Enclosed Discharge Safety Relief Valves

for liquid

Seetru Limited

Type 980 Flanged

Safety valves made from Stainless Steel <
Enclosed discharge valve with flanged connections <
Metal to metal sealing <

Example Applications

- Pressure vessels
- Thermal relief
- Water tanks
- Liquid storage
- Oil
- Chemical process

Specifications

- Inlet connections: DN15 (1/2), DN20 (3/4") or DN25 (1") flange – DIN EN1092 and ANSI flanges are available
- Temperature range:-50°C to +250°C (depending on body o'ring material)
- Pressure range: 0.3 to 33.0 bar (depending on bore size)

Approvals

- Designed in accordance with BS EN ISO-4126-1 &-7
- PED 2014/68/EU (CE)
- PE(S)R UK SI 2016 No. 1105 (UKCA)
- Leak tightness at 90% set pressure to API 527 and in accordance with EN ISO 4126-1

CE UKCA EAC

Materials of Construction

Component	Material	Grade
Inlet & Outlet Flanges	Stainless Steel	1.4401 (316)
Body	Stainless Steel	1.4408 (316)
Internal Parts	Stainless Steel	1.4401 (316)
Spring	Stainless Steel	1.4310 (302)
Disc	Stainless Steel	S20910

Seal Materials

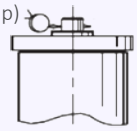
This valve using metal to metal sealing. There is a choice of o'ring used for the sealed cap/lever.

O'ring material – Top cap	Temperature Range
Viton® (FKM)	-20°C to +250°C
Nitrile (NBR)	-30°C to +150°C
Silicone	-50°C to +250°C
EPDM	-40°C to +150°C
PTFE	-50°C to +250°C

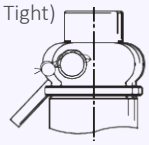
Standard seal materials shown, others are available.

Easing Gear / Lifting Gear / Top Fitting Options

- Sealed Cap (Gas Tight Cap)

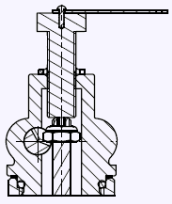


- Sealed Lever (Gas Tight)



- Sealed Lever (With Test Gag)

A test gag is used to prevent the valve from opening at the set pressure during hydraulic testing when commissioning a system. Once tested, the gag screw is removed and replaced with a short blanking plug before the valve is place in service.



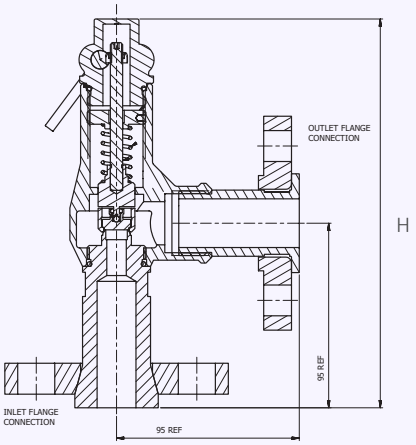
Technical information by bore size

Bore size	10mm (98010)			15mm (98015)
Inlet Size	DN15 (1/2”)	DN20 (3/4”)	DN25 (1”)	DN25 (1”)
Outlet Size	DN25 (1")			DN40 (1 1/2")
Flow Area	78.5mm²			177mm²
H - Height (Sealed Lever version)	200mm			253mm
Derated coefficient discharge of water below 100°C - Kdr	0.48			0.54
Weight (approximate) Kg	3.0			5.3
Set Pressure range - PED (CE) bar	0.3 to 28.0			0.3 to 33.0
Relieving pressure/fully open pressure	Set pressure +10%			
Reseating pressure	Set pressure -20% (or 0.6 bar below 3 bar)			

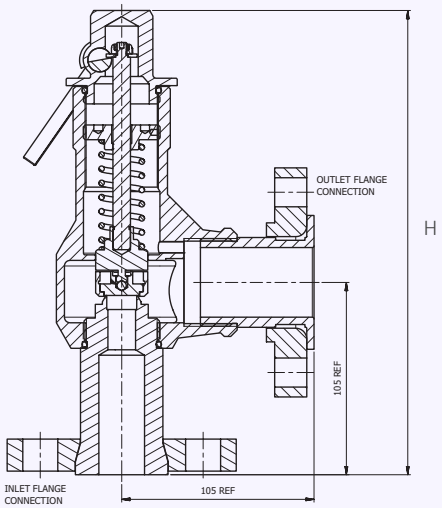
- Leak tightness at 90% set pressure to API 527 and in accordance with EN ISO 4126-1.

Valve Drawing

10mm bore – 94610



15mm bore – 94615



Standard INLET Connection Types

- DIN EN1092 Flange PN16, PN25 or PN40
- ASME Flange CL150, CL300 or CL600

Standard OUTLET Connection Types

- DIN EN1092 Flange PN16, PN25 or PN40
- ASME Flange CL150 or CL300

Valve Selection Guide

Valve type	Select Bore	Inlet Size	Inlet Flange Type	Outlet Flange Type	Easing Gear	O'ring material (for cap)
980	Select bore size from above table	Select inlet size from above table	Select Inlet Flange type	Select Outlet Flange type	Select easing gear/top fitting	See table

EAC marking available upon request

***Please send your selected details to Seetru and we can provide the full ordering code, price and lead-time.**

Example of Valve Selection Process

Example Selection	980	15	DN25	DIN EN1092 Flange PN16	DIN EN1092 Flange PN16	Sealed Lever	Viton	10.5 bar
	Valve Type	Bore = 10mm	Inlet Size	Inlet Flange Type	Outlet Flange Type	Top Fitting	O'ring	Set Pressure

Type 980 Capacity Table - In accordance with EN ISO 4126-1
Water below 100°C at 10% accumulation - litres/min

Set Pressure		Bore Size (D0)				
		10mm	15mm			
bar	psi	Litres/min of Water	Litres/min of Water			
3	43.5	58	147			
4	58	67	169			
5	72.5	74	189			
6	87.00	82	207			
7	101.5	89	224			
8	116	95	240			
9	130.5	100	254			
10	145	106	268			
15	217.5	130	328			
20	290	150	379			
25	362.5	167	424			
28	406	177	449			
30	435		465			
33	478.5		487			

For any intermediate pressures/flows please contact Seetru