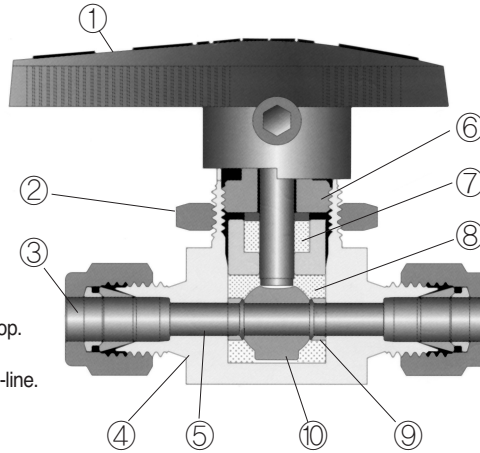


SBV30 Series For working pressure up to 3000 psig(206bar)

- 1. Handle with Arrow**
 - indicates flow direction.
 - allows quick operation to open and close.
- 2. Panel Mounting Nut**
 - allow easy installation.
- 3. Variety of End Connections**
 - include fractional/metric S-LOK tube fittings, NPT female, ISO female threads.
- 4. One-piece body**
 - reduces the number of potential leak points.
- 5. Orifice**
 - is optimized design for minimum pressure drop.
- 6. Packing Bolt**
 - allows easy packing adjustment with valve in-line.



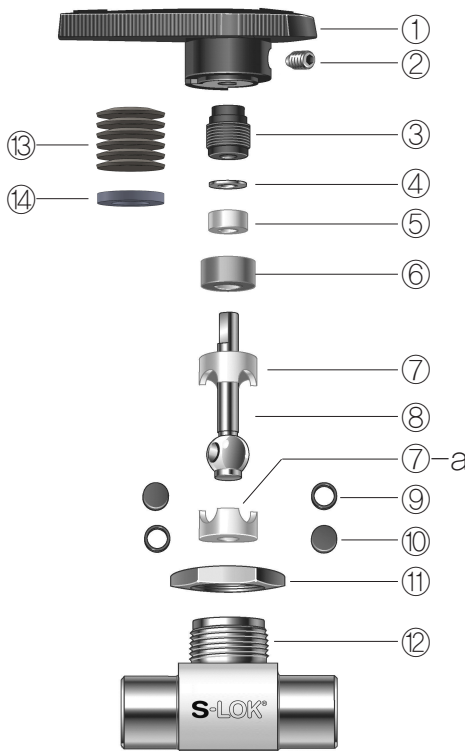
- 7. PTFE Packing**
 - is supported by top and bottom glands.
- 8. Encapsulating Ball Seats**
 - virtually allow no dead volume.
 - are uniformly forced to form tight seals against ball and body cavity.
- 9. Support rings and discs**
 - retains the capsule packing and prevent cold flow.
- 10. Integral Ball-Stem**
 - is machined from one piece bar stock.
 - is best suited to encapsulate ball seats.



Features

- Pressure rating up to 3000psig(206bar) @70°F(21°C).
- Temperature rating from 50°F(10°C) to 150°F(65°C) with standard PTFE seat and packing.
- Choice of materials : Standard S316 and available in alloy 400 and Brass.
- Vent to atmosphere available.
- Every valve is 100% factory tested with the Nitrogen @1000psi (69bar).

Technical Data



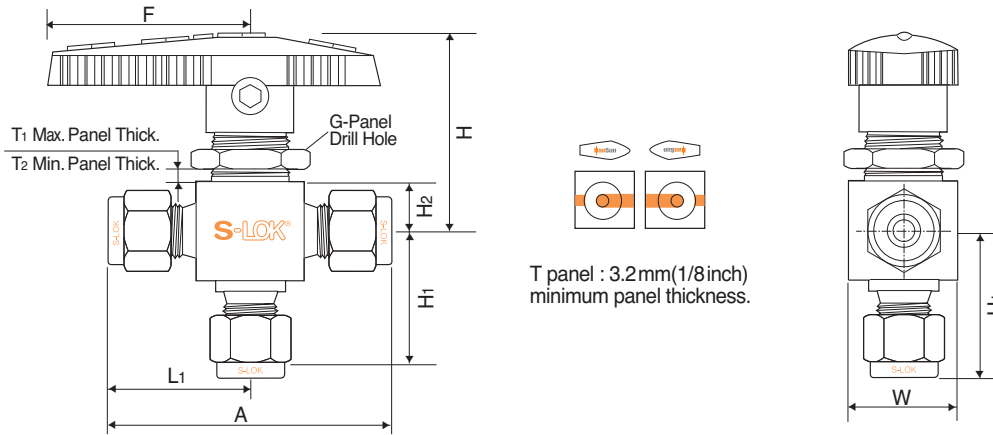
Materials of construction

Description	Grade / ASTM Specification	
	Valve Body Materials	
	S316	Brass
1 Handle	Black Nylon	
2 Set screw	17-4PH/A564	
3 Packing bolt	S316/A479, A276	Brass/B16
4 Upper grand	S316/A479, A276	
5 Packing	PTFE/D1710	
6 Lower grand	S316/A479, A276	Brass/B16
7 & 7-a Upper&Lower Ball seat	PTFE/D1710 (standard) PFA (Option)	
8 Ball stem	S316/A479, A276	
9 Support rings	S316 (Fluorocarbon-coated)	
10 Side discs		
11 Panel nut	S316 /A479, A276	Brass/B16
12 Body		
13 Packing spring	17-4PH / A693	
14 Packing grand	S316 / A276	

• Pressure Rating with standard PTFE & PFA seat

Valve Designator	Straight 2-way	Angle 2-way	Switching 3-way	Temperature Range	
				PTFE	PFA
SBV 1			2500psig (172bar)		
SBV 2	3000psig (206bar)		2500psig (172bar)	50°F to 150°F (10°C to 65°C)	-65°F to 150°F (-54°C to 65°C)
SBV 3	2500psig (172bar)		1500psig (103bar)		
SBV 4					

3-Way switching Valves



Ordering Information and Dimensions

Basic Ordering Number	Orifice		Cv	End Connections	Dimensions (mm)										
	mm	inch			A	L ₁	H ₁	H ₂	F	T ₁	T ₂	G	H	W	
SBV1-3B	S-1T	1.3	0.052	0.08	1/16" S-LOK	42.7	21.3	20.6	8.6	28.7	6.4	2.0	15.1	34.5	14.7
	S-2T	2.4	0.093	0.15	1/8" S-LOK	51.1	25.6	24.6							
	S-4T	3.2	0.125	0.35	1/4" S-LOK	56.1	28.1	27.2							
	S-3M	2.4	0.093	0.15	3mm S-LOK	51.1	25.6	24.6							
	S-6M	3.2	0.125	0.35	6mm S-LOK	56.1	28.1	27.2							
	F-2N	3.2	0.125	0.3	1/8" Female NPT	41.1	20.6	20.6							
SBV2-3B	S-4T	4.8	0.187	0.90	1/4" S-LOK	60.7	30.4	29.7	11.2	38.9	4.8	2.5	19.8	39.6	19.8
	S-6M			0.90	6mm S-LOK	60.7	30.4	29.7							
	S-8M			0.90	8mm S-LOK	62.5	31.2	30.5							
	F-4N			0.75	1/4" Female NPT	52.3	26.2	26.2							
	F-4R			0.75	1/4" ISO Female Tapered	52.3	26.2	26.2							
SBV3-3B	S-6T	7.1	0.281	2.0	3/8" S-LOK	73.4	36.7	36.3	14.2	50.8	9.5	3.0	28.6	52.6	28.4
	S-10M			2.0	10mm S-LOK	73.4	36.7	36.3							
	F-4N			1.7	1/4" Female NPT	63.5	31.8	31.8							
	F-6N			1.5	3/8" Female NPT	63.5	31.8	31.8							
	F-6R			1.5	3/8" ISO Female Tapered	63.5	31.8	31.8							
SBV4-3B	S-8T	10.3	0.406	4.6	1/2" S-LOK	88.4	44.2	44.2	17.5	76.2	9.5	3.0	38.1	61.7	38.1
	S-12T	10.3	0.406	3.8	3/4" S-LOK	88.4	44.2	44.2							
	S-12M	9.5	0.375	4.6	12mm S-LOK	88.4	44.2	44.2							
	F-8N	10.3	0.406	3.5	1/2" Female NPT	79.5	39.8	39.6							
	F-8R	10.3	0.406	3.5	1/2" ISO Female Tapered	79.5	39.8	39.6							

All dimensions shown are for reference only and are subject to change. Dimensions with S-LOK nuts are in finger-tight position.

• Flow Rate

Pressure Drop to Atmosphere (Δp) in psi	Cv													
	0.08	0.15	0.30	0.35	0.75	0.8	0.9	1.5	1.7	2.0	3.5	3.8	4.6	
Air SCFM @ 70°F(21°C)	10	0.9	2.0	4.2	4.8	10.0	11.0	12.0	20.8	23.5	27.7	48.4	52.6	63.7
	50	2.4	5.7	11.5	13.4	29.0	31.0	34.0	57.4	65.0	76.5	134.0	145.0	176.0
	100	4.3	10.1	20.3	23.7	51.0	54.0	61.0	102.0	115.0	136.0	237.0	258.0	312.0
Water US GPM @ 70°F(21°C)	10	0.3	0.4	0.9	1.1	2.3	2.5	2.8	4.7	5.4	6.3	11.1	12.0	14.5
	50	0.6	1.0	2.1	2.5	5.3	5.6	6.3	10.6	12.0	14.1	24.7	26.9	32.5
	100	0.8	1.5	3.0	3.5	7.5	8.0	9.0	15.0	17.0	20.0	35.0	38.0	46.0