



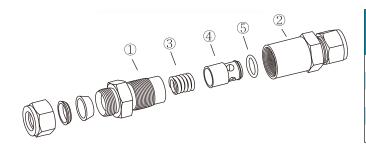




# **SCV Series**

**Check Valve** 

#### 3000PSIG(206BAR) POPPET CHECK VALVES



Component		Valve Body MATERIALS Material Grade / ASTM Specification			
		SS316	BRASS		
1	Body	SS316 / A276	C36000 / B16		
2	Connector	SS316 / A276	C36000 / B16		
3	Spring	SS302 / A313			
4	Poppet	SS316 / A276	C36000 / B16		
5	O-ring	FKM	NBR		

#### Features

- Fixed cracking pressure valves
- End connection includes I-LOK Fittings, Male & Female NPT threads up to 1 in ???.
- Valves product has the advantage of separately separate poppet and O-ring.
- Valve products have the advantage of separate poppet and O-ring.
- Valves are available in stainless steel, brass

#### Operation

- Fixed cracking pressure valves
- End connection includes I-LOK Fittings, Male & Female NPT threads up to 1 in ???.
- Valves product has the advantage of separately separate poppet and O-ring.
- Valve products have the advantage of separate poppet and O-ring.
- Valves are available in stainless steel, brass

#### Factory Test and Packaging

- Fixed cracking pressure valves are tested (on) cracking and resealing performance.
- Valves at room temperature ensure resealing within 5 seconds at the appropriate reseal pressure.

#### Spring Designator / Cracking and Reseal Pressure @70°F (21°C)

Nominal Cracking Pressure, psig (bar)	Designator	Cracking Pressure Range psig (bar)	Reseal Pressure psig (bar)
1/3 (0.03)	1/3	Up to 3 (0.21)	Up to 6 (0.42) back pressure
1 (0.07)	1	Up to 4 (0.28)	Up to 6 (0.42) back pressure
3 (0.21)	3	Up to 6 (0.41)	Up to 4 (0.28) back pressure
10 (0.69)	10	7 to 15 (0.49 to 1.1)	Minimum 3 (0.21) upstream Pressure
25 (1.8)	25	20 to 30 (1.4 to 2.1)	Minimum 17 (1.2) upstream Pressure

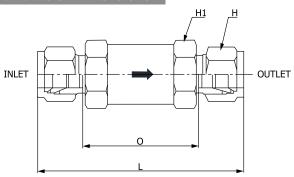




# Pressure-Temperature Rating

Valve Series	1,2	2,3,4	5,6				
Valve Material	SS316	Brass	SS316	Brass			
O-Ring Material	FKM	NBR	FKM	NBR			
Temperature, °F(°C)		Working Pressure, psig (bar)					
- 10 to 100 (-23 to 37)	3000 (206)	3000 (206)	2000 (137)	1500 (103)			
200 (93)	2575 (177)	2600 (179)	1715 (118)	1300 (89.6)			
250 (121)	2450 (168)	2405 (165)	1630 (112)	1200 (82.7)			
300 (148)	2325 (160)	-	1545 (106)	-			
350 (176)	2232 (153)	-	1481 (102)	-			
375 (190)	2185 (150)	-	1450 (99.9)	-			

# Ordering Information and Table of Dimensions



Basic Ordering Number		Outsies		End Connection		Dimensions																		
		Orifice	Cv	Inlet	Outlet	L	I	Н	H1															
	I-2T		0.16	1/8" I-LOK	1/8" I-LOK	55.6	30.2	11.1																
	M-2N			1/8" Male NPT	1/8" Male NPT	44.4																		
	F-2N			1/8" Female NPT	1/8" Female NPT	46.6	1	_																
SCV1	I-4T	4.0		1/4" I-LOK	1/4" I-LOK	60.0	29.5	14.3	15.9															
SCVI	I-6M	4.8	0.47	6mm I-LOK	6mm I-LOK	0.00	29.4	14.0																
	MI-4N4T			1/4" Male NPT	1/4" I-LOK	56.4		14.3																
	M-4N			1/4" Male NPT	1/4" Male NPT	53.4	-																	
	F-4N			1/4" Female NPT	1/4" Female NPT	54.6		_	19.1															
	I-6T			3/8" I-LOK	3/8" I-LOK	74.0	41.3	17.5																
SCV2	I-10M	7.1	1.48	10mm I-LOK	10mm I-LOK	74.8	40.4	19.0	22.2															
	M-6N			3/8" Male NPT	3/8" Male NPT	64.6	-	-																
	F-6N			3/8" Female NPT	3/8" Female NPT	63.8	-	-																
CCV2	I-8T	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0 1.70	1/2" I-LOK	1/2" I-LOK	80.2	34.5	22.2	22.2
SCV3	I-12M	10.0	10.0	12mm I-LOK	12mm I-LOK	00.2	34.6	22.0	22.2															
	M-8N			1/2" Male NPT	1/2" Male NPT	74.4	-	-																
SCV4	F-8N	12.5	2,60	1/2" Female NPT	1/2" Female NPT	84.7	-	-	28.6															
SCV4	I-10T	13.5	2.60	5/8" I-LOK	5/8" I-LOK	91.8	48.1	25.4	28.6															
	I-12T			3/4" I-LOK	3/4" I-LOK	110.7	61.9	28.6																
SCV5	M-12N	16.0	5.20	3/4" Male NPT	3/4" Male NPT	105.3			31.8															
	F-12N			3/4" Female NPT	3/4" Female NPT	103.0	_	_																
	I-16T			1" I-LOK	1" I-LOK	121.2	58.7	38.1	24.0															
SCV6	M-16N	18.0	8.0	1" Male NPT	1" Male NPT	116.2			34.9															
	F-16N			1" Female NPT	1" Female NPT	111.4		_	41.3															





#### Ordering Information

1. Valve Designator :

2. End Connection

3. Size Designator

SCV1	-	-	- 6T	_	1P	-	S
1		2	3		4		5

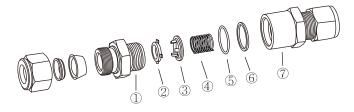
Thread(in)	1/8	1/4	3/8
Designator	2N(R)	4N(R)	6N(R)

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

**4. Cracking Pressure**: 1/3P (1/3 psig) / 1P (1psig) / 3P (3psig) / 5P (5 psig) /

**5. Material** : SUS : / BRASS :

## 6000PSIG(413BAR) HIGH PRESSIRE CHECK VALVES



Component		Valve Body MATERIALS Material Grade / ASTM Specification			
		SS316	BRASS		
1	Body	SS316	BRASS		
2	Connector	SS316 / A276	C36000 / B16		
3	Poppet	SS316 / A276	C36000 / B16		
4	O-ring	FKM	NBR		
5	Spring	SS302 / A313			
6	Connector Seal	FKM	NBR		

#### Features

- Fixed cracking pressure valves.
- High pressure application up to 6000 psig (413 bar).
- Bonded(FKM/NBR/EPDM/HNBR) to poppet retains the seal in sealing position against pressure pulses, surges or shock.
- End connection includes I-LOK Fittings, Male & Female NPT threads up to 1 in.???
- Valves are available in stainless steel, brass.

#### Operation

• Inlet pressure pushes the poppet from a closed to open position when upstream pressure is greater than Outlet pressure plus the spring force. The only time outlet pressure can be greater than inlet pressure when the valve is in closed position.

In a static condition, where(when) equal pressure is present at both inlet and outlet, the valve would be in closed due to the force of the spring.

#### Factory Test and Packaging

- Fixed cracking pressure valves are tested (on) cracking and resealing performance
- Valves at room temperature ensure resealing within 5 seconds at the appropriate reseal pressure

### Pressure-Temperature Rating

Valve Material	SS316			
Seal Material	FKM			
Valve Series				
Temperature, °F(°C)	Working Pressure, psig (bar)			
- 10 to 100 (-23 to 37)	6000 (413)	5000 (344)		
200 (93)	5160 (355)	4290 (295)		
250 (121)	4910 (338)	4080 (281)		
300 (148)	4660 (321)	3875 (266)		
400 (204)	4280 (294)	3560 (245)		

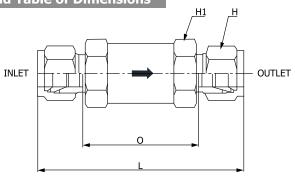




# Spring Designator / Cracking and Reseal Pressure @70°F (21°C)

Nominal Cracking Pressure, psig (bar)	Designator	Cracking Pressure Range psig (bar)	Reseal Pressure psig (bar)
1/3 (0.03)	1/3	Up to 3 (0.21)	Up to 6 (0.42) back pressure
1 (0.07)	1	Up to 4 (0.28)	Up to 6 (0.42) back pressure
5 (0.35)	5	3 to 9 (0.21 to 0.63)	Up to 2 (0.14) back pressure
10 (0.69)	10	7 to 15 (0.49 to 1.1)	Minimum 3 (0.21) upstream Pressure
25 (1.8)	25	20 to 30 (1.4 to 2.1)	Minimum 17 (1.2) upstream Pressure





Basic Ordering Number		Orifice	Cv	End Con	nection		Dimensions			
		Ornice	LV	Inlet	Outlet	L	0	Н	H1	
	I-2T			1/8" I-LOK	1/8" I-LOK	57.7	32.1	11.1		
	I-4T	]		1/4" I-LOK	1/4" I-LOK	61.7	31.2	14.2		
SHCV1	I-6M	4,8	0,67	6mm I-LOK	6mm I-LOK	01.7	31.1	14.0	17.5	
SHEVI	F-4N	1	0,07	1/4" Female NPT	1/4" Female NPT	54.1			17.5	
	M-2N			1/8" Male NPT	1/8" Male NPT	45.5	_	-		
	M-4N			1/4" Male NPT	1/4" I-LOK	55.1				
	I-6T			3/8" I-LOK	3/8" I-LOK	69.9	36.1	17.5		
	I-8T	1		1/2" I-LOK	1/2" I <b>-</b> LOK	75.2	29.5	22.2		
	I-8M		1		8mm I-LOK	8mm I-LOK	68.6	36.2	16.0	25.4
611616	I-10M	7.8	1.8	10mm I-LOK	10mm I-LOK	71.1	36.7	19.0	1	
SHCV2	I-12M			12mm I-LOK	12mm I-LOK	75.2	29.6	22.0		
	F-6N			3/8" Female NPT	3/8" Female NPT	64.8				
	F-8N	1		1/2" Female NPT	1/2" Female NPT	77.0			26.9	
	M-6N			3/8" Male NPT	3/8" Male NPT	59.9			25,4	
	M-8N			1/2" Male NPT	1/2" Male NPT	69.3			25,4	
	I-12T			3/4" I-LOK	3/4" I-LOK	89.4	40.6	28.6		
	I-16T	1		1" I-LOK	1" I-LOK	98.6	36.1	38.1		
	I-22M	]		22mm I-LOK	22mm I-LOK	88.4	36.4	32.0		
CHC/\s	I-25M	15.0	4.7	25mm I-LOK	25mm I-LOK	98.6	36.0	40.0	1 44.3	
SHCV3	F-12N	1		3/4" Female NPT	3/4" Female NPT	82.0			41.3	
	F-16N	1		1" Female NPT	1" Female NPT	97,3	1			
	M-12N	1		3/4" Male NPT	3/4" Male NPT	83.6	1 <u>-</u>	_		
	M-16N	1		1" Male NPT	1" Male NPT	93,2	1			

# Ordering Information

1. Valve Designator :

2. End Connection

3. Size Designator

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

SHCV1	-	I -	<b>6T</b>	-	1P	_	S
1		2	3		4		5

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

**4. Cracking Pressure** : 1/3P(1/3 psig) / 1P(1psig) / 3P(3psig) / 5P(5 psig) /

**5. Material** : SUS : / BRASS :

