

HIGH PRESSURE CHECK VALVES

SHCV SERIES



Features

- Pressure rating up to 6,000psig(413bar) at 70 °F (20°C)
- Temperature rating up to 375 °F (190 °C) with viton seal standard
- Cracking pressure fixed from 1/3 to 25psig (0.02 to 1.7bar)
- Variety of end connections
- 316 stainless steel body material as standard.
- Each and every valve is tested at the factory.

Technical Data

Series	Orifice (mm)	Working and Back Pressure @70 °F(20 °C)	Flow Coefficient Cv	Nominal Cracking Pressure
SHCV1	4.8	6000psig (413bar)	0.67	1/3, 1, 5, 10, 25 psig (0.02, 0.06, 0.34, 0.68, 1.7 bar)
SHCV2	7.8		1.80	
SHCV3	15.0	5000psig (344bar)	4.70	

Seal Materials

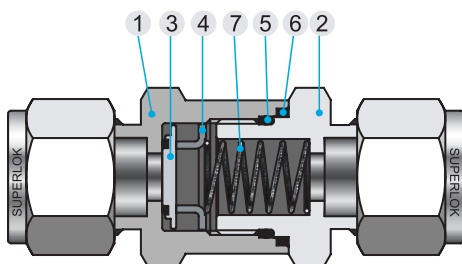
Material	Temperature Rating	Designator
Viton	-10 °F to 375 °F (-23 °C to 190 °C)	Standard
NBR	-10 °F to 250 °F (-23 °C to 121 °C)	N
Ethylene Propylene	-50 °F to 300 °F (-45 °C to 148 °C)	E

To order add the seal material designator to the ordering number.
ex) SHCV1-S-8-1P-N

Cracking Pressure and Reseal Pressure at 70 °F (20 °C)

Nominal Spring Size psig(bar)	Cracking Pressure Range psig(bar)	Min. Reseal Pressure psig(bar)	Designator
1/3 (0.02)	0~3 (0~0.20)	6 (0.41) back pressure	1/3P
1 (0.068)	0~4 (0~0.27)	5 (0.34) back pressure	1P
5 (0.34)	3~9 (0.20~0.62)	2 (0.13) back pressure	5P
10 (0.68)	7~15 (0.48~1.0)	3 (0.20)	10P
25 (1.7)	20~30 (1.3~2.0)	17 (1.1)	25P

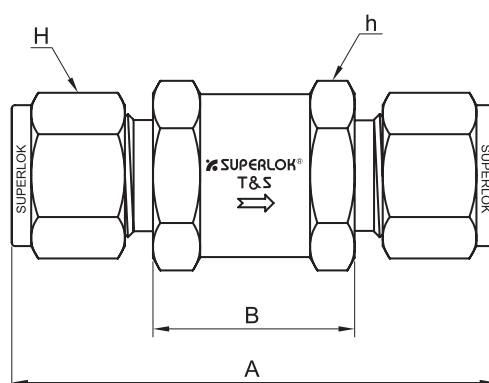
Materials of Construction



No.	Component	Material
1	Inlet Body	SS316
2	Outlet Body	SS316
3	Poppet	Viton-bonded SS316
4	Poppet Stopper	SS316
5	O-Ring	Viton standard
6	Packing	PTFE
7	Spring	SS304

Testing

All valves are factory tested for cracking pressure and reseal performance.


Table of Dimensions

Order Number		Orifice (mm)	Cv Max.	End Connection	Pressure Rating psig (bar)	Dimensions (mm)				
Series	Part No.					A	B	H	h	
SHCV1	S-2	4.8	0.67	1/8" SUPERLOK	6000 (413)	57.7	26.4	11.11(7/16)	17.46 (11/16)	
	S-4			1/4" SUPERLOK		61.7		14.29(9/16)		
	S-6M			6mm SUPERLOK				14		
	F-4N			1/4" FEMALE NPT		54.1	-	-		
	M-2N			1/8" MALE NPT		45.5	26.4			
	M-4N			1/4" MALE NPT		55.1				
SHCV2	S-6	7.8	1.8	3/8" SUPERLOK	6000 (413)	69.9	31.2	17.46(11/16)	25.4(1)	
	S-8			1/2" SUPERLOK		75.2		22.22(7/8)		
	S-8M			8mm SUPERLOK		68.6		16		
	S-10M			10mm SUPERLOK		71.1		19		
	S-12M			12mm SUPERLOK		75.2		22		
	F-6N			3/8" FEMALE NPT	5000 (344)	64.8	-	-	26.9(1-1/16)	
	F-8N			1/2" FEMALE NPT	4600 (316)	77.0				
	M-6N			3/8" MALE NPT	6000 (413)	59.9				31.2
	M-8N			1/2" MALE NPT		69.3				
	SHCV3			S-12	15	4.7				3/4" SUPERLOK
S-16		1" SUPERLOK	4700 (323)	98.6			45.5	38.1(1-1/2)		
S-22M		22mm SUPERLOK	5000 (344)	88.4				32		
S-25M		25mm SUPERLOK		98.6				40		
F-12N		3/4" FEMALE NPT	4300 (296)	82.0			-	-		
F-16N		1" FEMALE NPT	4100 (282)	97.3						
M-12N		3/4" MALE NPT	5000 (344)	83.6					45.5	
M-16N		1" MALE NPT		93.2			45.7			

Dimensions, shown on the above table, are measured based on finger-tight.
All dimensions are for reference only, subject to change.

Ordering information

SHCV2 - **S** - **6** - **1P** - **SS**

1 2 3 4 5

1 : Valve Series 2 : End Connection Type 3 : Connection Size 4 : Cracking Pressure Designator
5 : Body Material Designator [SS : 316 stainless steel(standard), B : Brass]