

www.fd-lok.com

Instrumentation Solutions



Fd-Lok.

ZHEJIANG FANGDUN INSTRUMENT VALVE CO.,LTD No.177, Zhanwang Road,Longwan Industry Center, Wenzhou,Zhejiang,China 325024

Tel: 86-577-8692 7952 Fax: 86-577-8598 9788 E-mali: fangdun@fd-lok.com

High Pressure Ball Valves

ZHEJIANG FANGDUN INSTRUMENT VALVE CO., LTD

Contents

01 15B Series 15,000 psi (1034 bar)



04 20B Series 20,000 psi (1379 bar)

15B Series 15,000 psi (1034 bar)

Features

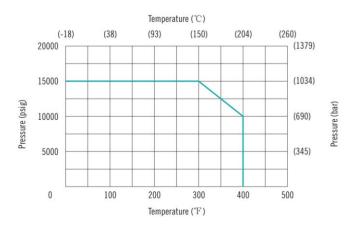
- One-piece, trunnion mounted style, ideal for severe duty applications.
- Two-way and three-way valve configurations.
- PEEK seats offer excellent resistance to chemicals, heat, and wear/abrasion.
- Full-port flow path minimizes pressure drop.
- 316 cold worked stainless steel construction.
- Viton 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 FD-LOK for details of actuator options.

Technical Data

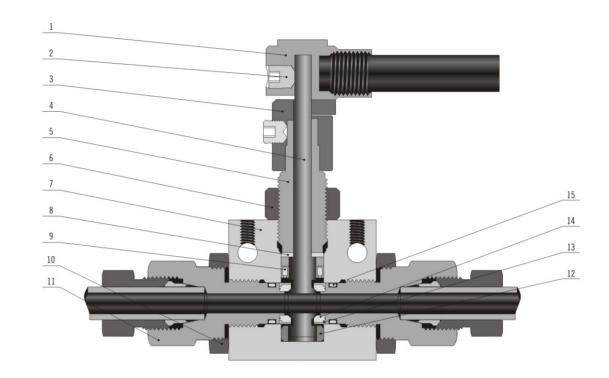
Tube O.D. in.	2-way Orifice Size in. (mm)	3-way Orifice Size in. (mm)	Rated Cv (2-WAY)	Rated Cv (3-WAY)	Pressure/Temperature Rating psi (bar) @ Room Temperature
1/4	0.128 (3.25)	0.128 (3.25)	0.65	0.26	15,000 (1034)
3/8	0.250 (6.35)	0.188 (4.77)	0.96	0.50	15,000 (1034)
1/2	0.250 (6.35)	0.188 (4.77)	1.51	0.50	15,000 (1034)

NPT	2-way Orifice Size in. (mm)	3-way Orifice Size in. (mm)	Rated Cv (2-WAY)	Rated Cv (3-WAY)	Pressure/Temperature Rating psi (bar) @ Room Temperature
1/8	0.250 (6.35)	0.188 (4.77)	1.51	0.50	15,000 (1034)
1/4	0.250 (6.35)	0.188 (4.77)	1.51	0.50	15,000 (1034)
3/8	0.250 (6.35)	0.188 (4.77)	1.51	0.50	15,000 (1034)
1/2	0.250 (6.35)	0.188 (4.77)	1.51	0.50	15,000 (1034)

Pressure & Temperature Curve



Standard Materials of Construction



ltem	Component	Valve Material
1	Handle	316 SS/A276
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	316 SS/A479
9	Spring Energized 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	Copper/molybdenum disulfide

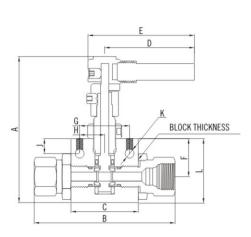
NOTE: Ball valves are not recommended for critical gas applications such as Hydrogen, Helium or other small molecular gases.

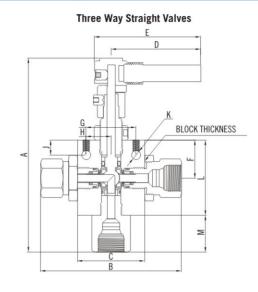
15B Series 15,000 psi (1034 bar)

15B Series 15,000 psi (1034 bar)

Dimensions

Two Way Straight Valves





Two Way Straight Valves Dimensions

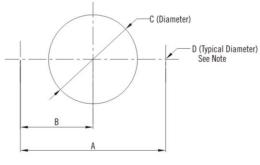
Ordering	Tube OD	NPT	Α	В	C	D	E	F	G	Н	J	K	L	Block Thickness
Number	in.	Size						in	. (mm)					
15BSS-S4-1	1/4													
15BSS-S6-1	3/8													
15BSS-S8-1	1/2													
15BSS-F2-1		1/8	4.33 (109.99)	4.19 (106.49)	2 (50.8)	3.37 (85.55)	3.9 (99.02)	1.13 (28.58)	1.5 (38.1)	0.75 (19.05)	0.43 (10.92)	0.28 (7.11)	1.91 (48.41)	1 (25.4)
15BSS-F4-1		1/4												
15BSS-F6-1		3/8												
15BSS-F8-1		1/2												

Three Way Valves Dimensions

Ordering	Tube OD	NPT	Α	В	C	D	E	F	G	Н	J	K	L	М	Block Thickness
Number	in.	Size							in. (m	ım)					
15BSS-S4-2	1/4														
15BSS-S6-2	3/8														
15BSS-S8-2	1/2														
15BSS-F2-2		1/8	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)
15BSS-F4-2		1/4										50 G.			8 6
15BSS-F6-2		3/8													
15BSS-F8-2		1/2													

Ball Valve Panel Mounting Dimensions-inches (mm)

Α	В	C	D
1.5	0.75	1.06	0.28
(38.1)	(19.05)	(26.92)	(7.11)



All dimensions are for reference only and are subject to change without notice.

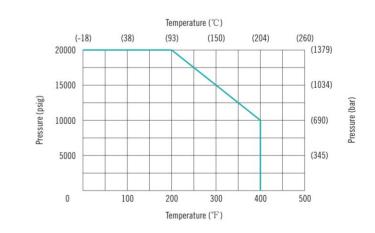
Features

- 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.
- . Low friction pressure assisted graphite filled Teflon stem seal increases cycle life and reduces operating torque. • Viton o-rings for operation from 0°F (-17.8°C) to 400°F (204°C).
- Optional o-rings available for high-temperature applications.
- · Large selection of tube and pipe end fittings available.
- Electric and pneumatic actuator options. Please contact the FD-LOK for details of actuator options.

Technical Data

Tube O.D. in.	2-way Orifice Size in. (mm)	3-way Orifice Size in. (mm)	Rated Cv (2-WAY)	Rated Cv (3-WAY)	Pressure/Temperature Rating psi (bar) @ Room Temperature
1/4	0.109 (2.77)	0.109 (2.77)	0.65	0.26	20,000 (1379)
3/8	0.203 (5.16)	0.188 (4.77)	0.96	0.50	20,000 (1379)
9/16	0.250 (6.35)	0.188 (4.77)	1.51	0.50	20,000 (1379)

Pressure & Temperature Curve



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

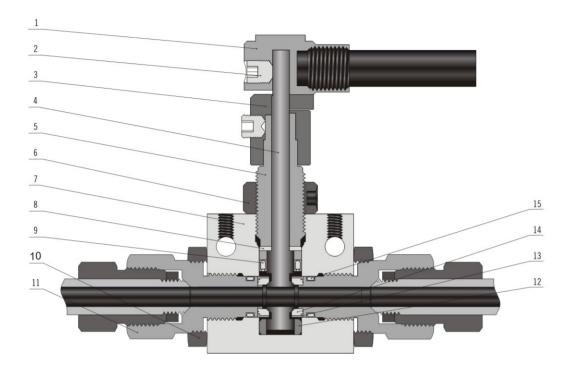
20B Series 20,000 psi (1379 bar)

20B Series 20,000 psi (1379 bar)

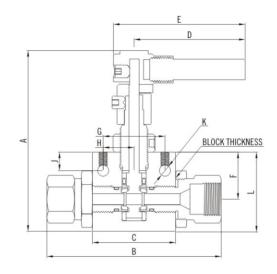
Standard Materials of Construction

Dimensions

Two Way Straight Valves



Item	Component	Valve Material
1	Handle	316 SS/A276
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	316 SS/A479
9	Spring Energized 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	Copper/molybdenum disulfide



Ordering	Tube OD	Α	В	C	D	E	F	G	Н	1	К	L	Block Thickness
Number	in.						in.	(mm)					
20BSS-S4-1	1/4												
20BSS-S6-1	3/8	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)
20BSS-S9-1	9/16	,	(,			(,	()	(,	(,	(,	((()

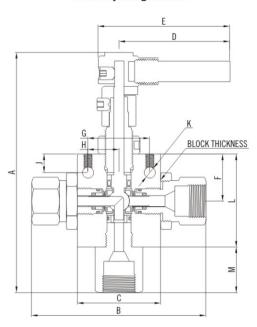
Ordering	Tube OD	Α	В	C	D	E	F	G	Н	1	К	L	М	Block Thickness
Number	in.							in	. (mm)					
20BSS-S4-2	1/4													
20BSS-S6-2	3/8	5.64 (143.35)	4.72 (119.94)	2.5 (63.5)	3.37 (85.55)	3.9 (99.02)	1.13 (28.58)	1.5 (38.1)	0.75 (19.05)	0.43 (10.92)	0.28 (7.11)	2.25 (57.15)	0.97 (24.64)	1 (25.4)
20BSS-S9-2	9/16												1-11-17	

Ball Valve Panel Mounting Dimensions-inches (mm)								
Α	В	C	D					
1.5	0.75	1.06	0.28					
(38.1)	(19.05)	(26.92)	(7.11)					

Note: Body mounting 1/4"-20 thread

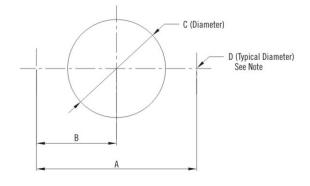
20B Series 20,000 psi (1379 bar)

Three Way Straight Valves



Two Way Straight Valves Dimensions

Three Way Valves Dimensions



All dimensions are for reference only and are subject to change without notice.

Ordering Information

