.5)	1.59 (40.4)			
BV5-M8-05-	8 mm Hikelok							
BV5-FNPT4-07-	1/4 Female NPT	0.281 (7.1)	3.8	2.57 (65.2)	1.28 (32.6)			
BV5-FBT4-07-	1/4 Female BSPT							
BV5-PSW4-07-	1/4 PSW							
BV5-PBW6-07-	3/8 PBW							
BV5-F6-07-	3/8" Hikelok			3.17 (80.5)	1.59 (40.4)			
BV5-M10-07-	10 mm Hikelok							
BV5-F8-10-	1/2" Hikelok	0.417 (10.6)	7.5	4.04 (103.0)	2.02 (51.3)			
BV5-M12-10-	12 mm Hikelok							
BV5-M14-10-	14 mm Hikelok							
BV5-FNPT6-13-	3/8 Female NPT	0.50 (12.7)	11.3	2.57 (65.2)	1.28 (32.6)	0.88 (22.3)	3.94 (100.0)	2.26 (57.5)
BV5-FBT6-13-	3/8 Female BSPT							
BV5-PSW6-13-	3/8 PSW							
BV5-PBW8-13-	1/2 PBW							
BV5-F10-13-	5/8" Hikelok			4.06 (103.0)	2.03 (51.6)			
BV5-M16-13-	16 mm Hikelok							
BV5-FNPT8-15-	1/2 Female NPT	0.591 (15.0)	13.0	2.74 (69.5)	1.37 (34.8)	1.06 (27.0)		
BV5-FBT8-15-	1/2 Female BSPT							
BV5-PSW8-15-	1/2 PSW							
BV5-MBW22-15-	22 mm MBW							
BV5-PSW12-15-	3/4 PSW							
BV5-MSW18-15-	18 mm MSW							
BV5-F12-15-	3/4" Hikelok			4.06 (103.2)	2.03 (51.6)			
BV5-M18-15-	18 mm Hikelok							
BV5-M20-15-	20 mm Hikelok							
BV5-FNPT12-20-	3/4 Female NPT	0.787 (20.0)	50.0	3.15 (80.0)	1.57 (40.0)	1.34 (34.0)	5.08 (129.0)	2.48 (63.0)
BV5-FBT12-20-	3/4 Female BSPT							

Basic Ordering Number	Connection Type and Size	Orifice in. (mm)	Cv	Dimension, in. (mm)				
				L	L_1	W	H	L_2
BV5-PBW12-20-	3/4 PBW	0.787 (20.0)	50.0	3.15 (80.0)	1.57 (40.0)	1.34 (34.0)	5.08 (129.0)	2.48 (63.0)
BV5-PSW12-20-	3/4 PSW							
BV5-PSW16-20-	1 PSW							
BV5-MBW25-20-	25 mm MBW							
BV5-MSW25-20-	25 mm MSW							
BV5-F16-20-	1" Hikelok			5.36 (136.0)	2.68 (68.1)			
BV5-M22-20-	22 mm Hikelok							
BV5-M25-20-	25 mm Hikelok							
BV5-M28-20-	28 mm Hikelok							
BV5-FNPT16-25-	1 Female NPT	1.00 (25.4)	93.0	3.54 (90.0)	1.77 (45.0)	1.63 (41.3)	6.14 (156.0)	2.97 (75.5)
BV5-FBT16-25-	1 Female BSPT							
BV5-PSW16-25-	1 PSW							
BV5-PBW16-25-	1 PBW							
BV5-F20-25-	11/4" Hikelok			7.59 (193.0)	3.79 (96.3)			
BV5-FNPT20-32-	11/4 Female NPT	1.250 (31.75)	110.0	4.33 (110.0)	2.17 (55.0)	1.94 (49.2)	6.14 (156.0)	3.19 (81.0)
BV5-FBT20-32	11/4 Female BSPT							
BV5-PBW20-32-	1 1/4 PBW							
BV5-FNPT24-38-	11/2 Female NPT	1.50 (38.1)	130.0	4.72 (120.0)	2.36 (60.0)	2.24 (57.0)	7.19 (182.5)	3.70 (94.0)
BV5-FBT24-38-	11/2 Female BSPT							
BV5-PBW24-38-	11/2 PBW							
BV5-FNPT32-50-	2 Female NPT	1.97 (50.0)	270.0	5.51 (140.0)	2.75 (70.0)	2.76 (70.0)	7.19 (182.5)	4.11 (104.5)
BV5-FBT32-50-	2 Female BSPT							
BV5-PBW32-50-	2 PBW							

How to Order

BV5 — M12 — FNPT8 — T10 — Y1 — 316

Series	Port 1 Type	Port 1 Size	Port 2 Type / Port 2 Size	Seat Material	Orifice Size	Handle	Body Material
BV5	**FNPT** Female NPT **NPT** Male NPT **FBT** Female BSPT **MBT** Male BSPT **FMS** Female ISO 261 **MS** Male ISO 261 **FBP** Female BSPP **MBP** Male BSPP **F** Fractional Tube Fitting **M** Metric Tube Fitting **MSW** Metric Tube Socket Weld **FSW** Fractional Tube Socket Weld **MBW** Metric Tube Butt Weld **FBW** Fractional Tube Butt Weld **PSW** Pipe Socket Weld **PBW** Pipe Butt Weld	**2** 1/8 in. **3** 3 mm **4** 1/4 in. **5** 5/16 in. **6** 3/8 in. or 6 mm **8** 1/2 in. or 8 mm **10** 10 mm **12** 3/4 in. or 12 mm **14** 14 mm **16** 1 in. or 16 mm **18** 18 mm **20** 1 1/4 in. or 20 mm **22** 22 mm **24** 1 1/2 in. **25** 25 mm **27** M27x 2 **28** 28 mm **32** 2 in. or 32 mm	Same as port 1 type and port 2 size If port2 and port 1 are the same, eliminate the port 2 designator	**T** PTFE	**05** 0.188 in. (4.8 mm) **07** 0.281 in. (7.1 mm) **10** 0.417in. (10.6 mm) **13** 0.5in. (12.7 mm) **15** 0.591 in. (15.0 mm) **20** 0.787 in. (20.0 mm) **25** 1.00 in. (25.4 mm) **32** 1.250in. (31.75 mm) **38** 1.5 in. (38.1 mm) **50** 2.00 in. (50.8 mm)	Blue **R1** Red **G1** Green **B1** Black **Y1** Yelow **PSC** **PSO** **PD** **E**	**316L** CF3M **316** CF8M **304L** CF3 **304** CF8

- Pneumatic Actuators: **PSC** Spring return, normally closed / **PSO** Spring return, normally open / **PD** Double acting
- Electric Actuators: **E**