



**KOMOTO®**

**k2 SERIES**

## Pressure Control Relief Valve

This is a special design Pressure Control and Relief valve for Superheated steam Boilers application, For the market of most of the world including America, Canada and many other countries such as Middle Eastern Ones, the applicable code used for boilers and its relating Accessories is ASME section I. Korea Motoyama Inc. (KOMOTO) also use this code for the governing Manufacturing steps.

Set Pressure psi (Mpa)	Maximum Blowdown
<67 (500)	4 psi (30 KPa)
≥67 (500) and ≤250 (1700) and	6% of set pressure
>250 (1700) and <375 (2500)	15 psi (100 KPa)
≥375 (2500)	4% of set pressure

PRV capacity is such that should not allow the pressure to rise more than 6% above the highest pressure at which any valve is set and in no case to more than 6% above the MAWP.

k2 Series	
Series	1" up to 10"
Orifices	0.110 to 26.000 in <sup>2</sup> 71 to 16770 mm <sup>2</sup>
Inlet rating	ANSI Class 900 to 2500
Maximum	1166 °F (630 °C)
Set pressure	5990 psig (413 barg)
Codes	ASME I
Bonnet	Open and closed (heat transfer fluid)

The adjustable nozzle ring and guide ring utilize the reactive and expansive forces of flowing steam to provide full lift. Valve capacity is governed by the nozzle throat area alone. With high capacity valves, positive overpressure protection is achieved with the fewest valves.

KOMOTO safety valves are recommended for use on boilers at design pressure up to 5,800 psig (400 Barg), the valves are designed for temperatures up to 1,166°F (630°C). These valves are available in sizes from 1" up to 10" with ANSI Class 900, 1500 and 2500 inlet flanges and RTJ or BW connection type.

## Design Feature

- **Certified Discharge Capacity**

This series of our product is designed and manufactured in accordance with ASME Sec. I.

Also the discharge capacity is certified by NBBI (National Board OF Boiler and Pressure Vessel Inspections) as well.

- **Seat Design**

Seat design is recessed for pressure and temperature equalization, ensuring a tight seal. Seat tightness up to 93%.

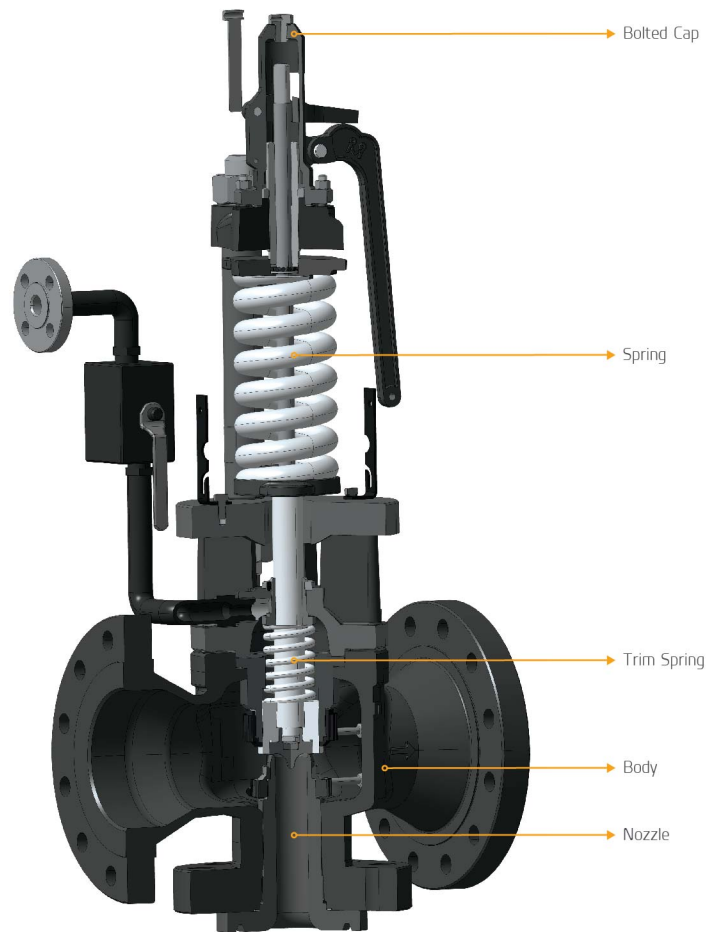
- **Excellent Seat Tightness**

Disc construction of this series is composed of a disc and disc holder.

This kind of special shaped disc permits a uniform pressure distribution not to make any distortion of seat, thus maintaining excellent seat tightness.

In addition, the seat is machined and lapped with a high precision to enhance the seat tightness.

## k2 Series (Spring loaded Control Relief Valve) Part Name & Material



No	Part Name	Material
		630 C (1166 F)
1	Body	A217 C12A
2	Bonnet	A217 C12A
3	Cap	A217 C12A
4	Seat	Inconel 625
5	Guide	SS321
6	Holder	SS321
7	Disc	Inconel 625
8	Upper Adjusting Ring	SS321
9	Lower Adjusting Ring	SS321
10	Stem	SS321
11	Lower Spring Seat	SS321
12	Upper Spring Seat	SS321
13	Adjust Screw	SS321
14	Spring	Inconel X750
15	Lock Nut	SS321
16	Set Screw	SS321
17	Stud Bolt	A193 B7
18	Nut	A194 2H