

SCV30 Series Check Valves

↗ Features

- Pressure rating up to 3,000psig (206bar)@70°F(21°C).
- Temperature rating up to 375°F(191°C) with Standard Viton O-ring.
- Choice of materials : Standard S316 and Brass.
- Cracking pressures include : 1/3, 1, 3, 10, 25, 50psi.
- Heat code traceability.
- Every valve is 100% factory tested for cracking and reseal.



Features

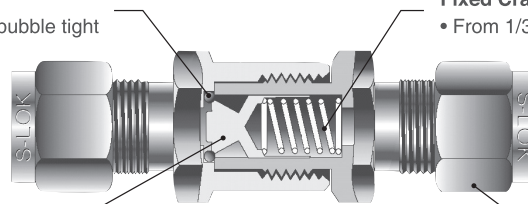
- Ensures Valve closes bubble tight

Fixed Cracking Pressures

- From 1/3psi to 50psi

Back stopped Poppet

- Minimize Spring stress



Various End Connections

- include S-LOK Tube Fittings
- NPT & ISO Male/Female Threads

↗ Technical Data

Valve Series	SCV1, SCV2, SCV3, SCV4	SCV5, SCV6
Max. Working Pressure @70°F(21°C)	SS316 and Brass : 3000psi (206bar)	SS316 : 2000psi (137bar) Brass : 1500psi (103bar)
Operating Temperature Range	Viton : -10°F to 375°F(-23°C to 190°C) NBR : -4°F to 221°F(-20°C to 105°C)	
Nominal Cracking Pressure	1/3, 1, 3, 10, 25, 50psi	

↗ Cracking, Reseal and Back Pressure

Cracking Pressure

The upstream pressure at which a detectable flow is Measured. The Check valve is actuated when the pressure difference between the inlet and the outlet reaches the range of cracking pressure.

Reseal Pressure

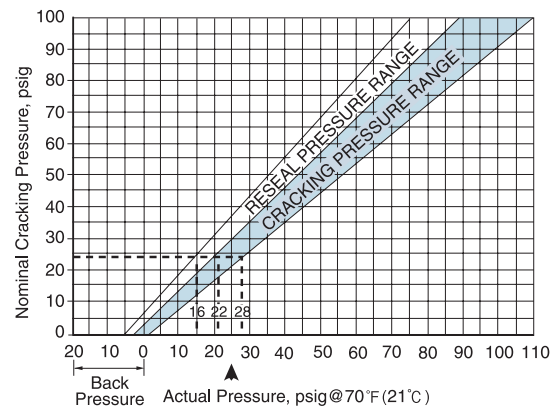
The downstream pressure at which the check valve closes bubble-tight. The Check valves that have higher cracking pressure can be resealed to bubble-tight by the spring force. The reseal pressure is the pressure at the same flow direction, but lower than the cracking pressure.

Back Pressure

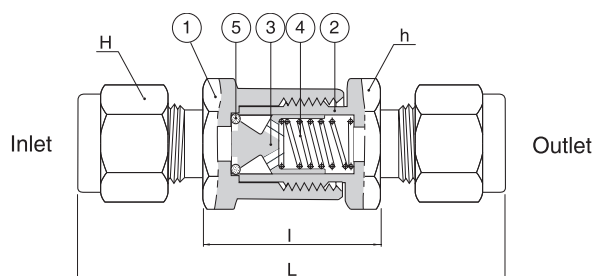
The Check valves that have cracking pressure 5psig(0.34bar) and lower may not be able to return to the bubble-tight seal. This may require back pressure to press the seal to form a bubble-tight contact in addition to the spring force.

Note

- When the check valve is not actuated for a period of time, it may require initially crack at higher than the above cracking pressure ranges.
- Check valves are designed for directional flow control only. Therefore HANSUN check valves should never be used as code Safety relief devices.



Materials of Construction



Item	Description	Materials	
		SS316	Brass
1	Body	SS316 / A479 or A276	Brass
2	Connector		Brass
3	Poppet	SS316 / A479 or A276	Brass
4	Spring	SS302/A313	
5	O-ring	Viton	

* Silicone-based Lubricant for poppet.

Ordering Information and Dimensions

Basic Ordering Number	Orifice mm(inch)	Cv	End Connections Inlet/Outlet	Dimensions(mm)				
				h	H	L	I	
SCV1	S-2T	2.28(0.09)	0.16	1/8" S-LOK	15.88(5/8)	11.11(7/16)	55.60(2.19)	25.00(0.98)
	M-2N	4.8 (0.19)	0.47	1/8" Male NPT		-	44.40(1.75)	-
	F-2N			1/8" Female NPT		-	46.50(1.83)	-
	S-4T			1/4" S-LOK		14.29(9/16)	60.00(2.36)	25.00(0.98)
	S-6M			6mm S-LOK		14.00	-	
	MS-4N4T			1/4" Male NPT 1/4" S-LOK		14.29(9/16)	56.40(2.22)	
M-4N	1/4" Male NPT			-	53.40(2.10)			
SCV2	F-4N	7.1 (0.28)	1.48	1/4" Female NPT	19.05(3/4)	-	56.80(2.24)	-
	S-6T			3/8" S-LOK		17.46(11/16)	65.50(2.58)	27.10(1.07)
	S-10M			10mm S-LOK		19.00	-	
	M-6N			3/8" Male NPT		-	55.50(2.19)	-
SCV3	F-6N	10.0 (0.39)	1.7	3/8" Female NPT	22.22(7/8)	-	63.80(2.51)	-
	S-8T			1/2" S-LOK		22.22(7/8)	80.20(3.16)	36.20(1.43)
	S-12M			12mm S-LOK		22.00	-	
SCV4	M-8N	13.5 (0.53)	2.6	1/2" Male NPT	28.58(1-1/8)	-	74.40(2.93)	-
	F-8N			1/2" Female NPT		-	84.70(3.33)	-
SCV5	S-10T	16.0 (0.63)	5.2	5/8" S-LOK	31.75(1-1/4)	25.40(1)	91.80(3.61)	48.10(1.89)
	S-12T			3/4" S-LOK		28.58(1-1/8)	110.70(4.35)	67.00(2.64)
	M-12N			3/4" Male NPT		-	105.30(4.15)	
SCV6	F-12N	18.0 (0.71)	8.0	3/4" Female NPT	41.28(1-5/8)	-	103.00(4.06)	-
	S-16T			1" S-LOK		38.1(1-1/2)	121.10(4.77)	68.40(2.69)
	M-16N			1" Male NPT		-	116.20(4.57)	
F-16N	1" Female NPT	-	111.40(4.39)	-				

Spring Cracking, Reseal and Back Pressure at @70°F(21°C)

Spring Nominal Cracking Pressure		Cracking Pressure Ranges				Reseal Pressure	
		Min. Pressure		Max. Pressure			
psig	bar	psig	bar	psig	bar	psig	bar
1/3	0.02	0	0	3	0.21	Up to 6	0.41
1	0.07	0	0	4	0.28	Back pressure	0.34
						Up to 5	0.28
3	0.21	2	0.14	7	0.48	Back pressure	0.21
						Up to 4	0.21
10	0.69	7	0.48	15	1.03	3	0.21
25	1.72	20	1.38	30	2.07	17	1.17
50	3.45	40	2.76	60	4.14	35	2.41
75	5.17	60	4.14	90	6.2	53	3.65
100	6.89	80	5.51	120	8.27	70	4.82

Pressure-Temperature Ratings

Ratings based on Viton O-ring in SS316 stainless steel valves and NBR O-ring in brass valves.

Series	SCV1, SCV2 SCV3, SCV4		SCV5, SCV6	
	SS316	Brass	SS316	Brass
Temperature °F(°C)	Working Pressure, psig (bar)			
	SS316	Brass	SS316	Brass
-10(-23) to 100(37)	3000(206)	3000(206)	2000(137)	1500(103)
200(93)	2575(177)	2600(179)	1715(118)	1300(89)
250(121)	2450(168)	2405(165)	1630(112)	1250(86)
300(148)	2325(160)	-	1545(106)	-
375(190)	2185(150)	-	1450(99.9)	-
400(204)				