

Hex Bar Stock Ball Valves

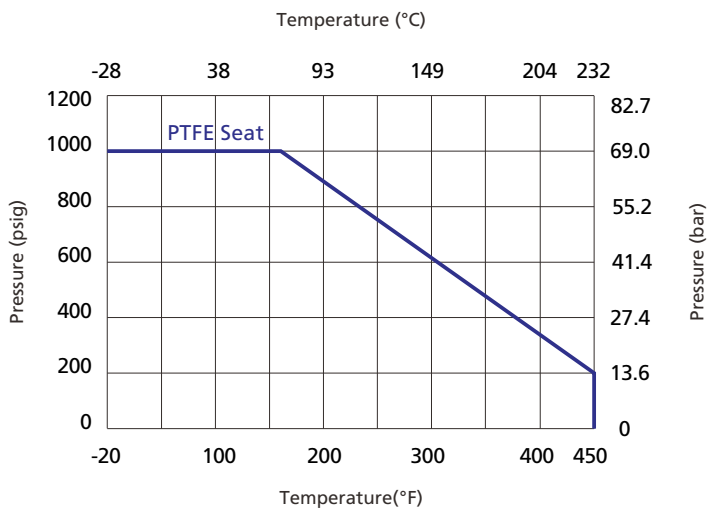
BR Series

Features

- Working pressures up to 1,000 psig (69 bar)
- Working temperature: -20°F to 450°F (-28°C to 232°C)
- Cv up to 17.35
- Compact design for minimal space requirements
- Floating ball design compensates for seat wear, improving leak-tight integrity
- Blowout-proof stem minimizes failures caused by stem movement or looseness
- Multiple handle types available
- Each valve is factory leak-tested with nitrogen or compressed air at rated pressure

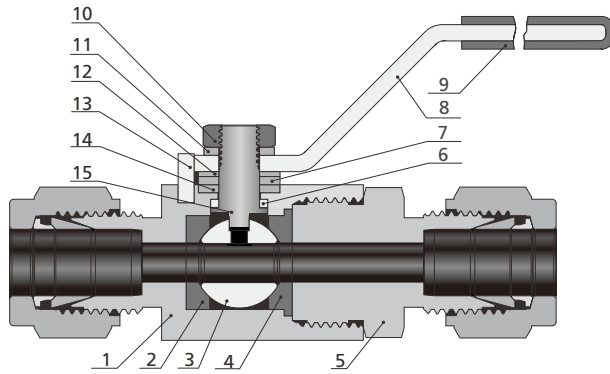


Pressure vs. Temperature

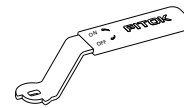


Standard Materials of Construction

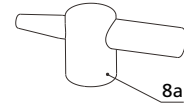
Bar Stock Body



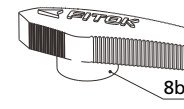
Handle Options



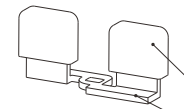
Lever Handle



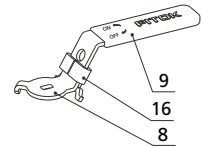
Aluminium Handle (-U)



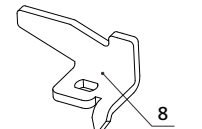
Nylon Handle (-NY)



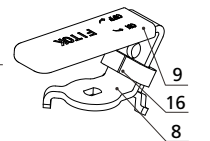
Butterfly Handle (-T)



Handle with Locking Device (-LB)



K-Shaped Handle (-KS)



Scorpion Handle with Locking Device (-FZLB)

Ball Valves
Plug Valves

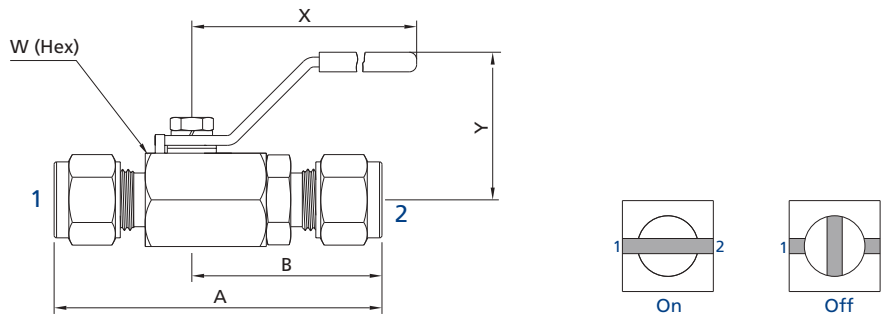
Item	Component	Material/Specification		
1	Body	<i>316 SS/A479</i>	<i>Alloy 400/B164</i>	<i>Brass C36000/B16</i>
2	Front Seat	<i>PTFE/D1710</i>		
3	Ball	<i>316 SS/A479</i>	<i>Alloy 400/B164</i>	<i>316 SS/A479</i>
4	Back Seat	<i>PTFE/D1710</i>		
5	End Connection	<i>316 SS/A479</i>	<i>Alloy 400/B164</i>	<i>Brass C36000/B16</i>
6	Lower Packing	<i>PTFE/D1710</i>		
7	Washer	<i>316 SS/A479</i>		
8	Handle	<i>304 SS/A240</i>		
8a		Aluminium		
8b		Nylon with 304 SS insert		
9	Sleeve	Vinyl ester		
10	Stem Nut	Stainless steel		
11	Gasket	Stainless steel		
12	Coned-disc Spring	S17700/A693		
13	Stop Pin ^①	Stainless steel		
14	Upper Packing	<i>PTFE/D1710</i>		
15	Stem	<i>316 SS/A479</i>	<i>Alloy 400/B164</i>	<i>316 SS/A479</i>
16	Lock Block	<i>304 SS/A240</i>		

Note: Wetted components are listed in italics.

① A handle with a locking device does not include a stop pin.

Dimensions

Bar Stock Body

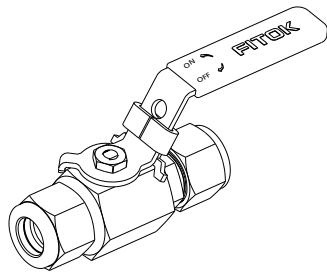


Basic Ordering Number	Connection Type and Size Connection 1/2	Orifice in. (mm)	Cv	Dimensions, in. (mm)				
				A	B	W	X	Y
BR□□-ML6-05	6 mm FITOK	0.19 (4.8)	1.25	2.57 (65.2)	1.50 (38.1)	3/4 (19.05)	2.36 (60)	1.18 (30)
BR□□-ML8-05	8 mm FITOK			2.63 (66.8)	1.53 (38.8)			
BR□□-FL4-05	1/4" FITOK			2.57 (65.2)	1.50 (38.1)			
BR□□-FL5-05	5/16" FITOK			2.63 (66.8)	1.53 (38.8)			
BR□□-FNS2-05	1/8 Female NPT			1.85 (47.0)	1.08 (27.4)			
BR□□-FRP2-05	1/8 Female BSPP			2.00 (50.0)	1.14 (29.0)			
BR□□-FRP4-05	1/4 Female BSPP			2.00 (50.0)	1.14 (29.0)			
BR□□-FNS4-05	1/4 Female NPT			1.85 (47.0)	1.08 (27.4)			
BR□□-ML10-07	10 mm FITOK	0.28 (7.1)	2.50	2.87 (72.9)	1.68 (42.7)	7/8 (22.23)	2.36 (60)	1.26 (32)
BR□□-FL6-07	3/8" FITOK			2.03 (51.6)	1.18 (30.0)			
BR□□-FRP6-07	3/8 Female BSPP			2.03 (51.6)	1.18 (30.0)			
BR□□-FNS6-07	3/8 Female NPT	0.35 (8.9)	5.30	3.15 (80.0)	1.83 (46.5)	1 1/16 (27.0)	3.15 (80)	1.54 (39)
BR□□-ML14-10	14 mm FITOK			3.24 (82.2)	1.87 (47.5)			
BR□□-FL8-10	1/2" FITOK			3.15 (80.0)	1.83 (46.5)			
BR□□-FL10-10	5/8" FITOK			3.24 (82.2)	1.87 (47.5)			
BR□□-FRP8-10	1/2 Female BSPP			2.08 (53.0)	1.12 (28.5)	15/16 (24.0)		
BR□□-FNS8-10	1/2 Female NPT			2.08 (53.0)	1.12 (28.5)			
BR□□-ML16-13	16 mm FITOK	0.47 (12.0)	8.60	3.50 (88.9)	2.00 (50.8)	1 1/4 (31.75)	3.94 (100)	2.03 (51.7)
BR□□-ML18-13	18 mm FITOK			2.48 (63.0)	1.30 (33.0)			
BR□□-FL12-13	3/4" FITOK			2.39 (60.7)	1.20 (30.5)			
BR□□-FRP12-13	3/4 Female BSPP			2.39 (60.7)	1.20 (30.5)			
BR□□-FNS12-13	3/4 Female NPT	0.63 (16.0)	17.35	3.96 (100.6)	2.24 (56.8)	1 1/2 (38.1)	3.94 (100)	2.15 (54.8)
BR□□-ML22-16	22 mm FITOK			4.31 (109.5)	2.42 (61.5)			
BR□□-ML25-16	25 mm FITOK			3.25 (82.6)	1.63 (41.3)			
BR□□-FL16-16	1" FITOK			3.00 (76.5)	1.50 (38.1)			
BR□□-FRP16-16	1 Female BSPP			3.00 (76.5)	1.50 (38.1)			
BR□□-FNS16-16	1 Female NPT			3.00 (76.5)	1.50 (38.1)			

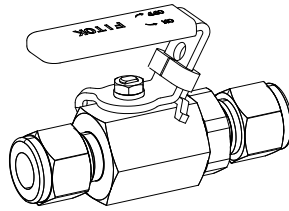
1. FITOK means FITOK double ferrule tube fittings.
2. Sizes and types listed are standard. Other sizes and types are available upon request, please contact FITOK Group or our authorized distributors.
3. Dimensions are shown with FITOK tube fitting nuts finger-tightened. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact FITOK Group or our authorized distributors.

Locking Device

Body Material	Orifice	Locking Hole Diameter in. (mm)	Example
A variety of optional materials (bar stock)	05	0.19 (4.8)	BRSS-ML12-10-LB BRSS-ML12-10-FZLB
	07		
	10	0.24 (6.2)	
	13		
	16		



BRSS-ML12-10-LB



BRSS-ML12-10-FZLB

Note: Locking device applies only to lever and scorpion handles. For other handle types requiring a locking device, please contact FITOK Group or our authorized distributors.

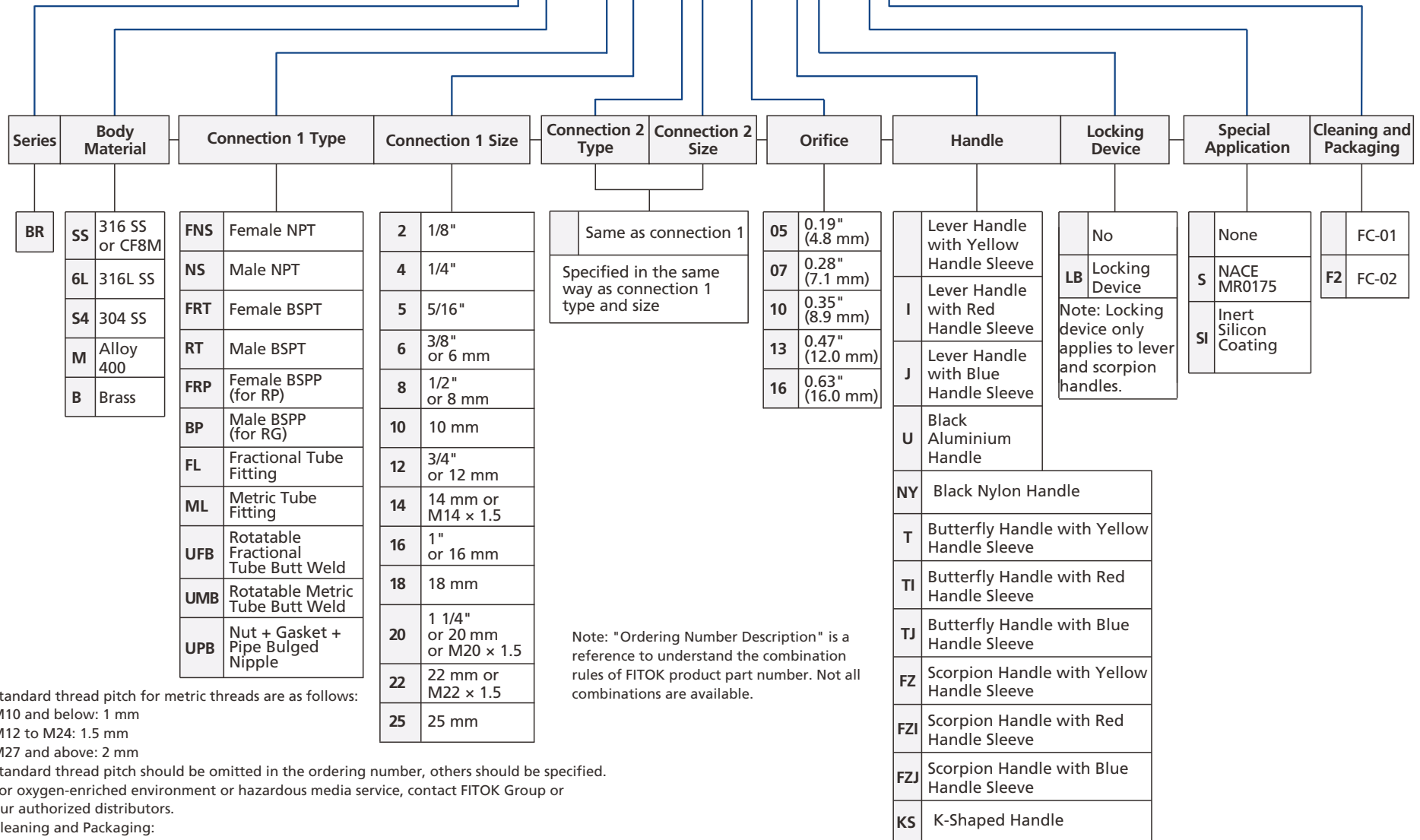
Seal Kits

Valve Orifice	Basic Seal Kit Ordering Number	Content
05	BRSS-05-RK	Front seat, back seat, ball, lower packing, upper packing, instructions
07	BRSS-07-RK	
10	BRSS-10-RK	
13	BRSS-13-RK	
16	BRSS-16-RK	

1. Seal kit components are the same materials and grades listed in materials of construction.
2. The listed basic seal kit ordering numbers specify 316 stainless steel material. To order kits with other materials, such as 304 stainless steel material, replace "SS" with "S4" in the ordering number.
Example: BR54-05-RK

Ordering Number Description

BRSS - ML8 - FL4 - 05 - JLB - SF2



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

- Standard thread pitch for metric threads are as follows:
 M10 and below: 1 mm
 M12 to M24: 1.5 mm
 M27 and above: 2 mm
 Standard thread pitch should be omitted in the ordering number, others should be specified.
- For oxygen-enriched environment or hazardous media service, contact FITOK Group or our authorized distributors.
- Cleaning and Packaging:
 FC-01: Standard cleaning and packaging for general industrial procedures.
 FC-02: Special cleaning and packaging for wetted system components to ensure compliance with product cleaning requirement of ASTM G93 Level C.
- Inert Silicon Coating: Wetted metal components Inert Silicon coated.