

CAST STEEL RELIEF VALVE FOR LIQUIDS (ENCLOSED SPRING)

**FOR WATER INDUSTRY USE ONLY
WITHIN THE EUROPEAN COMMUNITY**



FIG: 451

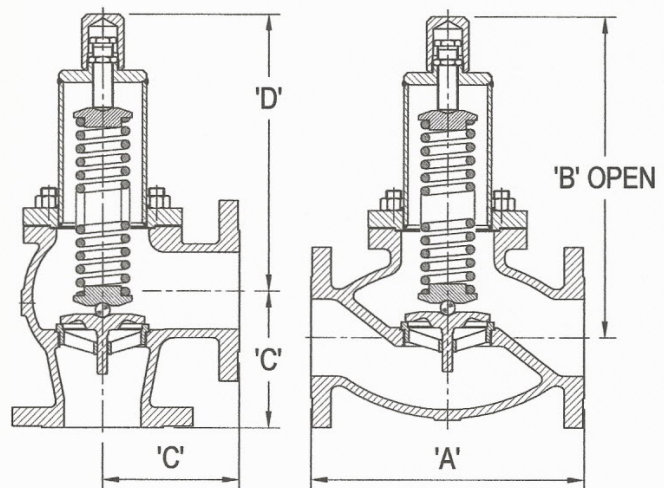


FIG No. 451

FIG No. 450

FLANGED:

BS EN 1092-1 PN10, PN16, PN25, PN40.
BS 10 Tables E, F, H.
ANSI B16.5 Class 150.

CONSTRUCTION:

Designed for installations with permanently flooded discharge, these valves completely contain the excess liquid by means of a totally enclosed and leakproof outlet.

The relief pressure is the static set pressure plus prevailing back pressure which can be up to 100psi, allowing use as a pump suction/discharge bypass valve.

The valve is intended to relieve excess liquid, and must not be used as a safety valve to prevent system failure as referenced in the Pressure Systems Safety Regulations SI 2000 No. 128.

Flanges will be drilled unless otherwise specified on order.

MATERIALS:

Body Carbon steel to ASTM A216 Grade WCB (0.25%C max.)
Cover Carbon steel to BS EN 10028 161 - 430
Disc Stainless steel to ASME SA 487 CA6NM Cl.'A'
Seat Ring Stainless steel to BS EN 10283 1.4408
Spring Spring alloy steel in accordance with BS 1726 chrome vanadium alloy coated.

PRESSURE / TEMPERATURE RATING: (Detailed on Valve I/D plate)

Nominal Size	Max. Set Pressure	Max. Temp.
15mm - 25mm	1000psi 69.0 Bar	80°C
40mm - 80mm	500psi 34.5 Bar	80°C
100mm - 150mm	300psi 20.7 Bar	80°C
200mm	230psi 15.8 Bar	80°C

Minimum set pressure all sizes 5psi (0.35 Bar).

STANDARD SPRING RANGE: Nominal Sizes 15mm to 25mm

Spring No.	PSI	Bar
S1	5 - 13	0.35 - 0.9
S2	10 - 25	0.7 - 1.7
S3	20 - 60	1.4 - 4.1
S4	50 - 120	3.5 - 8.3
S5	110 - 250	7.6 - 17.2
S6	200-500	13.8-34.5
S7	400 - 1000	27.6 - 69.0

STANDARD SPRING RANGE: Nominal Sizes 32mm to 200mm

Spring No.	PSI	Bar
1	5 - 13	0.35 - 0.9
2	10 - 25	0.7 - 1.7
3	20 - 50	1.4 - 3.5
4	40 - 100	2.7 - 6.9
5	90 - 230	6.2 - 15.8
6	200 - 500	13.8 - 34.5

OPTIONAL EXTRAS:

Handwheel and glanded spindle.

TYPE OF APPLICATION:

Thermal and pressure relief

LINE MEDIA:

Water.

Nominal Size (Fig. 450)		15/20	25	32	40	50	65	80	100	125	150	200
A	PN 10 16 25 40	152	152	200	200	254	280	305	356	406	457	533
	BST E, F H, ANSI 150	152	152	184	184	254	280	305	356	406	457	533
B		178	190	264	229	292	315	345	409	559	533	605
Nominal Size (Fig. 451)		15/20	25	32	40	50	65	80	100	125	150	200
C	PN 10 16 25 40	83	83	114	114	127	140	152	178	203	229	260
	BST E, F H, ANSI 150	83	83	102	102	127	140	152	178	203	229	260
D		178	190	264	198	274	274	315	361	516	503	685