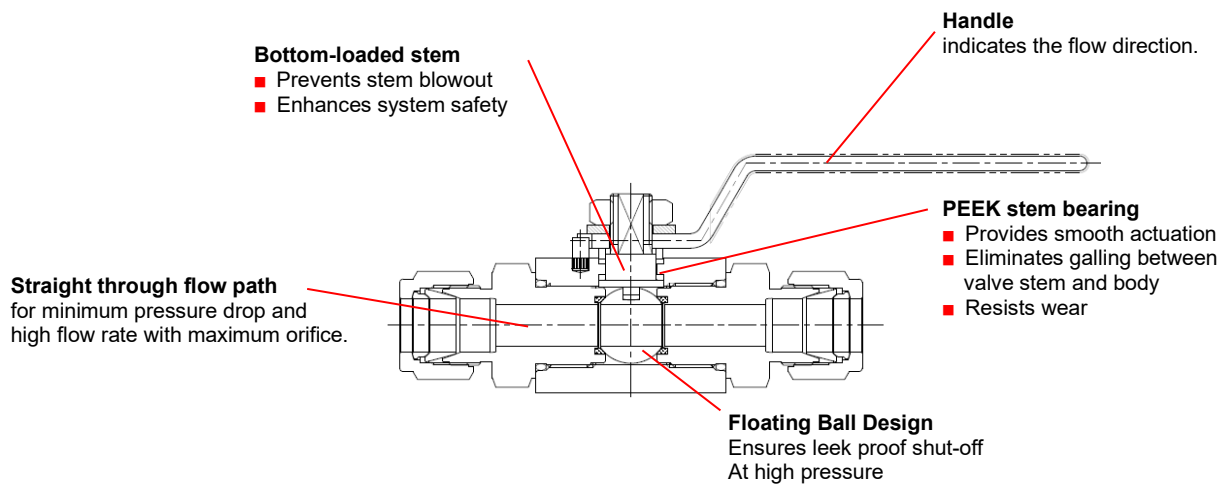


Features

- Pressure rating up to 10,000psig (690bar)@70°F(21°C).
- Temperature rating from -22°F(-30°C) to 265°F(130°C) with PVDF seat
from -65°F(-54°C) to 500°F(260°C) with PEEK seat
- OTG-Lok tube fitting end connections in fractional (1/4 in. to 1 in.) and metric (6 mm to 25 mm),
female pipe end connections in fractional (1/4 in. to 1 in.)
- Cold drawn bar construction.
- Panel mounting and locking devices are available as options.
- Optional NACE MR0175-2001 for Sour Gas.
- Outstanding sealing performance across the pressure range.



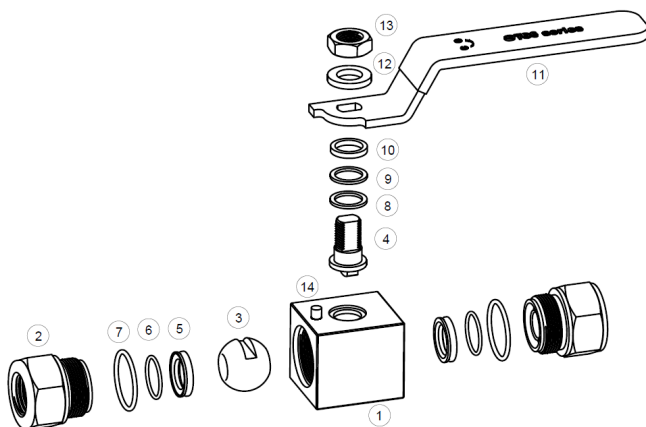
Application

- Provide quick turn on-off control of fluids in process, power and instrumentation applications.
- All ports are suitable as inlets in full operation pressure of the valve.
- A broad selection of valve body, seat, and seal materials provide a wide range of pressure and temperatures at which the valve may be used.
- Designed for gas, liquid, and vacuum service provides a reliable sealing performance in wide range high duty applications.

Operation

- 2-way valves are designed to control fluid bi-directionally in full open and full close position.
- Valves that have not been actuated for a period of time may have a higher actuation torque

Materials of Construction



Components	Valve Body Material Stainless Steel Material Grade/ASTM Specification
1. Body	SS316 / A276, A479
2. End Connector	
3. Ball	
4. Stem	
5. Seats	PCTFE optional PEEK
6. Seat Seal	Fluorocarbon FKM O-ring not applicable to OBV6A Series
7. End Connector Seals	Fluorocarbon FKM O-ring
8. Lower Packing	PEEK
9. Upper Packing	PTFE/D1710
10. Grand	SS316 / A276
11. Handle	S304 with PVC Coating
12. Spring Washer	Stainless Steel
13. Lock Nut	
14. Stop Pin	

Note: Wetted parts are listed in orange color.
Lubricant is silicone based.

2 - Way

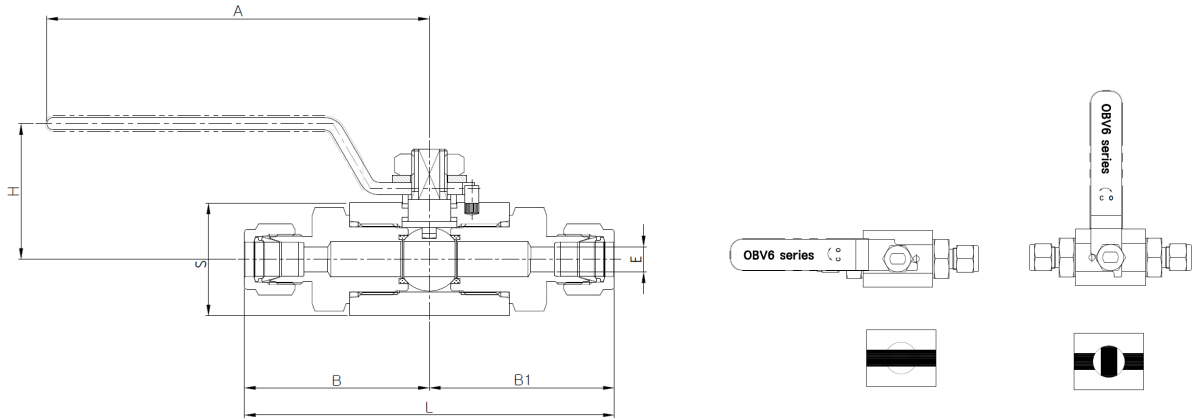


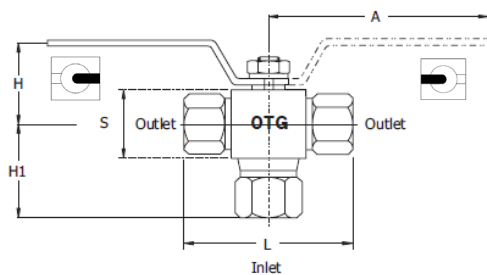
Table of Dimensions

Basic Ordering Number		End Connections	Orifice mm(in.) E	Cv	Dimensions, mm (in.)					
		Inlet / Outlet			S	B	B1	L	H	A
OBV6A-	O-4T	1/4" OTG-Lok	4.8(0.19)	1.2	32.0 (1.26)	48.0 (1.89)	48 (1.89)	96.0 (3.78)	39.0 (1.53)	108.0 (4.25)
	O-6T	3/8" OTG-Lok	7.1(0.28)	3.7		51.0 (2.0)	51.0 (2.0)	102.0 (4.0)		
	O-8T	1/2" OTG-Lok				53.5 (4.1)	53.5 (4.1)	107.0 (4.2)		
	F-4N	1/4" Female NPT	10.0(0.39)	7.5		37.0 (1.46)	37.0 (1.46)	74.0 (2.91)		
	F-6N	3/8" Female NPT				38.5 (1.52)	38.5 (1.52)	77.0 (3.03)		
	F-8N	1/2" Female NPT				42.5 (1.67)	42.5 (1.67)	85.0 (3.35)		
	M-4N	1/4" Male NPT	7.1(0.28)	3.7		47.5 (1.87)	47.5 (1.87)	95.0 (3.74)		
	M-6N	3/8" Male NPT	9.7(0.38)	7.2						
	M-8N	1/2" Male NPT	10.0(0.39)	7.5		50.0 (1.97)	50.0 (1.97)	100 (3.94)		
OBV6B-	O-10T	5/8" OTG-Lok	12.7(0.50)	10.1	40.0 (1.57)	57.0 (2.24)	57.0 (2.24)	114.0 (4.49)	51.0 (2.00)	149.0 (5.87)
	O-12T	3/4" OTG-Lok				57.5 (2.26)	57.5 (2.26)	115.0 (4.52)		
	F-8N	1/2" Female NPT				44.5 (1.75)	44.5 (1.75)	89.0 (3.50)		
	F-12N	3/4" Female NPT				45.0 (1.77)	45.0 (1.77)	90.0 (3.54)		
	M-12N	3/4" Male NPT				54.5 (2.15)	54.5 (2.15)	109.0 (4.29)		
OBV6C-	O-12T	3/4" OTG-Lok	15.8(0.62)	19.0	50.0 (1.97)	62.5 (2.46)	62.5 (2.46)	125.0 (4.92)	56.0 (2.20)	149.0 (5.87)
	O-16T	1" OTG-Lok	19.0(0.75)	30.0		67.0 (2.64)	67.0 (2.64)	134.0 (5.27)		
	F-12N	3/4" Female NPT				48.0 (1.89)	48.0 (1.89)	96.0 (3.78)		
	F-16N	1" Female NPT				55.5 (2.19)	55.5 (2.19)	111.0 (4.37)		
	M-12N	3/4" Male NPT	15.8(0.62)	19.0		59.5 (2.34)	59.5 (2.34)	119.0 (4.68)		
	M-16N	1" Male NPT	19.0(0.75)	30.0		64.5 (2.54)	64.5 (2.54)	129.0 (5.07)		

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

3 - Way Bottom Port Inlet (3B)

180° Turn



3 - Way Side Port Inlet (3S)

90° Turn

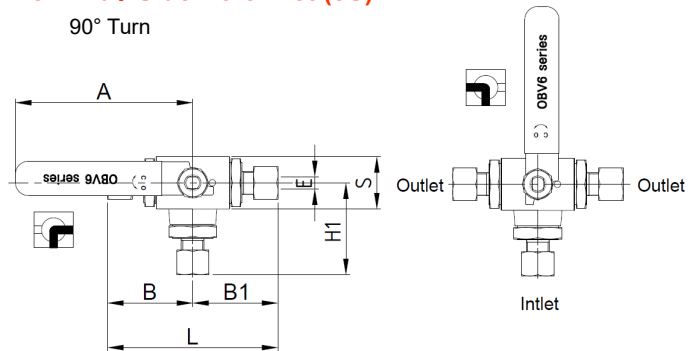


Table of Dimensions

Basic Ordering Number		End Connections Inlet & Outlet	Orifice mm(in.)	Dimensions, mm (in.)							
				S	B	B1	L	H	H'1	A	
OBV6A -3B- -3S-	O-4T-	1/4" OTG-Lok	4.8(0.19)	32.0 (1.26)	48.0 (1.89)	48.0 (1.89)	96.0 (3.78)	39.0 (1.53)	50.9 (2.00)	108.0 (4.25)	
	O-6T-	3/8" OTG-Lok	7.1(0.28)		51.0 (2.0)	51.0 (2.0)	102.0 (4.0)		53.0 (2.09)		
	O-8T-	1/2" OTG-Lok	10.0(0.39)		53.5 (4.1)	53.5 (4.1)	107.0 (4.2)		55.8 (2.20)		
	F-4N-	1/4" Female NPT			37.0 (1.46)	37.0 (1.46)	74.0 (2.91)		40.0 (1.57)		
	F-6N-	3/8" Female NPT			38.5 (1.52)	38.5 (1.52)	77.0 (3.03)		41.5 (1.64)		
	F-8N-	1/2" Female NPT			42.5 (1.67)	42.5 (1.67)	85.0 (3.35)		45.5 (1.79)		
OBV6B-3B- -3S-	O-10T-	5/8" OTG-Lok	12.7(0.50)	40.0 (1.57)	57.0 (2.24)	57.0 (2.24)	114.0 (4.49)	51.0 (2.00)	67.2 (2.65)	149.0 (5.87)	
	O-12T-	3/4" OTG-Lok			57.5 (2.26)	57.5 (2.26)	115.0 (4.52)		67.7 (2.66)		
	F-8N-	1/2" Female NPT			44.5 (1.75)	44.5 (1.75)	89.0 (3.50)		55.0 (2.17)		
	F-12N-	3/4" Female NPT			45.0 (1.77)	45.0 (1.77)	90.0 (3.54)				
OBV6C-3B- -3S-	O-12T-	3/4" OTG-Lok	15.8(0.62)	50.0 (1.97)	62.5 (2.46)	62.5 (2.46)	125.0 (4.92)	56.0 (2.20)	75.3 (2.96)		
	O-16T-	1" OTG-Lok	19.0(0.75)		67.0 (2.64)	67.0 (2.64)	134.0 (5.27)		80.0 (3.15)		
	F-12N-	3/4" Female NPT			48.0 (1.89)	48.0 (1.89)	96.0 (3.78)		59.5 (2.34)		
	F-16N-	1" Female NPT			55.5 (2.19)	55.5 (2.19)	111.0 (4.37)		67.0 (2.64)		

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

Pressure and Temperature Rating

2 - Way

Valve Series	Seat Material	Pressure Rating @ 21°C (70°F)	Temperature Rating °C (°F)
OBV6A	PCTFE	6,000 psig (413 bar)	-30 to 180°C (-22°C to 355°F)
	PEEK	10,000 psig (689 bar)	-40 to 230°C (-40°C to 446°F)
OBV6B OBV6C	PCTFE	5,000 psig (344 bar)	-30 to 160°C (-22 to 320°F)
	PEEK	6,000 psig (413 bar)	-40 to 210°C (-40°C to 410°F)

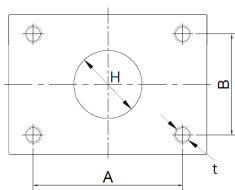
3 - Way

Valve Series	Seat Material	Pressure Rating @ 21°C (70°F)	Temperature Rating °C (°F)
OBV6A	PCTFE	4,000 psig (275 bar)	-30 to 180°C (-22°C to 355°F)
	PEEK	6,000 psig (413 bar)	-40 to 230°C (-40 to 446°F)
OBV6B OBV6C	PCTFE	3000 psig (206 bar)	-30 to 160°C (-22 to 320°F)
	PEEK	4,000 psig (275bar)	-40 to 210°C (-40 to 410°F)

- Note:**
- The rated pressure shown above is the maximum allowable pressure to the seat. If the system requires higher pressure to test, the valve must be in open position before and during test so as not to damage the seat.
 - Pressure ratings of valves are sometimes limited to the maximum working pressure of pipe ends and tubing connected. The working pressure of tubing must be considered in the calculation of total system working pressure.

Panel mounting option

Ordering designator: **PS**

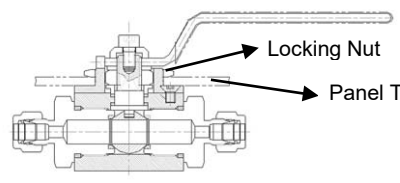


PS - Screw Hole Panel Mount

Unit: mm (in.)

Valve Series	A	B	H	t
SBV1H	34.0 (1.34)	23.0 (0.91)	30.0 (1.18)	M4
SBV2H	36.0 (1.42)	29.0 (1.14)	38.1 (1.5)	M5
SBV3H	40.0 (1.57)	35.0 (1.38)	38.1 (1.5)	M6

Ordering designator: **PN**



PN - Locking Nut Panel Mount

Unit: mm (in.)

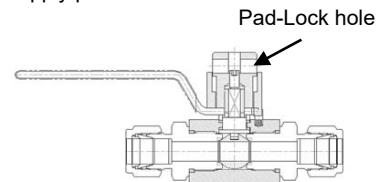
Valve Series	Panel Hole	Max T
SBV1H	30 (1.18)	Max. 4.0 (0.157)
SBV2H	38.1 (1.5)	
SBV3H		

Locking device option

Ordering designator: **LD**

Locking device option is applicable to 2-way and 3-way valve.

The valve with locking device is manually locked out in the valve open or close position. For additional security, apply padlock.



The padlock applicable hole is 7.2 mm (0.28 in.) and is constructed above the upper lock detent.

Note: LD option applicable to 2-way valves.

Sour Gas Service

- Is provided to meet NACE Standard MR0175/ISO 15156-3. To order valve for sour gas application, insert "**SG**" to the valve basic ordering number. Example: OVC6A-O-4T-**SG**-SS

Testing and Cleaning

- Every valve is factory tested with nitrogen @ 1000 psig (69 bar) for leakage at the seat to a maximum allowable leak rate of 0.1 SCCM.
- The packing is tested with nitrogen for no detectable leakage.
- Every valve is cleaned and packaged in accordance with OTG cleaning standard.

Ordering Information

Selection the applicable options from designators listed below

OBV6A-O-4T	-	PC	-	PN	-	LD	-	SG	-	SS
		Seat Material			Panel Mounting			Locking Device		
		<ul style="list-style-type: none">▪ Nil: Standard PCTFE▪ PK: PEEK			<ul style="list-style-type: none">▪ Nil: Standard▪ PS: Screw hole panel mounting▪ PN: Lock nut panel mounting			<ul style="list-style-type: none">▪ Nil: Standard▪ LD: Locking Device		
								<ul style="list-style-type: none">▪ Nil: Standard▪ SG: Sour Gas Service		
					</					