

# High Pressure Check Valves

## SHCV SERIES

### Features

- Pressure rating up to 6,000psig(413bar) at 100°F (37°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

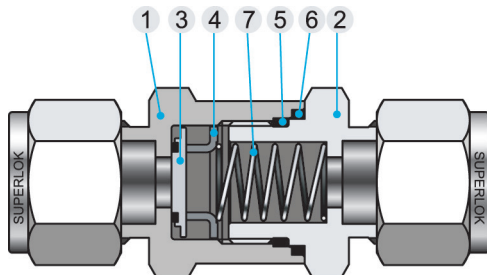
Material	Temperature Rating	Designator
Viton	-10°F to 375°F (-23°C to 190°C)	Standard
NBR	-10°F to 250°F (-23°C to 121°C)	N
Ethylene Propylene	-50°F to 300°F (-45°C to 148°C)	E

To order add the seal material designator to the ordering number.  
ex) SHCV1-S8-1P-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	0.3P
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

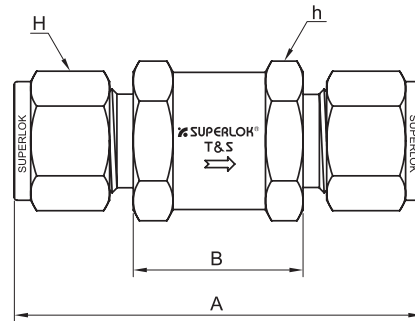
### Materials of Construction



No.	Component	Material
1	Inlet Body	A276-316
2	Outlet Body	A276-316
3	Poppet	Viton-bonded SS316
4	Poppet Stopper	Stainless Steel 316
5	O-Ring	Viton(Standard)
6	Packing	PTFE
7	Spring	Stainless Steel 304

#### Testing

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



### Table of Dimensions

Part Number	Orifice	Cv Max.	End Connection	Pressure Rating psig (bar)	Dimensions mm(in.)				
					A	B	H	h	
SHCV1	S2	4.8	0.67	1/8" SUPERLOK	6000(413)	57.7	26.4	11.1(9/16)	17.5(11/16)
	S4			61.7		14.3(7/16)			
	S6M			61.7		14			
	F4N			54.1		-	-		
	M2N			45.5		26.4	-		
	M4N			55.1			-		
SHCV2	S6	7.8	1.8	3/8" SUPERLOK	6000(413)	69.9	31.2	17.5(11/16)	25.4(1)
	S8			75.2		22.2(7/8)			
	S8M			68.6		16			
	S10M			71.1		19			
	S12M			75.2		22			
	F6N			64.8		-	-		
	F8N			77.0		-	-		
	M6N			59.9		31.2	-		
	M8N			69.3			-		
	SHCV3			S12		15	4.7	3/4" SUPERLOK	
S16		98.6	38.1(1-1/2)						
S22M		88.4	32						
S25M		98.6	40						
F12N		82.0	-	-					
F16N		97.3	-	-					
M12N		83.6	45.5	-					
M16N		93.2		45.7					

• All dimensions in millimeters unless specified as "inch". Dimension are for reference only, subject to change  
 • Dimensions, shown on the above table, are measured based on finger-tight.  
 • ISO Tapered Threads are available upon request.

### Ordering information

**Example :**      **SHCV2**   -   **S 6**   -   **1 P**   -   **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]