SOBV Series Swing-Out Ball Valves

S-LOK Swing out Ball Valves(SOBV Series) are durable valves that can handle the pressure and piping loads.
The structure allows for quick and easy replacement of seats, seals and balls without a major disruption to the piping system.

Features

- Three-piece swing-out design & Spring-loaded seats design
- Actuator mounting design
- 100% Factory tested
- Temperature range from -20˚F(-28˚C) to 450˚F(232˚C)
- Pressure rating to seats

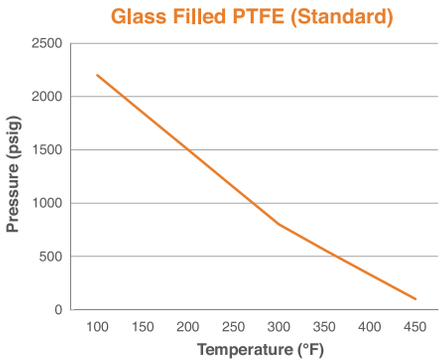
  3000 psig(207bar) @ 100℉(38˚C) : PEEK

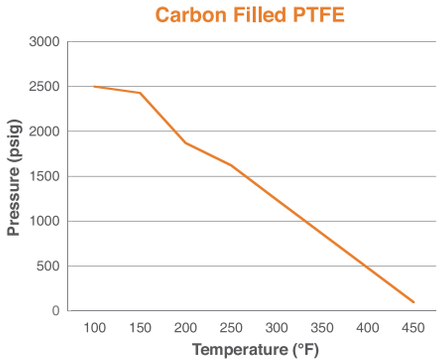
  2500 psig(172bar) @ 100℉(38˚C) : Carbon Filled PTFE

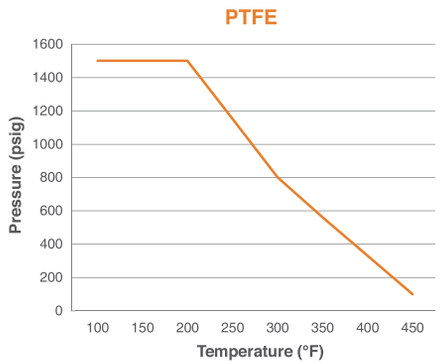
  2200 psig(151bar) @ 100℉(38˚C) : Glass Filled PTFE (Standard)

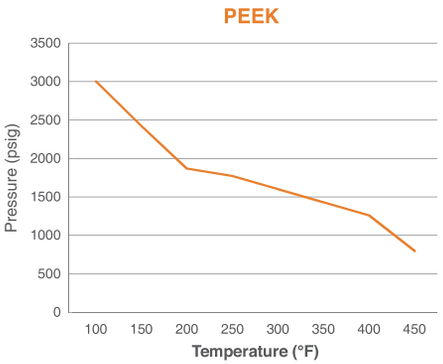
  1500 psig(103bar) @ 100℉(38˚C) : Virgin PTFE

Pressure and Temperature Ratings





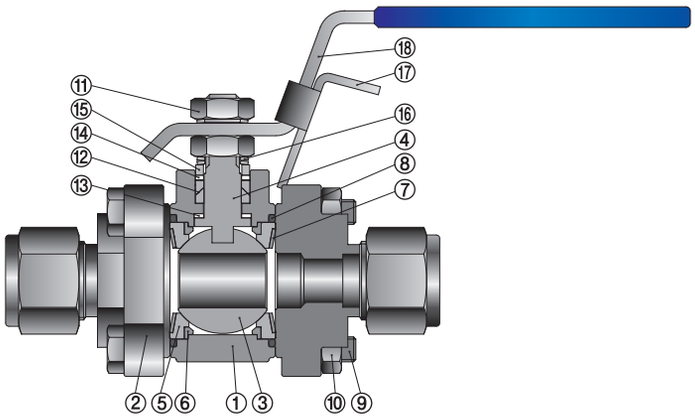




Testing

- Each swing-out ball valve is tested with Nitrogen@1,000 psig (69 bar) to max. leak rate of 0.1 (SSCM).
- Hydrostatic shell test is performed at 1.5 times the working pressure as an option.

Materials of Construction



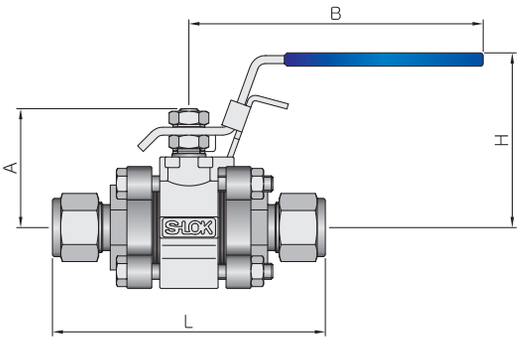
No	Part Name	Material
1	Body	CF8M / A351
2	End Connector	CF8M / A351
3	Ball	SS316 / A276 or A479
4	Stem	SS316 / A276 or A479
5	Ball Seat	Reinfoced PTFE
6	Support ring	SS316 / A276 or A479
7	Disc Spring	X-750
8	O-Ring	FKM
9	Hex Long Bolt	A193 B8M CL.2
10	Hex Nut	A194 8M
11	Stem Nut	Stainless Steel
12	Stem Packing	Reinfoced PTFE
13	Thrust Washer	PEEK
14	Bearing	PEEK
15	Packing Gland	SS316 / A276 or A479
16	Stem Spring	Stainless Steel
17	Locking Device	Stainless Steel
18	Bar Handle	Stainless Steel

NOTE

- Stainless steel is standard body material but such a Monel, Carbon steel, and other special material are available upon request

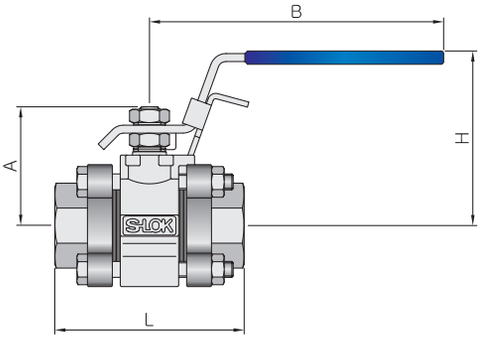
Ordering Information & Dimension

S-LOK Tube Fitting End



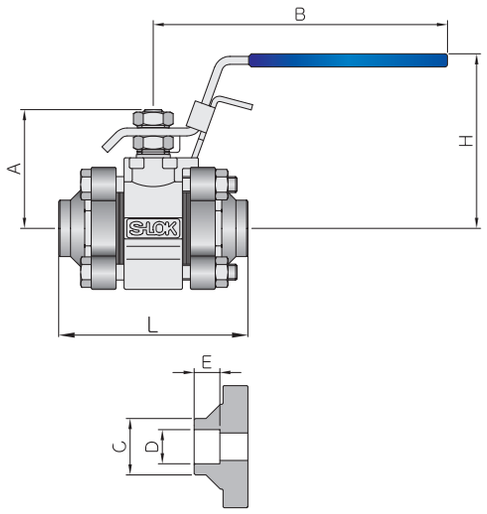
Ordering Number		Size	Cv	Orifice (mm)	Dimensions (mm)			
					A	B	L	H
SOBV1	S-4T	1/4	1.2	4.8	30.2	65	80.5	45.8
	S-6M	6mm						
	S-8M	8mm	2.5	6.4				
	S-6T	3/8	3.8	7.1				
	S-10M	10mm					81.4	
SOBV2	S-12M	12mm	7.5	9.5	44.8	110	103	64.8
	S-8T	1/2		10.3				
	S-12T	3/4	13.6	13.1				
	S-18M	18mm						
SOBV3	S-16T	1	40	22.2	62.2	150	136	81.6
	S-25M	25mm						
SOBV4	S-24T	1-1/2	100	31.8	78	210	193	105

Female Thread End



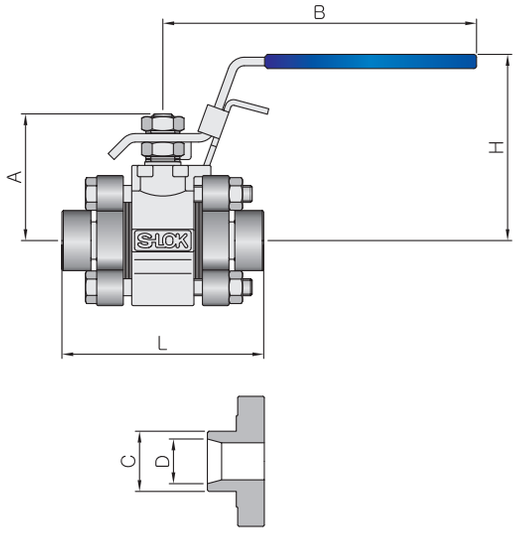
Ordering Number		Size	Cv	Orifice (mm)	Dimensions (mm)			
					A	B	L	H
SOBV1	F-2N	1/8 NPT	3.8	7.1	30.2	65	54.9	45.8
	F-4N	1/4 NPT						
SOBV2	F-6N	3/8 NPT	12	13.1	44.8	110	68.6	64.8
	F-8N	1/2 NPT						
SOBV3	F-12N	3/4 NPT	31	22.2	62.2	150	91.2	81.6
	F-16N	1 NPT	38					
SOBV4	F-20N	1-1/4 NPT	90	31.8	78	210	112	105
	F-24N	1-1/2 NPT	100					

Socket Weld End



Ordering Number		Size	Cv	Orifice (mm)	Dimensions (mm)						
					A	B	C	D	E	L	H
SOBV1	SW-4T	1/4 Tube	1.2	4.8	30.2	65	13.7	6.5	7.1	54.9	45.8
	SW-6T	3/8 Tube	3.8	7.1			17.1	9.7	7.9		
SOBV2	SW-8T	1/2 Tube	7.5	10.4	44.8	110	21.3	12.9	9.7	68.6	64.8
	SW-12T	3/4 Tube	13.6	13.1			26.7	19.2	11.2		
	SW-8P	1/2 Pipe	15				31.2	21.8	9.7		
SOBV3	SW-12P	3/4 Pipe	36	22.2	62.2	150	39.2	27.2	12.7	91.2	81.6
	SW-16T	1 Tube	40				33.4	25.6	15.7		
	SW-16P	1 Pipe	42				46	33.9	12.7		
SOBV4	SW-20T	1-1/4 Tube	80	28.6	78	210	42.2	32	15.7	112	105
	SW-20P	1-1/4 Pipe	90	31.8			62.2	42.7	12.7	115	
	SW-24T	1-1/2 Tube	100					38.3	19.1	112	
	SW-24P	1-1/4 Pipe						48.8	12.7	116	

Pipe Butt Weld End



Ordering Number		Size	Pipe Sch.	Cv	Orifice (mm)	Dimensions (mm)					
						A	B	C	D	L	H
SOBV1	BW-4P10	1/4	10	1.2	4.8	30.2	65	13.7	10.4	52.8	45.8
	BW-4P40		40						9.2		
	BW-4P80		80						7.7		
	BW-6P80	3/8	80	3.8	7.1			17.1	10.7		
SOBV2	BW-8P10	1/2	10	15	13.1	44.8	110	21.3	17.1	68.3	64.8
	BW-8P40		40						15.8		
	BW-8P80		80						13.9		
	BW-12P80	3/4	80	13.6				26.7	18.8		
SOBV3	BW-12P10	3/4	10	36	22.2	62.2	150	26.7	22.5	91.2	81.6
	BW-12P40		40		20.9				20.9		
	BW-16P10	1	10	40	22.2			33.4	27.9	87.9	
	BW-16P40		40						26.6		
	BW-16P80		80						23.9		
SOBV4	BW-20P80	1-1/4	80	80	28.6	78	210	42.2	32.5	116	105
	BW-24P10	1-1/2	10	100	31.8			48.3	42.7	114	
	BW-24P40		40						40.9		
	BW-24P80		80						38.1	116	

SOBV2 — Valve Series

S — Connection Type
- **S** : S-LOK Tube fitting
- **F** : Female Thread
- **SW** : Socket Weld
- **BW** : Butt Weld (Pipe Size + SCH)

8T — Connection Size
- **2** : 1/8 ″
- **4** : 1/4 ″
- **6** : 3/8 ″
- **8** : 1/2 ″
- **12** : 3/4 ″
- **16** : 1 ″
- **20** : 1-1/4 ″
- **24** : 1-1/2 ″

T1 — Seat / Seal Material
- **TE** : PTFE
- **T1** : Glass 15% Filled PTFE (Standard)
- **T3** : Carbon 15% Filled PTFE
- **PK** : PEEK
- **VT** : FKM (Standard, Nill)
- **EP** : EPDM
- **KA** : FFKM

OH — Option
- **OH** : Oval Handle
- **PDA** : Double Acting
- **-NC** : Normal Close
- **-NO** : Normal Open
- **MP** : Mounting Pad
- **VP** : Vent Port
- **FS** : Fire Safety Design

S6 — Body Material
- **S6** : A351 CF8M
- **S6L** : A351 CF3M
- **A400** : Monel 400
- **CS** : Carbon Steel