

# One-Piece Check Valves

## SOCV SERIES

### Features

- One-piece Body
- Working pressure up to 3000 psig (206bar)
- Temperature rating up to 375°F(190°C) with viton seal standard.
- Cracking pressure fixed from 1/3 to 25psig (0.02 to 1.7 bar)
- NPT and ISO pipe end connections
- 316 stainless steel body as standard
- Each and every valve is tested for cracking pressure and reseal performance at the factory.

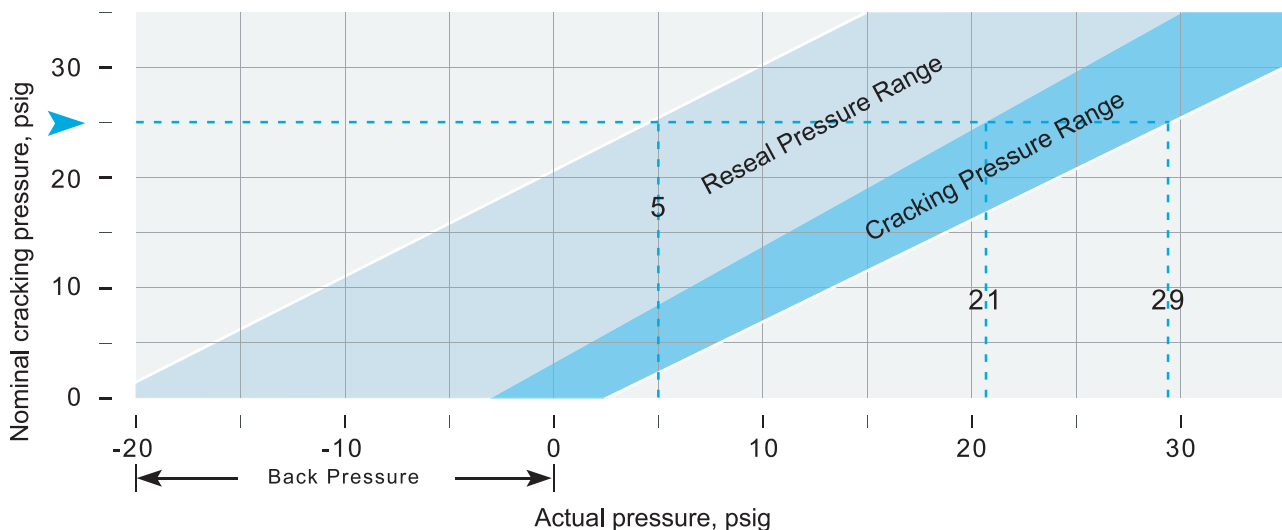


### Technical Data

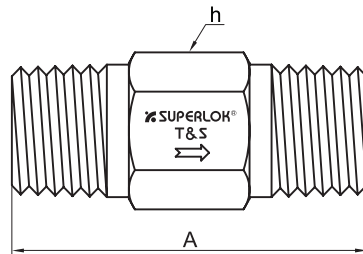
|   |  |
|---|--|
| Nominal Cracking Pressure               | 1/3, 1, 10 and 25psig (0.02, 0.06, 0.68, 1.7bar)   |
| Maximum Working Pressure at 70°F (20°C) | 3000psig (206bar)  |
| Maximum Back Pressure at 70°F (20°C)    | 3000psig (206bar)  |
| Flow Coefficient (Cv)                   | <ul style="list-style-type: none"> <li>• SOCV1 / SOCV2 : 0.35</li> <li>• SOCV3 / SOCV4 : 1.20</li> </ul>   |
| Temperature Rating                      | <ul style="list-style-type: none"> <li>• VITON O-ring : -10°F to 375°F (-23°C to 190°C)</li> <li>• NBR O-ring : -10°F to 250°F (-23°C to 121°C)</li> </ul> |

### Cracking Pressure and Reseal Pressure

SOCV Series Valves with nominal cracking pressure of 20 psig (1.3 bar) or lower may require back pressure to reseal bubble-tight.



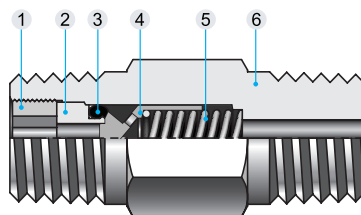
## Table of Dimensions



| Part No. | End Connection |                | A    | h Hex<br>mm (in.) |
|----------|----------------|----------------|------|-------------------|
|          | Inlet          | Outlet         |      |                   |
| SOCV1    | M4N            | 1/4 Male NPT   | 41.2 | 14.3 (9/16)       |
|          | M4R            | 1/4 Male ISO   |      |                   |
| SOCV2    | F4N            | 1/4 Female NPT | 61.2 | 19.1 (3/4)        |
|          | F4R            | 1/4 Female ISO | 64.5 |                   |
|          | M4N-F4N        | 1/4 Male NPT   | 44.5 |                   |
|          | F4N-M4N        | 1/4 Female NPT | 58.2 |                   |
| SOCV3    | M8N            | 1/2 Male NPT   | 57.9 | 22.2 (7/8)        |
| SOCV4    | F8N            | 1/2 Female NPT | 94.2 | 26.9 (1-1/16)     |
|          | M8N-F8N        | 1/2 Male NPT   | 71.9 |                   |

- Dimensions and Drawings are for reference only and are subject to change without prior notice.
- Unless otherwise specified, all dimensions are in millimeters.
- Sizes, pressure classes, and end connections not listed are available upon request.
- Dimensions shown with SUPERLOK nuts finger-tight, where applicable.

## Materials of Construction



| No. | Component         | Valve Body Materials |       |
|-----|-------------------|----------------------|-------|
|     |                   | Stainless Steel      | Brass |
| *1  | Insert Lock Screw | 316SS / A276         | Brass |
| *2  | Insert            | 316SS / A276         | Brass |
| *3  | O-Ring            | VITON                | NBR   |
| *4  | Poppet            | 316SS / A276         | Brass |
| *5  | Spring            | SS304                |       |
| *6  | Body              | 316SS / A276         | Brass |

\* Wetted components

## Ordering information

**Example :**      **SOCV2 - F 4N - 1P - N - B**

1
2
3
4
5
6

### 1. Valve Series

- SOCV1       SOCV3
- SOCV2       SOCV4

### 2. End Connection

- M = Male Thread
- F = Female Thread

### 3. Connection Size

| Thread (inch) | 1/4 | 1/2 | 3/4 |
|---------------|-----|-----|-----|
| Screwed NPT   | 4N  | 8N  | 12N |
| Screwed BSPT  | 4R  | 8R  | 12R |

### 4. Cracking Pressure

- 0.3P = 1/3 psi       10P = 10 psi
- 1P = 1 psi       25P = 25 psi

### 5. Seal Material

- (Blank) = Viton (Standard)
- N = NBR

### 6. Body Material

- (Blank) = 316 Stainless Steel
- B = Brass

※ For special sizes and configurations, please consult BMT (SUPERLOK) sales representative.