

# High Pressure Ball Valves

B15 Series, 15,000 psi (1034 bar)

B20 Series, 20,000 psi (1379 bar)



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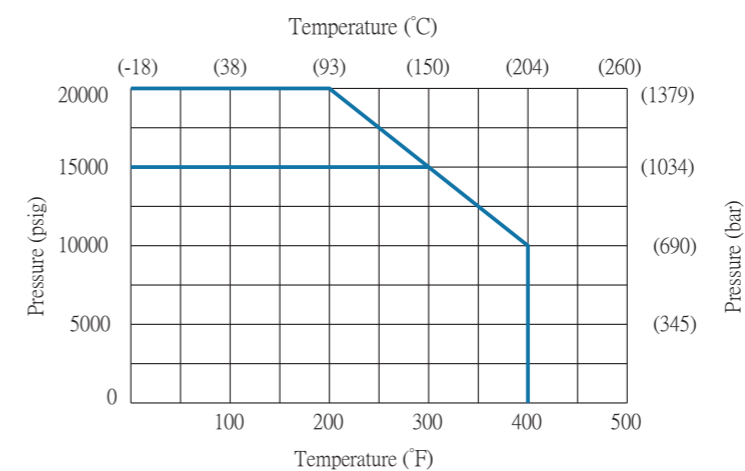
# Contents

Features	1
<hr/>	
Pressure & Temperature Curve	1
<hr/>	
Standard Materials of Construction	2
<hr/>	
Dimensions	4
<hr/>	
Ball Valve Panel Mounting Dimensions	4
<hr/>	
Flow Configuration	5
<hr/>	
Ordering Information	6
<hr/>	

## Features

- ☆ One-piece, trunnion mounted style, ideal for severe duty applications.
- ☆ Two-way and three-way valve configurations.
- ☆ PEEK seats offer excellent resistance to chemicals, heat, and wear/abrasion.
- ☆ Full-port flow path minimizes pressure drop.
- ☆ 316 cold worked stainless steel construction.
- ☆ Viton o-rings for operation from 0°F (-17.8°C) to 400°F (204°C).
- ☆ Optional o-rings available for high-temperature applications.
- ☆ Wide selection of tube and pipe end fittings available.
- ☆ Electric and pneumatic actuator options. Please contact the FINELOK for details of actuator options.

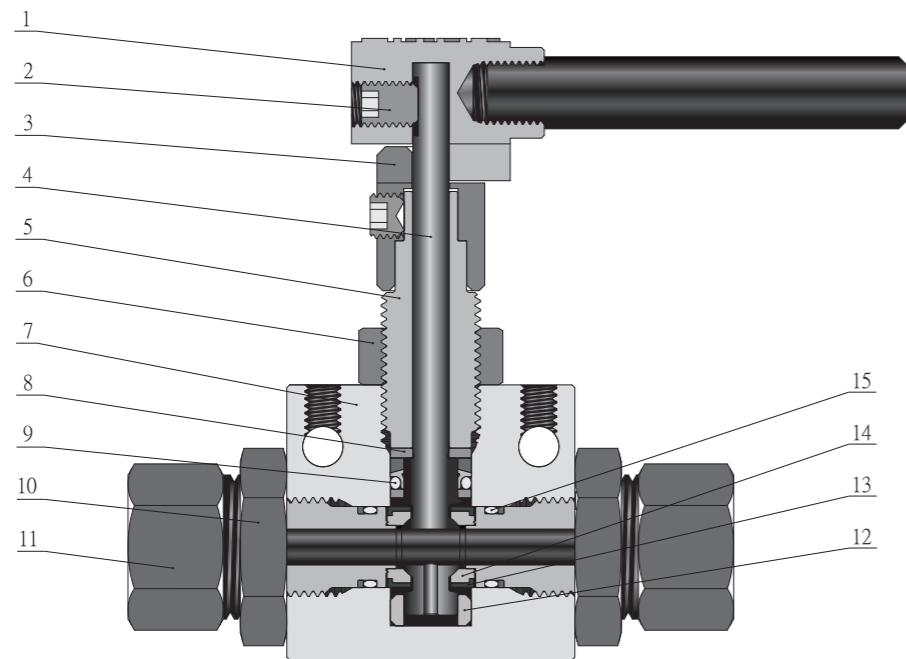
## Pressure & Temperature Curve



NOTE: Ball valves are not recommended for critical gas applications such as Hydrogen, Helium or other small molecular gases.

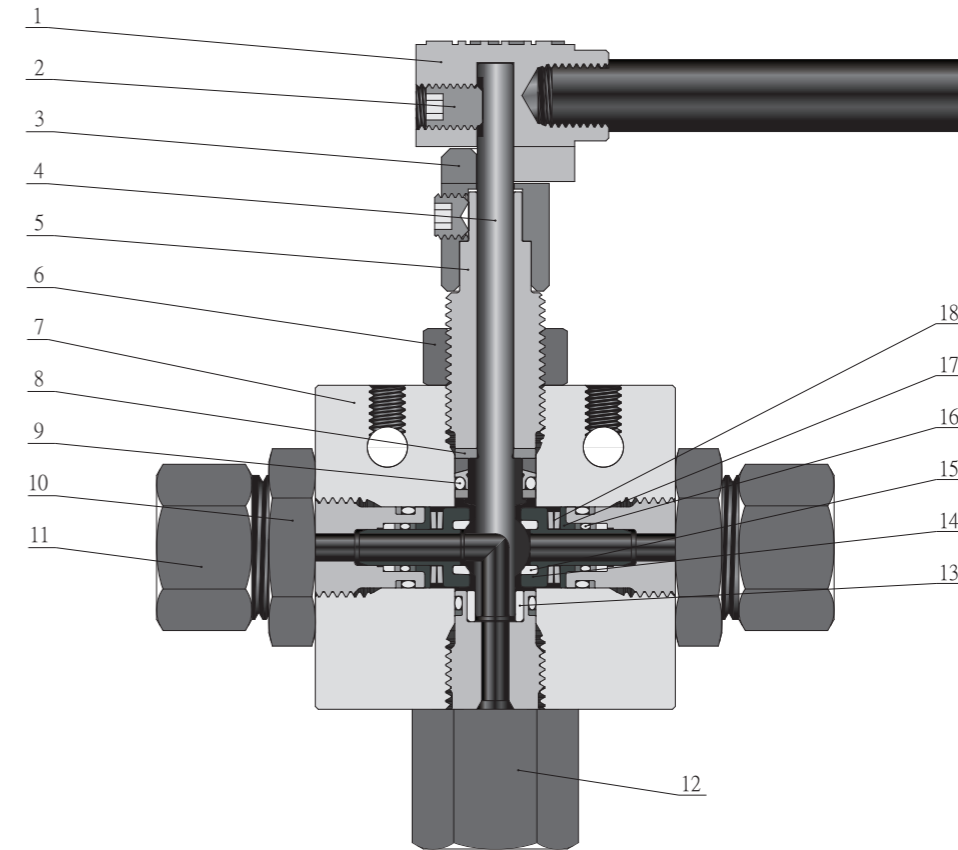
Standard Materials of Construction

2-Way Straight Valves



Item	Component	Valve Material
1	Handle	Stainless Steel
2	Set Screw	Stainless Steel
3	Stopping Device	316 SS/A276
4	Ball Stem	316 SS/A479
5	Packing Gland	316 SS/A479
6	Locking Piece	316 SS/A276
7	Valve Body	316 SS/A479
8	Thrust Washer	C63000/B150
9	Combination Seal	Fluorocarbon FKM
10	Lock Nut	316 SS/A276
11	Seat Gland	316 SS/A479
12	Bearing	PEEK
13	Seat Retainer	316 SS/A479
14	Seat	PEEK
15	End Seal	Fluorocarbon FKM
Lubricant		Molybdenum Disulfide/Fluorinated-based

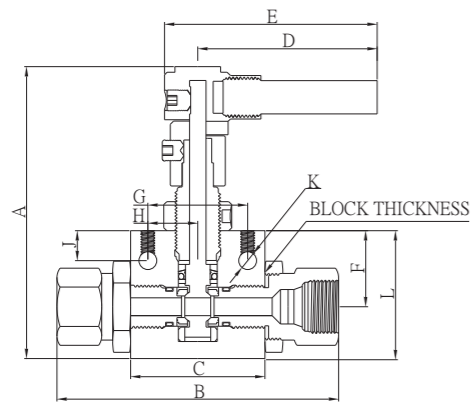
3-Way Valves



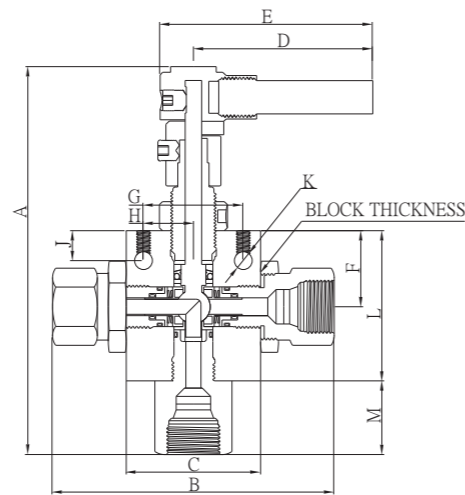
Item	Component	Valve Material
1	Handle	Stainless Steel
2	Set Screw	Stainless Steel
3	Stopping Device	316 SS/A276
4	Ball Stem	316 SS/A479
5	Packing Gland	316 SS/A479
6	Locking Piece	316 SS/A276
7	Valve Body	316 SS/A479
8	Thrust Washer	C63000/B150
9	Combination Seal	Fluorocarbon FKM
10	Lock Nut	316 SS/A276
11	Seat Gland	316 SS/A479
12	Bottom Gland	316 SS/A479
13	Bearing	C63000/B150
14	Seat Retainer	316 SS/A479
15	Seat	Carbon Filled PEEK
16	End Seal	Fluorocarbon FKM
17	Belleville Backup	316 SS/A479
18	Belleville Washers	17-7PH/A693
Lubricant		Molybdenum Disulfide/Fluorinated-based

Dimensions

2-Way Straight Valves



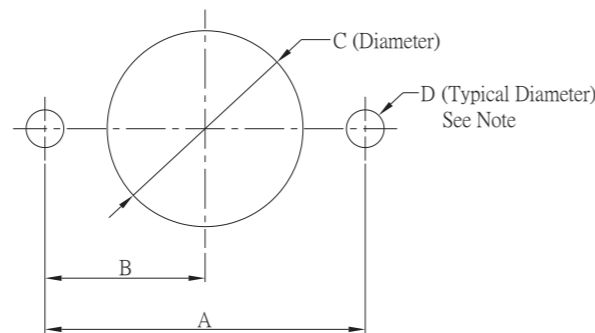
3-Way Valves



Body Style	Orifice No.	in. (mm)													Block Thickness
		A	B	C	D	E	F	G	H	J	K	L	M		
2-way	4	4.33 (109.99)	4.19 (106.49)	2 (50.8)	3.37 (85.55)	3.9 (99.02)	1.13 (28.58)	1.5 (38.1)	0.75 (19.05)	0.43 (10.92)	0.28 (7.11)	1.91 (48.41)		1 (25.4)	
	6	4.97 (126.3)	5.53 (140.41)	3 (76.2)	4.99 (126.82)	5.52 (140.32)	1.38 (34.93)	2 (50.8)	1 (25.4)	0.41 (10.31)	0.28 (7.11)	2.5 (63.5)		1.38 (34.93)	
3-way	3	5.64 (143.35)	4.72 (119.94)	2.5 (63.5)	3.37 (85.55)	3.9 (99.02)	1.13 (28.58)	1.5 (38.1)	0.75 (19.05)	0.43 (10.92)	0.28 (7.11)	2.25 (57.15)	0.97 (24.64)	1 (25.4)	
	6	6.55 (166.37)	5.74 (145.79)	3 (76.2)	4.99 (126.82)	5.52 (140.32)	1.38 (34.93)	2 (50.8)	1 (25.4)	0.41 (10.31)	0.28 (7.11)	2.88 (73.03)	1.19 (30.22)	1.38 (34.93)	

Ball Valve Panel Mounting Dimensions

Body Style	Orifice No.	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)
2-way	4	1.5 (38.1)	0.75 (19.05)	1.06 (26.92)	0.28 (7.11)
	6	2 (50.8)	1 (25.4)	1.5 (38.1)	0.28 (7.11)
3-way	3	1.5 (38.1)	0.75 (19.05)	1.06 (26.92)	0.28 (7.11)
	6	2 (50.8)	1 (25.4)	1.5 (38.1)	0.28 (7.11)

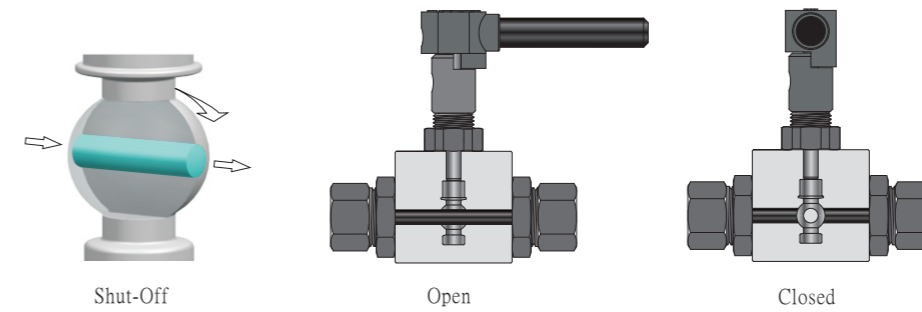


All dimensions are for reference only and are subject to change.

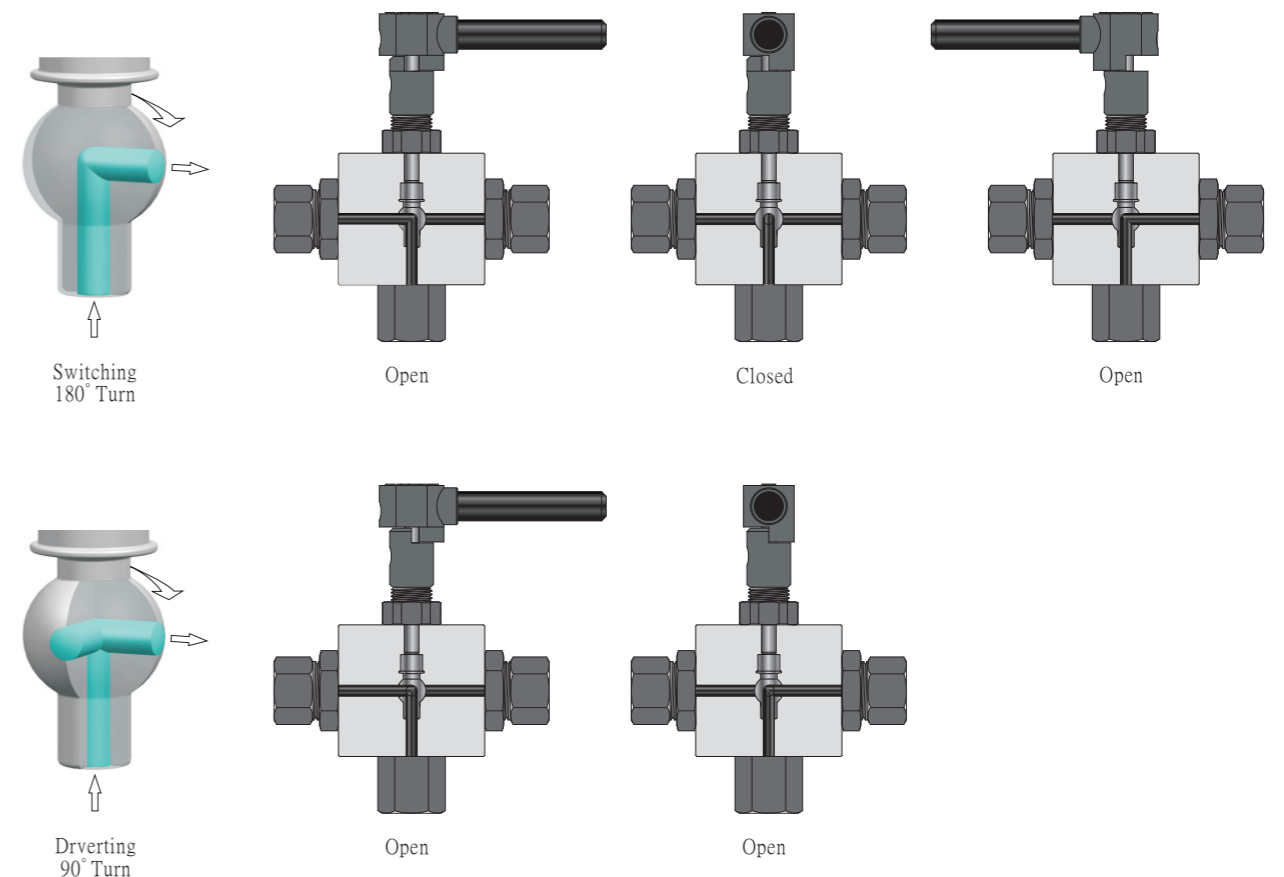
Note: Body mounting 1/4-20 thread

Flow Configuration

2-Way Straight Valves



3-Way Valves



Note: Maximum side connection inlet pressure 15,000 psig (1034 bar) for 3-Way Valves.

Ordering Information

Series	Body Style	Connection Type	Orifice No.	Orifice Size in. (mm)	Rated Cv	Catalog No.	Pressure/Temperature Rating psig (bar) @ Room Temperature
B15	2-way	4	15S2	0.094 (2.39)	0.26	SS-B15-S2-1	15,000 (1034)
			15S4	0.128 (3.25)	0.26	SS-B15-S4-1	
			15S6	0.250 (6.35)	1.51	SS-B15-S6-1	
			15S8	0.250 (6.35)	1.51	SS-B15-S8-1	
			FNT2	0.250 (6.35)	1.51	SS-B15-FNT2-1	
			FNT4	0.250 (6.35)	1.51	SS-B15-FNT4-1	
			FNT6	0.250 (6.35)	1.51	SS-B15-FNT6-1	
			FNT8	0.250 (6.35)	1.51	SS-B15-FNT8-1	
			15S8	0.375 (9.52)	3.51	SS-B15-S8-6-1	
			FNT4	0.375 (9.52)	3.51	SS-B15-FNT4-6-1	
			FNT6	0.375 (9.52)	3.51	SS-B15-FNT6-6-1	
			FNT8	0.375 (9.52)	3.51	SS-B15-FNT8-6-1	
	3-way	3	15S2	0.094 (2.39)	0.13	SS-B15-S2-2 SS-B15-S2-2D	
			15S4	0.128 (3.25)	0.23	SS-B15-S4-2 SS-B15-S4-2D	
			15S6	0.188 (4.77)	0.50	SS-B15-S6-2 SS-B15-S6-2D	
			15S8	0.188 (4.77)	0.50	SS-B15-S8-2 SS-B15-S8-2D	
			FNT2	0.188 (4.77)	0.50	SS-B15-FNT2-2 SS-B15-FNT2-2D	
			FNT4	0.188 (4.77)	0.50	SS-B15-FNT4-2 SS-B15-FNT4-2D	
			FNT6	0.188 (4.77)	0.50	SS-B15-FNT6-2 SS-B15-FNT6-2D	
			FNT8	0.188 (4.77)	0.50	SS-B15-FNT8-2 SS-B15-FNT8-2D	
			15S8	0.328 (8.33)	2.10	SS-B15-S8-6-2 SS-B15-S8-6-2D	
			20S6	0.203 (5.16)	0.81	SS-B15-2S6-6-2 SS-B15-20S6-6-2D	
			20S9	0.312 (7.92)	1.90	SS-B15-20S9-6-2 SS-B15-20S9-6-2D	
			20S12	0.328 (8.33)	2.10	SS-B15-20S12-6-2 SS-B15-20S12-6-2D	
		FNT4	0.328 (8.33)	2.10	SS-B15-FNT4-6-2 SS-B15-FNT4-6-2D		
		FNT6	0.328 (8.33)	2.10	SS-B15-FNT6-6-2 SS-B15-FNT6-6-2D		
		FNT8	0.328 (8.33)	2.10	SS-B15-FNT8-6-2 SS-B15-FNT8-6-2D		
		6	15S2	0.094 (2.39)	0.13	SS-B15-S2-2 SS-B15-S2-2D	
			15S4	0.128 (3.25)	0.23	SS-B15-S4-2 SS-B15-S4-2D	
			15S6	0.188 (4.77)	0.50	SS-B15-S6-2 SS-B15-S6-2D	
15S8			0.188 (4.77)	0.50	SS-B15-S8-2 SS-B15-S8-2D		
FNT2			0.188 (4.77)	0.50	SS-B15-FNT2-2 SS-B15-FNT2-2D		
FNT4			0.188 (4.77)	0.50	SS-B15-FNT4-2 SS-B15-FNT4-2D		
FNT6			0.188 (4.77)	0.50	SS-B15-FNT6-2 SS-B15-FNT6-2D		
FNT8			0.188 (4.77)	0.50	SS-B15-FNT8-2 SS-B15-FNT8-2D		
15S8			0.328 (8.33)	2.10	SS-B15-S8-6-2 SS-B15-S8-6-2D		
20S6	0.203 (5.16)		0.81	SS-B15-2S6-6-2 SS-B15-20S6-6-2D			
20S9	0.312 (7.92)		1.90	SS-B15-20S9-6-2 SS-B15-20S9-6-2D			
20S12	0.328 (8.33)		2.10	SS-B15-20S12-6-2 SS-B15-20S12-6-2D			
B20	2-way	4	20S4	0.109 (2.77)	0.36	SS-B20-S4-1	20,000 (1379)
			20S6	0.203 (5.16)	1.23	SS-B20-S6-1	
			20S9	0.250 (6.35)	1.51	SS-B20-S9-1	
			60S4	0.094 (2.39)	0.26	SS-B20-60S4-1	
			60S6	0.125 (3.17)	0.47	SS-B20-60S6-1	
			60S9	0.188 (4.77)	1.05	SS-B20-60S9-1	
			20S6	0.203 (5.16)	1.23	SS-B20-S6-6-1	
			20S9	0.312 (7.92)	2.93	SS-B20-S9-6-1	
			20S12	0.328 (8.33)	3.21	SS-B20-S12-6-1	

Ordering Information(continue)

Series	Body Style	Connection Type	Orifice No.	Orifice Size in. (mm)	Rated Cv	Catalog No.	Pressure/Temperature Rating psig (bar) @ Room Temperature		
B20	3-way	20S4	3	0.109 (2.77)	0.17	SS-B20-S4-2	20,000 (1379)		
						SS-B20-S4-2D			
						20S6		0.188 (4.77)	SS-B20-S6-2
						SS-B20-S6-2D			
						20S9			SS-B20-S9-2
						SS-B20-S9-2D			
		60S4	0.094 (2.39)	SS-B20-60S4-2					
		SS-B20-60S4-2D							
		60S6		0.125 (3.17)	SS-B20-60S6-2				
		SS-B20-60S6-2D							
		60S9			0.188 (4.77)	SS-B20-60S9-2			
		SS-B20-60S9-2D							

