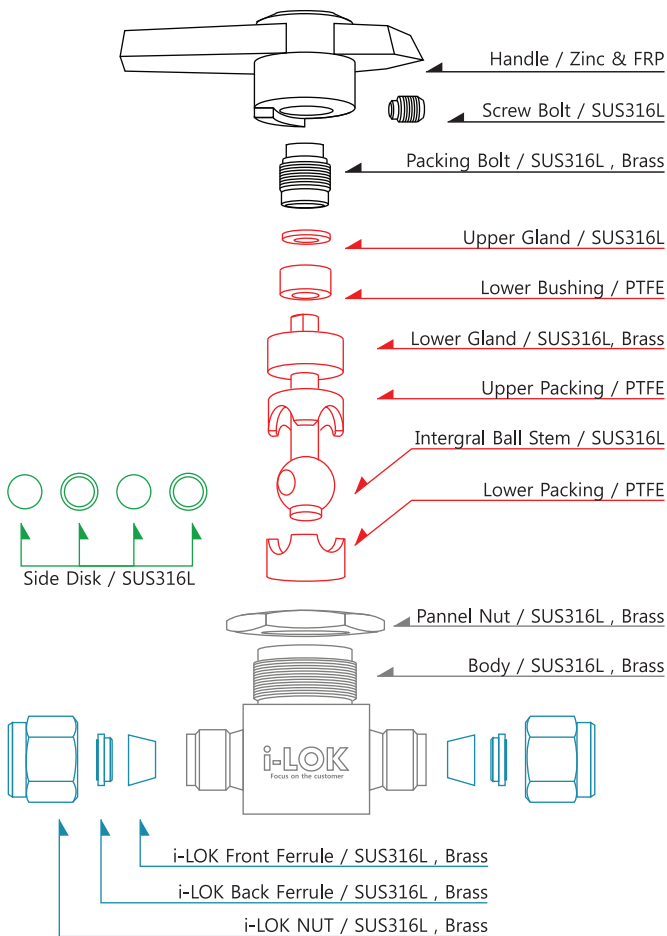




SMPV Series

Square Ball Valve

Material of Construction



Product Feature

Size

I-LOK 1/8 to 1" in OD/ 3mm to 25mm
Male Female Thread (NPT, PT, PF)

Applications

Instrumentation, Fluid Control, Control Sampling system

Material / Features

316L, Brass / 2 way shut off and 3 way switching
2,3 way and angle pattern

Specifications

Maximum Working Pressure @100°F(38°C) : 3000 psig (210 bar)
Working Temperature Range : 50°F to 150°F (10°C to 66°C)

SMPV Valve Pattern



2-Way In-Line Pattern
(SMPV1,2,3,4)

2-Way Angle Pattern
(SMPV1,2,3,4 - A)

3-Way Pattern
(SMPV1,2,3,4 - T)

Testing and Adjustable

Test

- Every valves are factory tested by nitrogen.
(1,000 psig @ 21°C (70°F))

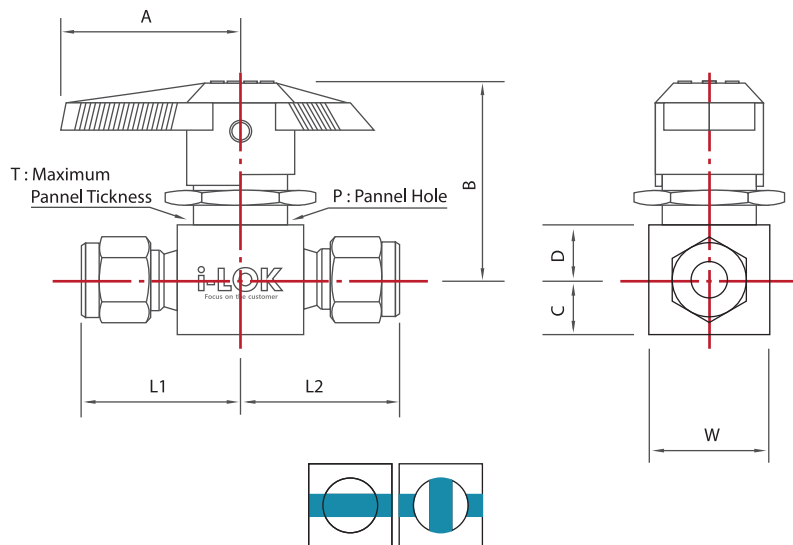
Specification Adjustment

- Packing is surely readjusted for service at higher pressures.

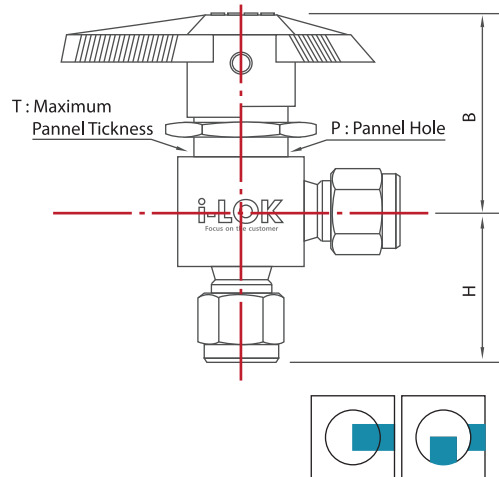
SMPV Series

SMPV 2-WAY Straight & ANLGE Pattern

2-Way Straight Type



2-Way Angle Type



Dimension Guide Table

Product Number		Orifice	Cv	End Connections		Dimensions (mm)										
Series	Part No.			Inlet	Outlet	L1	L2	H	C	D	T	P	B	A	W	
SMPV1	I	1	1.3	0.1	1/16" i-LOK		21.3	21.3	20.6	7.1	8.7	6.4	15.0	38.6	29.0	15.0
	I	3M	2.4	0.2	3mm i-LOK		25.4	25.4	24.6							
	I	2		0.2	1/8" i-LOK		20.6	20.6	20.6							
	F	2N	3.2	0.5	1/8" FEMALE NPT		27.7	27.7	27.7							
	I	6M		0.6	6mm i-LOK											
	I	4		0.6	1/4" i-LOK											
SMPV2	F	2N	4.8	1.2	1/8" FEMALE NPT		25.4	25.4	26.2	9.4	11.2	4.8	19.8	46.1	38.5	19.8
	F	4N		0.9	1/4" FEMALE NPT		26.2	26.2	30.2							
	F	4R		0.9	1/4" FEMALE PT		25.4	25.4	30.2							
	M	4N		1.2	1/4" MALE NPT		25.4	30.2	30.2							
	MI	4N-4		1.6	1/4" MALE NPT	1/4" i-LOK	30.2	30.2	30.2							
	S	6M		2.4	6mm i-LOK		31.0	31.0	31							
	S	4		2.4	1/4" i-LOK		32.5	32.5	31							
	S	8M		1.5	8mm i-LOK											
	S	6		1.5	3/8" i-LOK											
SMPV3	F	4N	7.1	3.0	1/4" FEMALE NPT		31.8	31.8	31.8	14.2	14.2	9.4	28.5	60	51.0	28.5
	F	6N		2.6	3/8" FEMALE NPT											
	F	6R		2.6	3/8" FEMALE PT											
	S	6		6.0	3/8" i-LOK		38.9	38.9	38.9							
	S	10M		6.0	10mm i-LOK											
SMPV4	F	8N	10.3	6.3	1/2" FEMALE NPT		39.6	39.6	39.6	17.5	17.5	9.4	38.1	62.7	75.0	75.0
	F	8R		6.3	1/2" FEMALE PT											
	S	12M		12.0	12mm i-LOK		50.0	50.0	50							
	S	8		12.0	1/2" i-LOK											
	S	12		6.4	3/4" i-LOK											

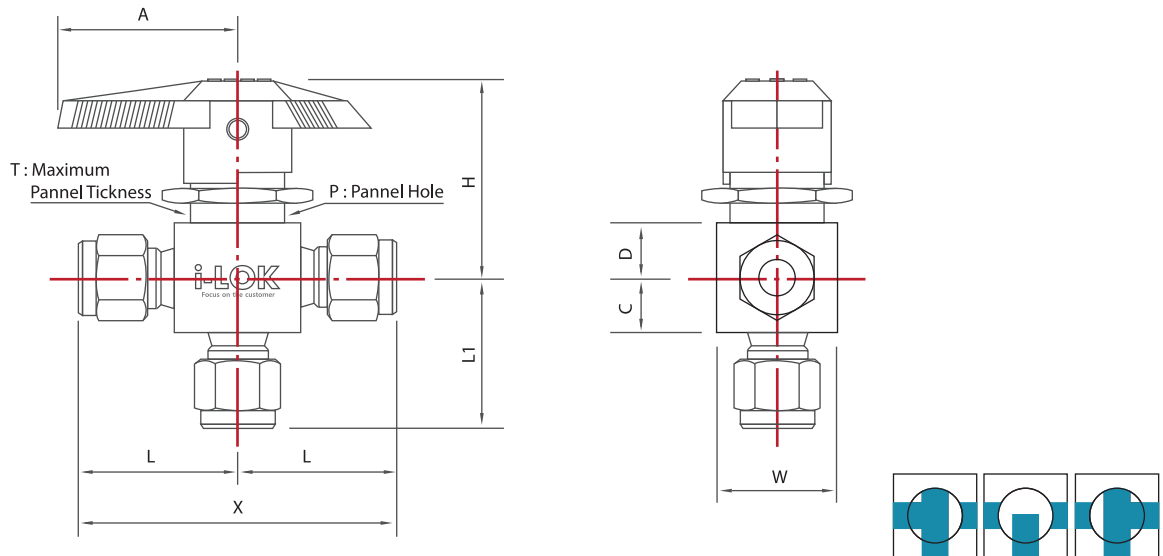
※ All dimensions shown are for reference only and are subject to change.

※ Dimensions with i-LOK nuts are in finger-tight position.

SMPV Series

SMPV 3-WAY Pattern

SMPV 3-WAY Pattern



Dimension Guide Table

Part Number		Orifice	Cv	End Connections		Dimensions (mm)										
Series	Part No.			Inlet	Outlet	L	L1	X	C	D	T	P	H	A	W	
SMPV1 -3	S	1	1.3	0.08	1/16" I-LOK		21.3	20.6	42.6	7.1	8.7	6.4	15.0	38.6	29.0	15.0
	S	3M	2.4	0.15	3mm I-LOK		25.4	24.6	50.8							
	S	2		0.15	1/8" I-LOK		20.6	20.6	41.2							
	F	2N	3.2	0.3	1/8" FEMALE NPT		27.7	26.9	55.4							
	S	6M		0.35	6mm I-LOK											
	S	4		0.35	1/4" I-LOK											
F	4N	4.8		0.75	1/4" FEMALE NPT		26.2	26.2	52.4	9.4	11.2	4.8	19.8	46.1	38.5	19.8
F	4R		1/4" FEMALE PT													
MS	4N-4		0.8	1/4" MALE NPT	1/4" SUPERLOK	25.4	30.2	55.6								
S	6M		0.9	6mm I-LOK		30.2	30.2	60.4								
S	4		0.8	1/4" I-LOK		31.0	31.0	62.0								
S	8M		0.8	8mm I-LOK												
SMPV3 -3	F	4N	7.1	1.7	1/4" FEMALE NPT		31.8	31.8	63.6	14.2	14.2	9.4	28.5	60	51.0	28.5
	F	6N		1.5	3/8" FEMALE NPT											
	F	6R	3/8" ISO FEMALE													
	S	6	3/8" I-LOK		38.9	38.9	77.8									
	S	10M	10mm I-LOK													
SMPV4 -3	F	8N	10.3	3.5	1/2" FEMALE NPT		39.6	39.6	79.2	17.5	17.5	9.4	38.1	62.7	75.0	38.1
	F	8R			1/2" ISO FEMALE											
	S	12M	4.6	12mm I-LOK		50.0	50.0	100								
	S	8		1/2" I-LOK												
	S	12		3/4" I-LOK												

※ All dimensions shown are for reference only and are subject to change.

※ Dimensions with I-LOK nuts are in finger-tight position.

SMPV Series

SMPV 2-WAY Strajght & ANLGE Pattern

Flow Data Information

2-way In-line Pattern

Pressure Drop to Atmosphere (ΔP)	Cv															
	0.1	0.2	0.5	0.6	0.9	1.2	1.5	1.6	2.4	2.6	3.0	6.0	6.3	6.4	12.0	
Air SCFM @70°F(21°C)	10	1.1	2.7	6.9	8.3	12.0	17.0	21.0	22.0	33.0	36.0	41.5	83.0	87.2	88.6	166.0
	50	3.0	7.6	19.1	23.0	34.0	46.0	57.0	61.0	92.0	99.5	115.0	230.0	241.0	245.0	459.0
	100	5.3	14.0	33.9	40.7	61.0	81.0	100.0	110.0	160.0	176.0	203.0	407.0	427.0	434.0	814.0
Water US GPM @70°F(21°C)	10	0.3	0.6	1.6	1.9	2.8	3.7	4.7	5.0	7.5	8.2	9.5	19.0	19.9	20.2	37.9
	50	0.7	1.4	3.5	4.2	6.3	8.4	12.1	11.0	17.0	18.4	21.2	42.3	44.5	45.3	84.9
	100	1.0	2.0	5.0	6.0	9.0	12.0	15.0	16.0	24.0	26.0	30.0	60.0	63.0	64.0	120.0

2-way angle pattern and 3-way

Pressure Drop to Atmosphere (ΔP)	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	60	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	

Technical Data for SMBVseries with standard PTFE seat

Valve Series		Pressure Rating		Temp Range PTFE seat
In-Line pattern	Anglepattern	psig	bar	
SMBV1	SMBV1-A, SMBV2-A	2500	172	10 to 65°C (50 to 150°F)
SMBV2	-	3000	206	
SMBV2,SMBV2	-	2500	172	
-	SMBV2-A, SMBV2-A	1500	103	

Valve Series	Pressure Rating		Temperature Range
	psig	bar	PTFE seat
SMBV1-3, SMBV2-3	2500	172	10° C to 65°C
SMBV3-3, SMBV4-3	1500	103	(50°F to 150°F)

Ordering Data

S	MB	V4	A	08T	316L	TM
SHINIL ACE	Middle Pressure Ball Valve type	Valve Body 4 Valve Body Size	Angle Pattern Pattern	1/2" Connection Size	SUS316L Body & Connection Material	Top Mounting Add Option

Pattern Advise : 2-Way Pattern is don't need fill in the odering data.