Check Valves SPCV Series

Features

- Fixed cracking pressure.
- Pressure rating up to 3000 psig @70°F(21°c)
- Temperature rating up to 375°F (191°c) with viton o-ring
- Variety of end connections.
- Each and every valves are tested at the factory.



22

10 20 30 40



5	1

1	Inlet Body ASTM A276 Type 3			
2	O-Ring	Viton		
3	Poppet	ASTM A276 Type 316		
4	Spring	304 Stainless Steel		
5	Outlet Body	ASTM A276 Type 316		

Material

O-Rings

O-ring Material	Temperature Rating°F(℃)	Designator
Buna N	-10 to 250 (-23 to 121)	-N
Ethylene Propylene	-70 to 250 (-57 to 121)	-E
Viton (Fluorocarbon)	-10 to 375 (-23 to 191)	Standard
Kalrez	-15 to 500 (-26 to 260)	-K
Neoprene	-35 to 225 (-37 to 107)	-P

To order, insert the seal material designator into the valve ordering number. ex)SPCV-S8-1P-N

Description

Back Pressure

Back Pressur

-09 bsid 80-

70-60-50-40-30-20-

10-

0

20 10

Nominal cracking pressure

Back pressure may be required to reseal the valves with nominal cracking pressure of 5psi or lower.

100 110

80 90

Example : For a valve with a spring having a rated cracking pressure of 25 psig (1.72 bar), the actual cracking pressure ranges between 22 and 28 psig (1.52 to 1.93 bar). The re-seal pressure range would be 16 to 22 psig (1.10 to 1.52 bar). Check valves having springs with rated crack pressure of 3 psig (0.21 bar) or less may require up to 4 psig (0.28 bar) back pressure to re-seal bubble-tight.

Testing

Every check valve is factory tested for crack and reseal performance.

50 60 70

Actual Pressure, psig @ 70°F (21°C)

Table of Dimensions





Part Number		0.	En LOurseation	Dimensions				
		Cv	End Connection	Α	В	С		Н
SPCV	S2	0.1	1/8 SUPERLOK	57.15	26.6	31.2	15.88	11.11
	F2N	0.47	1/8 Female NPT	50.00	-	-	15.88	-
	S4	0.47	1/4 SUPERLOK	62.16	26.6	31.4	15.88	14.28
	F4N	0.47	1/4 Female NPT	57.10	-	-	19.05	-
	S6	1.5	3/8 SUPERLOK	76.20	37.6	42.4	22.22	17.46
	F6N	1.7	3/8 Female NPT	73.90	-	-	22.22	-
	S8	1.7	1/2 SUPERLOK	86.58	42.9	40.8	25.40	22.22
	F8N	2.6	1/2 Female NPT	90.60	-	-	27.00	-
	S10	2.6	5/8 SUPERLOK	91.68	48.0	42.8	28.50	25.40
	S12	4.5	3/4 SUPERLOK	99.78	56.1	51.1	31.80	28.57
	F12N	4.5	3/4 Female NPT	99.78	-	-	31.80	-
	S16	4.5	1 SUPERLOK	111.22	58.4	48.9	38.10	38.1
	F16N	4.5	1 Female NPT	114.30	-	-	41.27	-

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change

Technical Data

Cracking pressure - the differential pressure between inlet and outlet, at which an initial flow is passing through the valve. Reseal pressure - the differential pressure between outlet and inlet, at which no flow is passing through the valve.

Cracking and Reseal Pressure					
Nominal Cracking Pressure psi (bar)	Cracking Pressure Range psi(bar)	Reseal Pressure psi (bar)	down stream pressure psi (bar)		
1/3 (0.02)	up to 3 (0.21)	up to 6 (0.4) downstream pressure	1/8 in	(00.0)	
1 (0.07)	up to 4 (0.28)	up to 6 (0.4) downstream pressure	1/4 in	1000 (68.9)	
10 (0.69)	7 to 15 (0.5 to 1.1)	3 (0.21) upstream pressure	3/8 in, 1/2 in	200 (13.7)	
25 (1.8)	20 to 30 (1.4 to 2.1)	17 (1.2) upstream pressure	3/4 in, 1 in		

*For cracking pressure of 25psi (1.8bar), downstream pressure is 3000psig (206bar).

Ordering Information



1. Valve Series

2. End Connection

3. Connection Size & Type

4. Cracking Pressure(0.3P: 1/3 psi , 1P: 1 psi , 10P: 10 psi , 25P: 25 psi , 100P: 100 psi) 5. Nil: 316 Stainless Steel, B: Brass