

Enclosed Discharge Safety Relief Valves

Seetru Limited

for compressed air & gas

hydrogen

Type 33110 / 34110 / 34410

Safety valves made with a Brass or Stainless Steel body and Stainless Steel inlets <
Enclosed discharge valve with threaded connections <
Elastomer rubber sealing <

Example Applications

- Air / gas compressors
- Pressure vessels
- Pneumatic systems
- Medical gases/Technical gases
- Hydrogen (with 316 stainless steel inlet)

Specifications

- Inlet connections: 3/8" to 1/2" threaded inlet connections
- Temperature range: -40°C to +200°C (depending on body rubber seal material)
- Pressure range: 27 to 36 & 48.3 to 241.3 bar

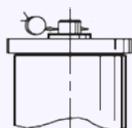
Materials of Construction

Component	Valve Type	Material	Grade
Inlet	33110	Stainless Steel	303
	34110	Stainless Steel	303
	34410	Stainless Steel	316
Body	33110	Brass	CZ122
	34110	Stainless Steel	316
	34410	Stainless Steel	316
Spring	All	Stainless Steel	302

Drawing showing all component materials available upon request.

Top fitting

Sealed Cap (gas tight cap)



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)

CE UK EAC

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)	-15°C to +200°C
Nitrile (NBR)	-40°C to +120°C

Standard seal materials shown, others are available.

THESE VALVES SHOULD ONLY BE TESTED FOR SET PRESSURE ON LIQUID PRIOR TO FINAL INSTALLATION. VALVES THAT ARE TESTED ON AIR & FULLY LIFTED WILL CAUSE DAMAGE TO THE SEALING FACE. [RETURN TO CONTENTS PAGE](#)

Technical information by bore size



Bore size	3.66mm (33110)		3.66mm (34110)		3.66mm (34410)	
Inlet Size	3/8"	1/2"	3/8"	1/2"	3/8"	1/2"
Outlet Size	3/8"	1/2"	3/8"	1/2"	3/8"	1/2"
Flow Area	10.52mm ²		10.52mm ²		10.52mm ²	
H - Height	92mm		92mm		92mm	
TÜV allotted outflow coefficient	0.73		0.73		0.73	
Weight (approximate) Kg	0.8		0.8		0.8	
Set Pressure range - PED (CE) bar	27 to 36 & 48.3 to 241.3 bar		27 to 36 & 48.3 to 241.3 bar		27 to 36 & 48.3 to 241.3 bar	
Relieving pressure/fully open pressure	Set pressure +10%					
Reseating pressure	Set pressure -10%					

Maximum permissible built up back pressure = 10% of set pressure at or below which flow is not reduced.

Standard INLET Connection Types



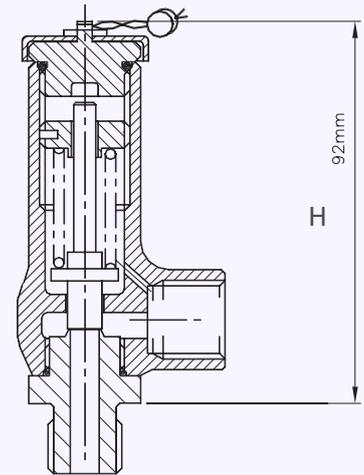
- BSP parallel male thread
- BSP taper male thread
- NPT male thread

Standard OUTLET Connection Types



- BSP parallel female thread
- NPT female thread

Valve Drawing



Valve Selection Guide



Valve type	Inlet Size	Inlet Thread Type	Outlet Thread Type	Seal Material	Set pressure
33110, 34110 or 34410 (see materials)	Select inlet size from above table	Select Inlet Thread type	Select Outlet Thread type	See table	Set pressure from available range

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	33110	1/2"	BSP parallel	BSP parallel	Viton	100 bar
	Valve Type	Inlet Size	Inlet Thread Type	Outlet Thread Type	Seal Material	Set Pressure

Capacity Table - In accordance with TÜV, AIR at 0°C and 1013mbar. Normal m³/hour
 Type 33110, 34110 and 34410: Flow rates at 10% above the set pressure



Set Pressure		Bore Size (D0)				
		3.66mm				
bar	psi	Nm ³ /Hour				
27	391.5	160.7				
30	435	177.9				
33	478.5	195.2				
36	522	212.5				
48	696	281.5				
50	725	293.0				
60	870.00	350.6				
70	1015	408.1				
80	1160	456.7				
90	1305	523.2				
100	1450	580.8				
150	2175	868.5				
200	2900	1156.2				
241	3494.5	1392.1				

For any intermediate pressures/flows please contact Seetru