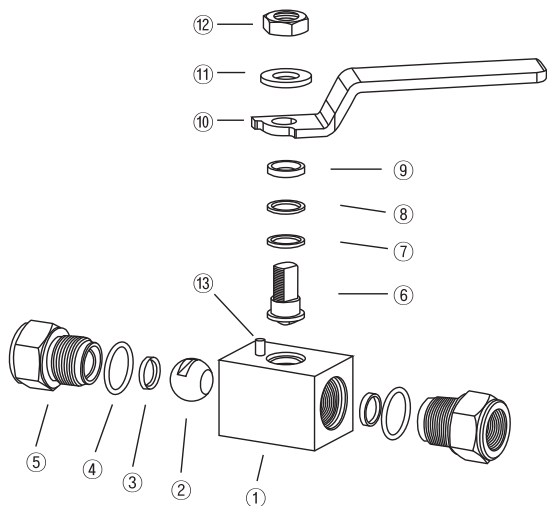


# SPBV Series

## 6,000 PSI Square CNG Ball Valve



Component		Materials Grade / ASTM Specification
1	Body	SS316 / A276
2	Ball	PVDF
3	Seat	Type 630 / A564
4	End Seal	FKM
5	End Connector	SS316 / A276
6	Stem	SS316 / A276
7	Bearing	PTEE
8	Packing	PTEE
9	Gland	SS316 / A276
10	Washer	SS304
11	Handle	SS304
12	Stem Nut	SS304
13	Stop Pin	SS304

### Features

- On-Off Normal standard ball valve
- Pressure rating up to 10,000 psig(690bar) @ 70°F(21°C)
- Body is Robust - Cold drawn bar construction
- Lever handle standard - Stainless Steel material

- Blow-out proof design with internally loaded stem
- Micro-finish ball for smooth valve actuation.
- Floating ball design provides seat wear compensation
- Outstanding sealing performance across the pressure range

### Technical Data

- 2WAY

	Materials		Pressure Rating @ -54□ to 21□ (-65□ to 70□)	Temperature Rating
	SEAT	Stem Packing / End Seal		
SPBV1	PVDF	PTFE	6000 psig (413bar)	-30□ to 130□ (-22□ to 265□)
SPBV1	PCTFE			
SPBV1	PEEK		10000 psig (689bar)	-54□ to 230□ (-65□ to 466□)
SPBV2/3	PVDF		5000 psig (344bar)	-23□ to 191□ (-10□ to 375□)
SPBV2/3	PCTFE			
SPBV2/3	PEEK			

- 3WAY

	SEAT	Materials		Pressure Rating @ -54□ to 21□ (-65□ to 70□)	Temperature Rating	
		Stem Packing	End Seal			
SPBV1	PVDF	PTFE	FKM	4000 psig (275bar)	-30□ to 130□ (-22□ to 265□)	
SPBV1	PCTFE				-30□ to 150□ (-22□ to 355□)	
SPBV1	PEEK				-54□ to 230□ (-65□ to 466□)	
SPBV2/3	PVDF			6000 psig (413bar)	3000 psig (206bar)	-23□ to 191□ (-10□ to 375□)
SPBV2/3	PCTFE					
SPBV2/3	PEEK					

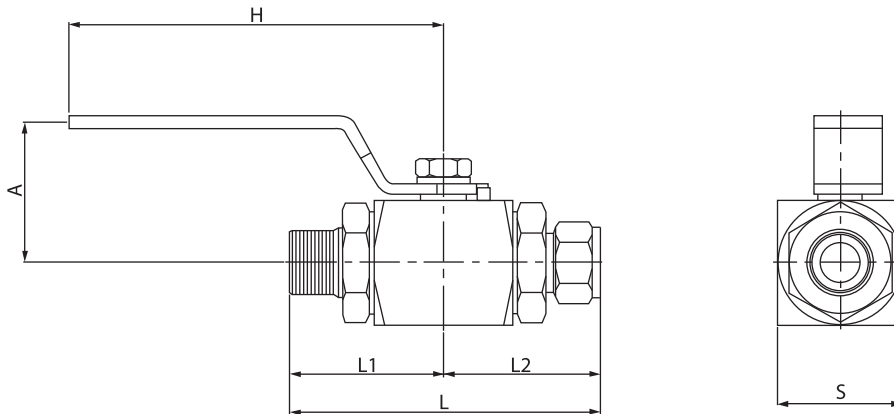
## Operation

- 2-way / 3-way valves are designed to control fluid bi-directionally in full open and full close position
- Designed for gas, liquid, and vacuum service provides a reliable sealing performance in wide range (a wide range of) high duty applications.

## Factory Test and Packaging

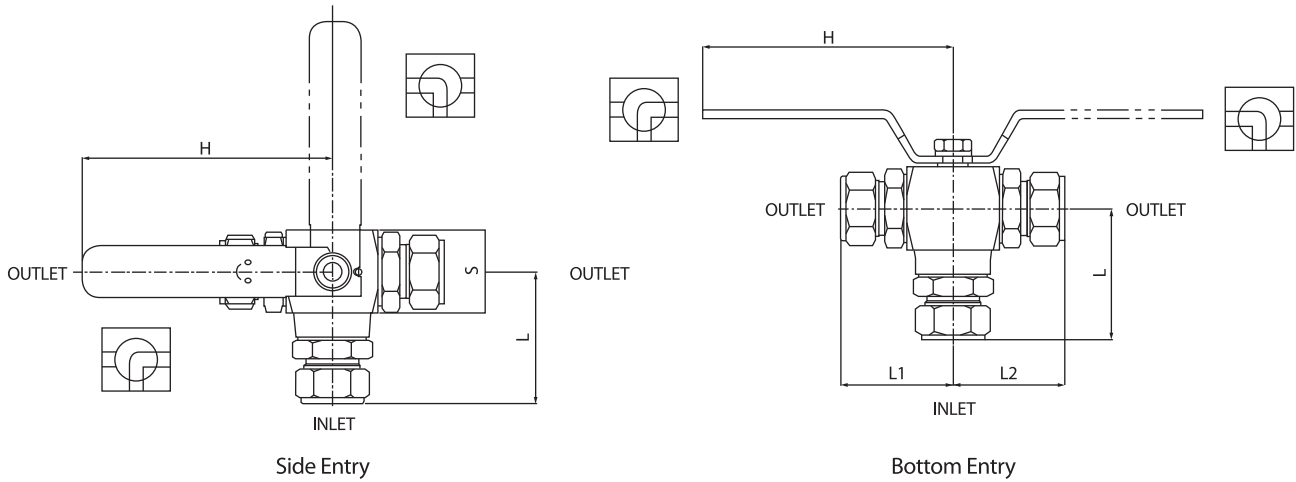
- Every valve is factory tested (taken a factory test) with nitrogen @ 1000 psig (69 bar)) for leakage at the seat to a maximum allowable leak rate of 0.1 SCCM.
- The packing is tested with nitrogen for no detectable leakage.
- Every valve is cleaned and packaged in accordance with SHINELACE cleaning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

## Ordering Information and Table of Dimensions



Basic Ordering No.	Orifice	Cv	End Connections	Dimensions									
				L1	L2	L	A	H	S				
SPBV1	I-4T	10.0	1.2	1/4" I-LOK	45.8	45.8	91.6	38.0	126.5	32.0			
	I-6T		3.7	3/8" I-LOK	47.3	47.3	94.6						
	I-8T		7.5	1/2" I-LOK	49.8	49.8	99.6						
	F-4N			1/4" Female NPT	32.0	32.0	64.0						
	F06N			3/8" Female NPT	35.5	35.5	71.0						
	F-8N		1/2" Female NPT	39.5	39.5	79.0	38.0				126.5	32.0	
	M-4N		3.7	1/4" Male NPT	42.7	42.7							85.4
	M-6N		7.2	3/8" Male NPT	42.7	42.7							85.4
	M-8N		7.5	1/2" Male NPT	47.6	47.6	95.2						
SPBV2	F-8N	12.7	10.0	1/2" Female NPT	45.0	45.0	90.0	50.8	162.0	40.0			
	F-12N		3/4" Female NPT	45.0	45.0	90.0							
	M-12N		3/4" Male NPT	52.6	52.6	105.2							
	I-10T		5/8" I-LOK	55.3	55.3	110.6							
	I-12T		3/4" I-LOK	55.3	55.3	110.6							
SPBV3	F-12N	19.0	30.0	3/4" Female NPT	45.0	45.0	90.0	55.6	162.0	50.0			
	F-16N		1" Female NPT	49.1	49.1	98.2							
	I-12T		19.0	3/4" I-LOK	58.3	58.3	116.6						
	I-16T		30.0	1" I-LOK	64.9	64.9	129.8						
	M-12N		19.0	3/4" Male NPT	57.6	57.6	115.2						
	M-16N		30.0	1" Male NPT	62.4	62.4	124.8						

## Ordering Information and Table of Dimensions



Basic Ordering No.	Orifice	End Connections	L1	L2	L	S	H
SPBV31	I-4T	1/4" I-LOK	45.8	45.8	53.3	32.0	126.5
	I-6T	3/8" I-LOK	47.3	47.3	54.8		
	I-8T	1/2" I-LOK	49.8	49.8	54.0		
	F4N	1/4" Female NPT	32.0	32.0	36.5		
	F6N	3/8" Female NPT	35.5	35.5	40.0		
	F8N	1/2" Female NPT	39.5	39.5	44.0		
SPBV32	I-10T	5/8" I-LOK	55.3	55.3	65.3	40.0	162.0
	I-12T	3/4" I-LOK	55.3	55.3	65.3		
	F8N	1/2" Female NPT	55.3	55.3	49.5		
	F12N	3/4" Female NPT	45.0	45.0	55.0		
SPBV33	I-12T	3/4" I-LOK	58.3	58.3	69.8	50.0	162.0
	I-16T	1" I-LOK	64.9	64.9	69.8		
	F12N	3/4" Female NPT	45.0	45.0	56.5		
	F16N	1" Female NPT	49.1	49.1	60.6		

## Ordering Information

**SPBV1 - B I - 6T - PK - S**

1                      2                      3                      4                      5                      6

### 1. Valve Designator

- SPBV1 : 2WAY –Orifice 10.0mm      SPBV2 : 2WAY –Orifice 12.7mm      SPBV3 : 2WAY –Orifice 19.0mm
- SPBV31 : 3WAY –Orifice 10.0mm      SPBV32 : 3WAY –Orifice 12.7mm      SPBV33 : 3WAY –Orifice 19.0mm

### 2. Patten Designator

Blank : 2-Way Straight / B : 3-WAY Bottom Entry / S : 3-WAY Side Entry

### 3. End Connector

I : I-LOK TUBE FITTING / M : Male Pipe Thread / F : Female Pipe Thread

### 4. Size Designator

Thread(in)	1/8	1/4	3/8
Designator	2N(R)	4N(R)	6N(R)

Inch Tube	Tube O.D	1/8	1/4	3/8	1/2
	Designator		2	4	6
Metric Tube	Tube O.D	3mm	6mm	10mm	12mm
	Designator		3M	6M	10M

**5. Seat Material Designator** - Blank : PVDF (standard) / PC : PCTFE / PK : PEEK

**6. Body Mateiral** - S : SUS316L / ST : Carbon Steel (S45C)