# **Enclosed Discharge Safety Relief Valves**

for liquid

#### **Seetru** Limited

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

# Type 980 Threaded

#### **Example Applications**

- Pumping systems and Hydraulic systems
- Thermal relief
- Waste water management
- Oil transfer
- Petrochemical industries
- Fire fighting equipment
- Water cooling and feeding systems
- Chemical process

#### Specifications

- Inlet connections: 1/2" to 2" threaded connections (depending on valve bore size)
  - \*For flanged connections see datasheet 980 Flanged
- Temperature range:-50°C to +250°C (depending on body o'ring material)
- Pressure range: 0.3 to 36.0 bar (depending on valve bore size)

### Materials of Construction

Component	Material	Grade
Inlet	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



## 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

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#### Seal Materials

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

Oʻring 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)





# Technical information by bore size



Bore size	10mm (98010)		15mm (98015)		20mm (98020)			25mm (98025)					
Inlet Size	1/2"	3/4"	1"	1"	1 1/4"	1 1/2"	1"	1 1/4"	1 1/2"	1"	1 1/4"	1 1/2"	2"
Outlet Size	1"		1 1/2"		2"		2"						
Flow Area	78.5mm²			177mm²		314mm²		491mm²					
H - Height (Sealed cap version)	114mm			168mm		144mm		225mm					
Derated coefficient discharge of water below 100°C - Kdr	0.48			0.54		0.503		0.507					
Weight (approximate) Kg	1.0		2.1		3.5		4.2						
Set Pressure range - PED (CE) bar	0.3 to 28.0		0.3 to 33.0			0.6 to 36.0			0.48 to 23.5				
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.

# Standard INLET Connection Types

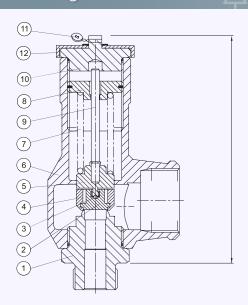


- BSP parallel male thread
- BSP taper male thread
- NPT male thread
- BSP parallel female thread (limited option)

# Standard OUTLET Connection Types



# Valve Drawing



#### Valve Selection Guide



Valve type	Select Bore	Inlet Size Inlet Thread Type		Top Fitting	O'ring material (for cap)	Set pressure
980	Select bore size from above table	Select inlet size from above table	Select Inlet Thread type	Select easing gear/top fitting	See table	Set pressure from available range

EAC marking available upon request

# Example of Valve Selection Process



Example				BSP parallel			17.5 bar
Selection	Valve Type	Bore = 15mm	Inlet Size	Inlet Thread Type	Top Fitting	O'ring	Set Pressure



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

# 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	20mm	25mm				
bar	psi	Litres/min of Water	Litres/min of Water	Litres/min of Water	Litres/min of Water				
3	43.5	58	147	243	383				
4	58	67	169	281	443				
5	72.5	74	189	314	495				
6	87.00	82	207	344	542				
7	101.5	89	224	372	585				
8	116	95	240	397	626				
9	130.5	100	254	422	664				
10	145	106	268	444	700				
15	217.5	130	328	544	857				
20	290	150	379	628	990				
25	362.5	167	424	703					
28	406	177	449	744					
30	435		465	770					
33	478.5		487	807					
35	507.5			831					
36	522			843					

For any intermediate pressures/flows please contact Seetru

