

Description

The SF2 type is a single spring flanged safety valve suitable for Steam, Hot and Cold water.

Limiting Conditions

| | |
|--------------------------------------|------------------------|
| Body Design Condition | PN16 |
| Maximum Design Temperature | 225 °C |
| Maximum Cold Hydraulic Test Pressure | 30 kgf/cm ² |
| Maximum Allowable Pressure | 15 kgf/cm ² |
| Minimum Allowable Pressure | 3 kgf/cm ² |



Operating Range

3 to 15 kgf/cm² by the order.

Note: 10 kgf/cm² set pressure is always available. The other pressure sets will be available by the order.

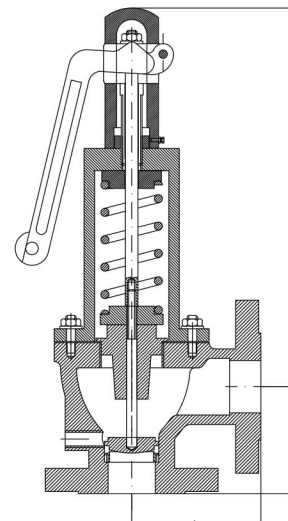
Sizes and Pipe Connections

DN 40 and 50 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and kg

| Connection | | L | G | H | Weight |
|------------|--------|-----|-----|-----|--------|
| Inlet | Outlet | | | | |
| DN 40 | DN 40 | 120 | 100 | 325 | 16 |
| DN 50 | DN 50 | 120 | 100 | 330 | 17 |

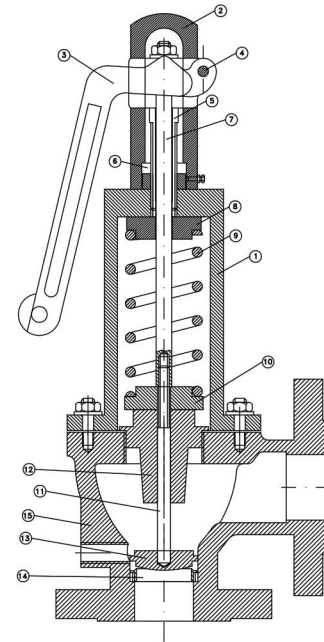
Constructions are a bit different according the sizes.



Single Spring Safety Valves - SF2

Materials

| No. | Part | Material |
|-----|--------------------|----------------|
| 1 | Bonnet | GG 25 |
| 2 | Cap | Gray Cast |
| 3 | Lever | Gray Cast |
| 4 | Pin | C.S. |
| 5 | Adjusting Bolt | Brass |
| 6 | Adjusting Nut | Brass |
| 7 | Spindle | C.S. |
| 8 | Spring Washer Up | Gray Cast |
| 9 | Spring | Cadmium Plated |
| 10 | Spring Washer Down | G.G. 25 |
| 11 | Disc Rod | AISI 304 |
| 12 | Guide | Brass |
| 13 | Disc | AISI 304 |
| 14 | Seat | AISI 304 |
| 15 | Body | GG 25 |



Safety Valves Capacities for Steam (kg/h)

| Size | Set pressure kgf/cm ² | | | | | |
|-------|----------------------------------|------|------|------|------|------|
| | 3 | 4 | 6 | 8 | 10 | 15 |
| DN 40 | 800 | 1000 | 1400 | 1800 | 2200 | 3200 |
| DN 50 | 1100 | 1400 | 2000 | 2600 | 3100 | 4600 |

Safety Valves Capacities for Hot and Cold Water (kg/h 10³)

| Size | Set pressure kgf/cm ² | | | | | |
|-------|----------------------------------|----|----|----|----|----|
| | 3 | 4 | 6 | 8 | 10 | 15 |
| DN 40 | 6 | 7 | 8 | 10 | 12 | 15 |
| DN 50 | 10 | 11 | 14 | 17 | 19 | 24 |

Calculation Formula for Relieving Capacity

Considering thermal input of the vessel

$$W = 0.840 \times 10^{-3} Q \quad W = \text{Relieving capacity (kg/h)} \quad Q = \text{Thermal input (kcal/h)}$$

Installation

The safety valve should always be fitted with the center line of the spring housing vertically above the valve.

Note: The condensed drain must be fitted.

How to Order

Example: SF2 – DN40, Set Pressure 6 kgf/cm² for cold water.