Class TH Pressure Reducing Valve

The Class TH High Pressure Reducing Valve has been developed to increase the outlet pressures available from the Class T range of valves.

The existing range utilises diaphragm technology to regulate the closing pressure. This technology relies on the flexibility of rolling rubber diaphragms, which limit the maximum outlet pressure due to the strength of the rubber.

Within the Class TH High Pressure Reducing Valve, the diaphragm is replaced with a piston (Y). The outlet pressure is sensed up through port (X) to the underside of the piston. This design allows much higher pressures to be accommodated and is less susceptible to pressure spikes and water hammer.

OPERATION

The Class TH pressure regulator is operated by a spring loaded piston and has a balanced main valve which ensures that the outlet dead-end pressure is unaffected by changes of inlet pressure.

The valve is opened by the load on the adjusting spring and closed by reduced pressure on the underside of the piston. Under normal working conditions, the balance of these two forces gives the degree of valve opening for the required reduced pressure.

FEATURES AND BENEFITS

- Fully balanced piston - allows a constant outlet pressure to be maintained, irrespective of varying inlet pressure.
- Soft disc - for positive shut-off.
- Self actuation/regulation - requires no external power source.
- Simple design - enables the valve to be easily maintained and serviced without removal from the line.
- Minimum variation between 'flow' and 'no-flow' pressure.

TECHNICAL SPECIFICATION

Size	25, 40 and 50 mm (1, 1½ and 2 inch)
Connection	Flanged BS4504 PN16/40.
Material	Bronze
Temperature Range	-20 to 100°C
Maximum Inlet Pressure	40 Barg
Maximum Outlet Pressure*	20 Barg
Minimum Outlet Pressure*	3 Barg

* Setting including rise at dead end (see pages 56 and 74).

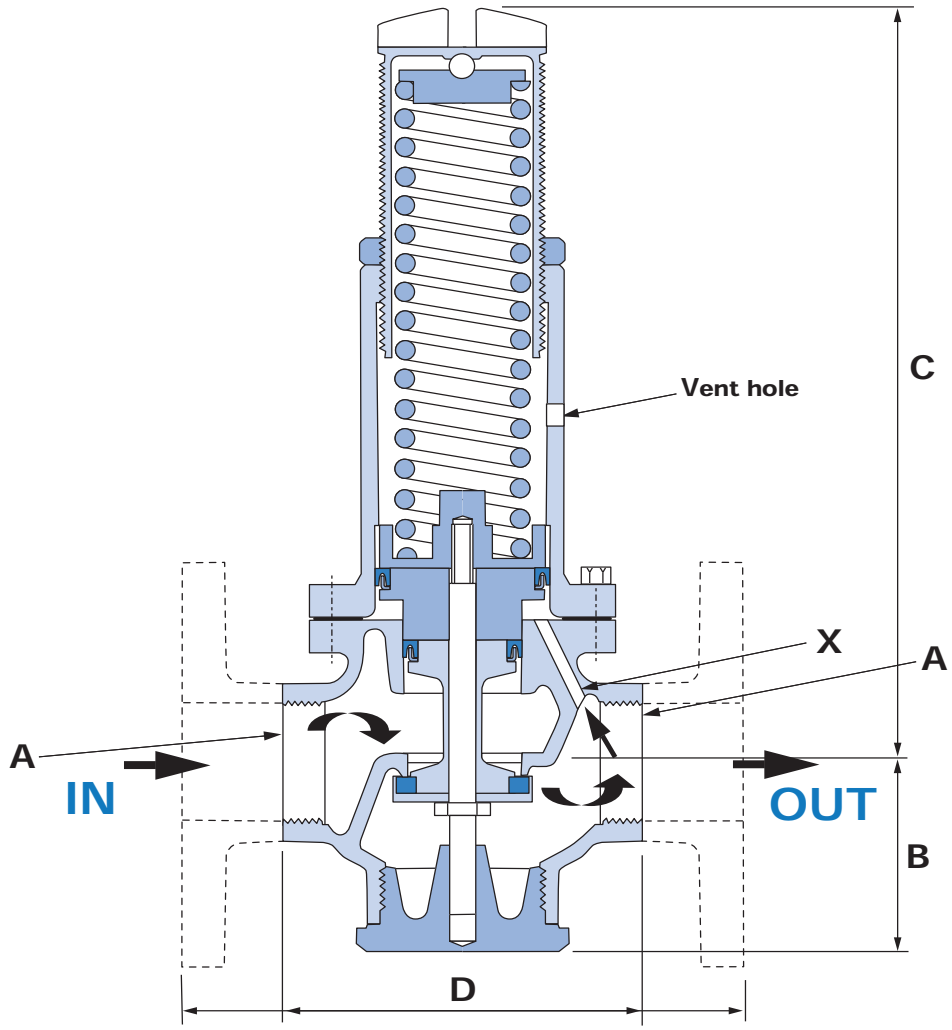
CE MARKING

The Class TH has been certified to the requirements of the PED (Category II). Valve sizes below 32mm (1¼ inch), do not require, and hence, cannot be CE marked.

SPRING SELECTION

Dead End Setting Barg	Spring Number DN25 (1")	DN40 (1.5")	DN50 (2")	Springs Colour Code
3 to 15	C2957-425	C2954-425	C2960-425	White
1 to 7	–	C3197-425	C3196-425	Purple
>7 to 20	C3019-425	C2959-425	C2961-425	Yellow

Dead End Setting = Flowing outlet pressure + Rise to dead end



DIMENSIONS

Screwed

SIZE	DN25	DN40	DN50
A BSPF	1"	1½"	2"
B	56	68	79
C	222	292	324
D	111	133	165
Kg	4	8	11

Flanged

SIZE	DN25	DN40	DN50
A	1"	1½"	2"
B	61	70	83
C	222	292	324
D	160	200	230
Kg	6.5	13	17

All dimensions in mm.