



# TB SERIES BALL VALVES

8250 Boyle Parkway Twinsburg, Ohio U.S.A. 44087 [www.mySSPusa.com](http://www.mySSPusa.com) 1.330.425.4250



## FEATURES

- Compact, low operating torque
- 2 and 3 way flow patterns
- Every SSP ball valve is 100% factory tested. Additional testing available.
- 1/8 to 1/2 inch and 6 to 12mm tube fitting or NPT end connections
- Blow-out proof ball and stem design
- Optional packing for Low Temperature Service available

## TECHNICAL DETAILS

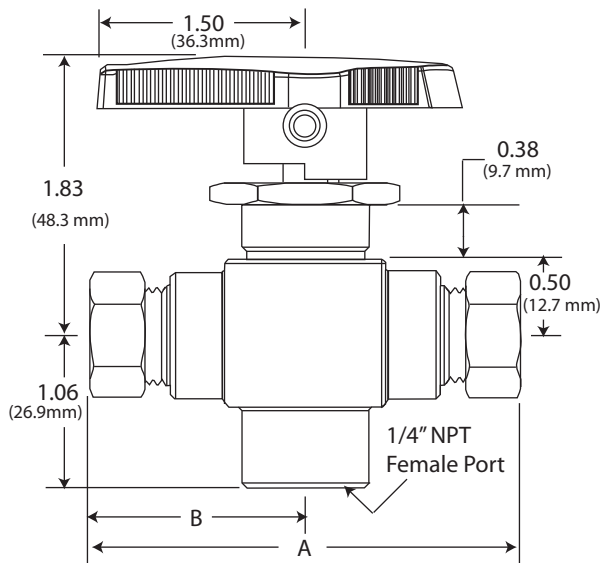
Body Material	316 Stainless Steel
Operating Pressure	Up to 6000 psi (413 bar)
Operating Temperature Range	0 to 450°F (-17 to 232°C) Optional Low-Temperature Service -40 to 200°F (-40 to 93°C)
Maximum Cv	2-way: 1.0 to 1.6 (depending on end connection) 3-way: 0.75

## BENEFITS

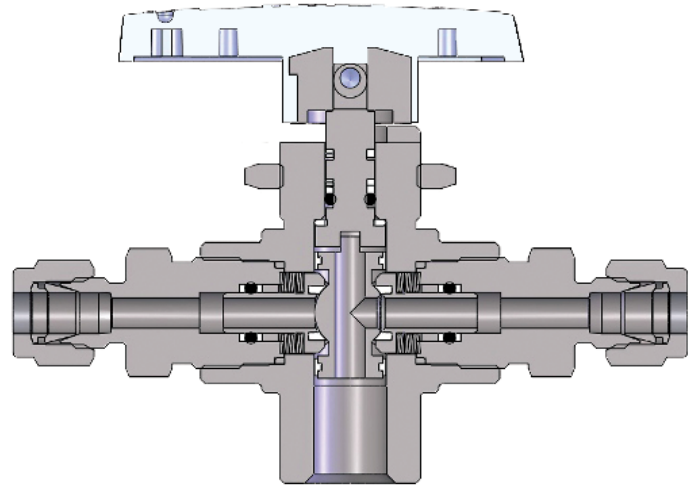
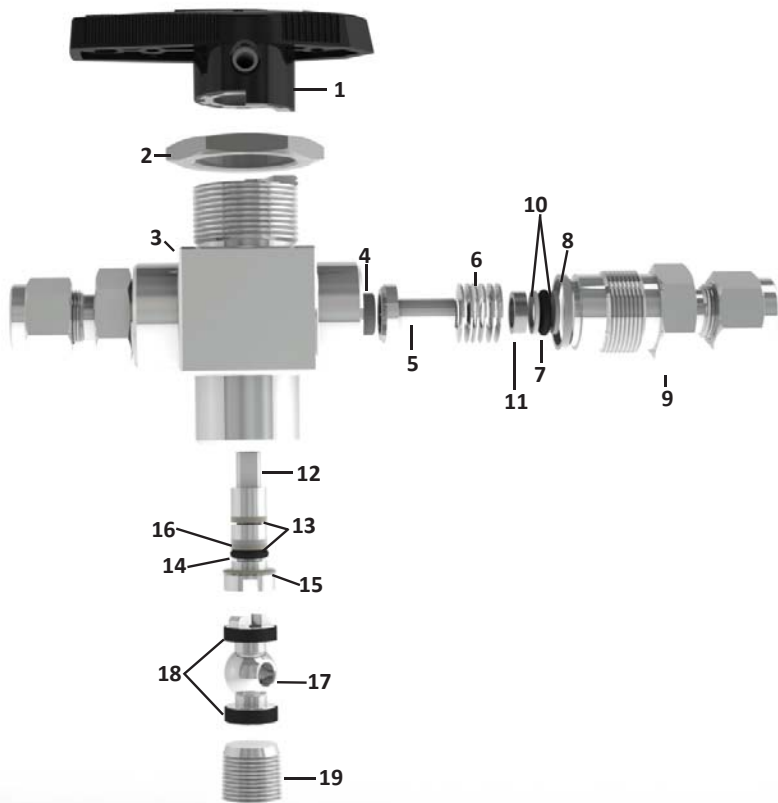
High Cycle Life

## APPLICATIONS

- High Pressure - Severe Service
- Diving
- Research & Development



End Connection		TB Series Basic Ordering Number	Dimensions			
Type	Size		A		B	
			in.	mm	in.	mm
Female NPT	1/8	83K2PF-316	2.94	74.7	1.47	37.3
	1/4	83K4PF-316	2.94	74.7	1.47	37.3
Fractional Tube Fitting	1/4	83KD4-316	4.14	105	2.07	52.6
	3/8	83KD6-316	4.39	112	2.19	55.6
	1/2	83KD8-316	4.6	117	2.3	58.4
Metric Tube Fitting	6	83KDM6-316	4.14	105	2.07	52.6
	8	83KDM8-316	1.15	105	2.07	52.6
	10	83KDM10-316	4.41	112	2.2	55.9
	12	83KDM12-316	4.6	117	2.3	58.4
End Connection		3-Way Valves Basic Ordering Number	Dimensions			
Type	Size		A		B	
			in.	mm	in.	mm
Female NPT	1/8	83XK2PF-316	2.94	74.7	1.47	37.3
	1/4	83XK4PF-316	2.94	74.7	1.47	37.3
Fractional Tube Fitting	1/4	83XKD4-316	4.14	105.0	2.07	52.6
	3/8	83XKD6-316	4.39	112.0	2.19	55.6
	1/2	83XKD8-316	4.60	117.0	2.30	58.4
Metric Tube Fitting	6	83XKDM6-316	4.14	105.0	2.07	52.6
	8	83XKDM8-316	4.15	105.0	2.07	52.6
	10	83XKDM10-316	4.41	112.0	2.2	55.9
	12	83XKDM12-316	4.60	117.0	2.3	58.4



Optional Low-Temperature valves have Buna O-rings and can be used in systems from -40 to 200°F (-40 to 37°C)

Component	Material	ASTM Specification
1. Handle	Nylon with SS insert	
2. Panel Nut	316 SS	A479/B164
3.* Body	316 SS	A479/B164
4.* Seat	PEEK, PCTFE, PTFE	F2026/A3595/D1710
5.* Seat Carrier	316 SS	A479/B164
6.* Seat Springs	Alloy X-750	AMS 5542
7.* Seat Carrier O-Ring	Flourocarbon FKM	
8.* End Screw Seal	PTFE	<b>D1710</b>
9.* End Screw	316 SS	A479/B164
10.* Carrier Back-Up Ring	Re-Inforced PTFE	
11.* Carrier Gland	316 SS	A479/B164
12.* Stem	316 SS	A479/B164
13.* Stem Back-Up Ring	PTFE	D1710
14.* Stem O-Ring	Flourocarbon FKM	
15.* Stem Bearing	PEEK	F2026
16.* Stem Secondary Back-Up Ring	PEEK	F2026
17.* Ball	316 SS	A479/B164
18.* Trunnion Bearing	PEEK	F2026
19^* 1/4" Countersunk Pipe Plug	316 SS	A479/B164
Lubricant	PTFE-Based	



SSP ball valves are designed to be used in a fully open or closed position. Valves that have not been cycled for a long period of time may have a higher initial actuation torque.

For how-to-order information visit us on the web at [www.mySSPusa.com](http://www.mySSPusa.com), or consult your authorized SSP Representative



\* Wetted Components  
 ^ TB Series 2-Way Ball Valve only

Please consider total system design considerations when selecting products to ensure safe, trouble-free performance. Function, material compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibilities of the system designer and user.

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Visit [www.mysspusa.com](http://www.mysspusa.com) for the controlled version of data.

SSPTBBV-00-12A

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