E.S.E. Valve Co. Ltd.

Description

The SF9 type is a double spring flanged safety valve suitable for Steam, Hot and Cold water.

Limiting Conditions

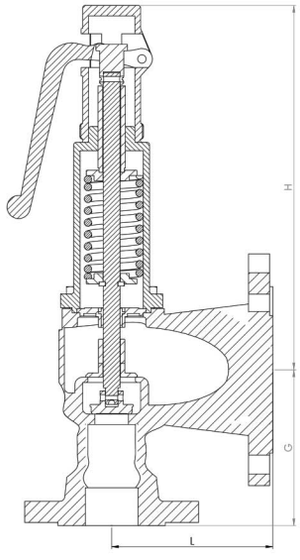
Body Design Condition	PN40
Maximum Design Temperature	300 °C
Maximum Cold Hydraulic Test Pressure	60 kgf/cm²
Maximum Allowable Pressure	25 kgf/cm²
Minimum Allowable Pressure	3 kgf/cm²

Operation Range

3 to 25 kgf/cm² by the order.

Sizes and Pipe Connections

DN 50X100 Flanged (DIN 2502)



Dimensions / Weights (Approximate) mm and Kg

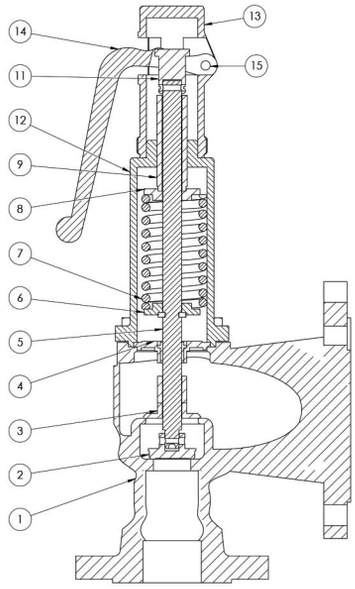
Connection		L	G	H	Weight
Inlet	Outlet				
DN 50	DN 100	155	150	350	31

Constructions are a bit different according the sizes.

Double Spring Safety Valves - SF9

Materials

No.	Part	Material
1	Body	AISI 420
2	Disc	AISI 316
3	Reaction Disc	AISI 316
4	Guide	AISI 304
5	Spindle	AISI 304
6	Spring Washer Down	AISI 304
7	Spring	AISI 320
8	Spring Washer Up	AISI 304
9	Adjusting Bolt	AISI 304
10	Adjusting Nut	AISI 304
11	Lifting Device	AISI 304
12	Bonnet	GGG 40
13	Cap	GGG 40
14	Lever	GGG 40
15	Pin	AISI 304



Safety Valves Capacities for Steam (kg/h)

Size	Set pressure kgf/cm²					
	3	5	10	15	20	25
DN 50X100	1600	1800	3200	4500	5800	7200

Safety Valves Capacities for Hot and Cold Water (kg/h 10^3)

Size	Set pressure kgf/cm²					
	3	5	10	15	20	25
DN 50X100	12	16	24	30	42	50

Calculation Formula for Relieving Capacity

Considering thermal input of the vessel

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

Instalation

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: SF9 – DN50X100, Set Pressure 15 kgf/cm² for steam.