

# High Pressure Relief Valves

## SHRV Series 20,000 and 60,000 psi

### Features

#### SHRV20 Series

- Soft seat relief valves.
- Set pressure : 1,500 to 20,000psig (103.4 to 1378.9 bar).
- Working temperature : 32°F (0°C) to 400°F (204°C).
- Liquid or gas service. Provide bubble tight shut-off of gas.
- Pressure settings are made at the factory and valves are tagged accordingly.
- Lock wire secure cap to maintain set pressure.
- Easily exchangeable seat.

#### SHRV60 Series

- Metal seat relief valves.
- Set pressure : 3,000 to 60,000psig (206.8 to 4136.8 bar).
- Working temperature : -110°F (-79°C) to 500°F (260°C).
- Liquid or gas service. Provide shut-off of liquids and gases under pressure to commercial tightness standards.
- Pressure settings are made at the factory and valves are tagged accordingly.
- Lock wired secure cap to maintain set pressure.
- Easily exchangeable seat.



### Technical Data

#### SHRV20 Series

Grade	Inlet		Outlet Connection Type	Orifice Size, In. (mm)	Cv	Pressure Rating, psig (bar) @ 100°F (38 °C)		
	Tube OD	Connection Type				Minimum Set Pressure	Maximum Set Pressure	Maximum Back Pressure
1A	9/16"	MP9	F.NPT 3/4"	0.312 (7.92)	1.2	1500 (103.4)	5000 (344.7)	500 (34.5)
2A				0.250 (6.35)	0.8	5000 (344.7)	10,000 (689.5)	
3A				0.156 (3.96)	0.3	10,000 (689.5)	20,000 (1378.9)	

\* Maximum system operation pressure should not exceed 90% of relief valve set pressure.

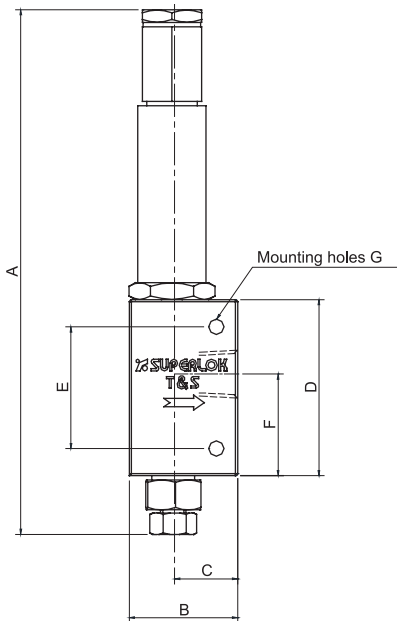
#### SHRV60 Series

Grade	Inlet		Outlet Connection Type	Orifice Size, In. (mm)	Cv	Pressure Rating, psig (bar) @ 100°F (38 °C)		
	Tube OD	Connection Type				Minimum Set Pressure	Maximum Set Pressure	Maximum Back Pressure
1A	9/16"	MP9	F.NPT 3/4"	0.312 (7.92)	1.2	3000 (206.8)	5000 (344.7)	500 (34.5)
2A				0.250 (6.35)	0.8	5000 (344.7)	10,000 (689.5)	
3A				0.188 (4.78)	0.45	10,000 (689.5)	15,000 (1034.2)	
4A				0.156 (3.96)	0.3	15,000 (1034.2)	20,000 (1378.9)	
5A	3/8"	HP6	F.NPT 3/4"	0.125 (3.18)	0.2	20,000 (1378.9)	30,000 (2068.4)	500 (34.5)
6A				0.093 (2.36)	0.1	25,000 (1723.7)	45,000 (3102.6)	
7A				0.078 (1.98)	0.07	30,000 (2068.4)	60,000 (4136.8)	

\* Maximum system operation pressure should not exceed 90% of relief valve set pressure.

- 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.

### Table of Dimensions



Dimensions, in. (mm)						
A	B	C	D	E	F	G
9.46 (240.4)	2 (50.8)	1.19 (30.2)	3.25 (82.6)	2.25 (57.1)	1.94 (49.3)	0.28 (7.1)

• All dimensions are for reference only, subject to change.

### Ordering Information

**Example :**      **SHRV20 - MP9 - F12N - 3A - 625**

1
2
3
4
5

#### 1. Valve Series

- SHBV20 = 20,000 psi
- SHBV60 = 60,000 psi

#### 2. Inlet Tube O.D

- MP9 = Medium Pressure 9/16"
- HP6 = High Pressure 3/8" (SHRV60 only)

#### 3. Outlet Connection Size

- F12N = Female 3/4" NPT

#### 4. Grade (Set Pressure)

1A	1500 ~ 5000 psig for SHRV20 Series
	3000 ~ 5000 psig for SHRV60 Series
2A	5000 ~ 10,000 psig
3A	10,000 ~ 15,000 psig
4A	15,000 ~ 20,000 psig
5A	20,000 ~ 30,000 psig
6A	25,000 ~ 45,000 psig
7A	30,000 ~ 60,000 psig

#### 5. Body Material

- (Blank) = 316 Stainless Steel
- 276 = Hastelloy
- 625 = Inconel 625

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