Enclosed Discharge Safety Relief Valves

for compressed air or gases | *cryogenic & liquefied gas* | *refrigeration*

Seetru Limited

Type 346 / 356

Safety valves with either Bronze or Stainless Steel body <
Enclosed discharge valve with threaded connections <

Example Applications

- Air/Gas systems
- Pressure vessels
- Medical gases
- Technical Gases
- CO2 refrigeration
- Ammonia refrigeration (34610)
- Cryogenic applications
- Liquefied gases

Specifications

- Inlet connections: 3/8” to 3/4”
- Temperature range:-196°C to +50°C
- Pressure range: 0.83 to 30.76 bar

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)
- Materials meet the requirements of BAM for oxygen service.

CE UKCA EAC

Materials of Construction

Component	Material	Grade
Inlet	Stainless Steel	1.4401 (316)
Body	356 Valve = Bronze	C83600
	346 Valve = Stainless Steel	1.4408 (316)
Internal Parts	356 Valve = Brass	BS2874 CZ121
	346 Valve = Stainless Steel	1.4401 (316)
Spring	Stainless Steel	1.4310 (302)

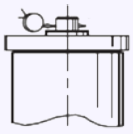
Seal Materials

Seal Material	Temperature Range
PTFE	-196°C to +50°C

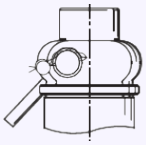
Standard seal materials shown, others are available.

Top Fitting Options

- Standard Option
Sealed Cap (gas tight cap)



- Other options:
Sealed lever (gas tight)

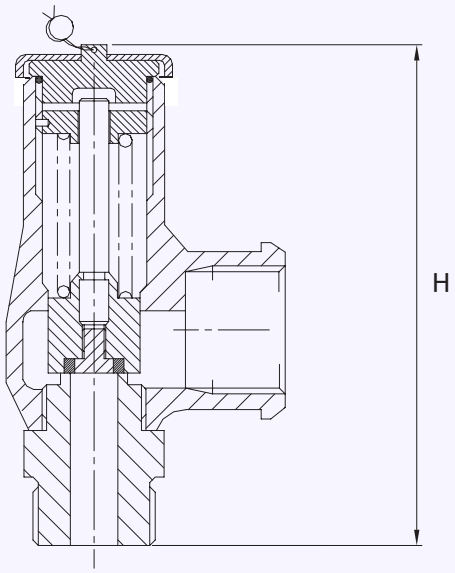


Technical information by bore size

Bore size	9.5mm (34610)			9.5mm (35610)		
Inlet Size	3/8"	1/2"	3/4"	3/8"	1/2"	3/4"
Outlet Size	3/4"			3/4"		
Flow Area	70.9mm²			70.9mm²		
H - Height (Rota-lift cap version)	113mm			99mm		
TÜV alloted outflow coefficient	0.77 above 1.55 bar (contact Seetru for below 1.55 bar)			0.77 above 1.55 bar (contact Seetru for below 1.55 bar)		
Weight (approximate) Kg	0.7 (3.0 to 30.76 bar)			0.7 (3.0 to 30.76 bar)		
Set Pressure range - PED (CE) bar	0.8			0.8		
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. Stable operation on flows down to 50% of valve rated capacity.

Valve drawing



Standard Thread 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 Selection Guide

Body Material	Valve Type	Select Bore	Inlet Size	Inlet Thread Type	Outlet Thread Type	Easing Gear	Seal Material
Stainless Steel	**346**	9.5mm	Select inlet size from above table	Select Inlet thread type	Select Outlet thread type	Sealed cap	PTFE
Bronze	**356**						

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	Bronze	356	9.5	1/2"	NPT	NPT	Sealed Cap	PTFE	23.5 bar
	Body Material	Valve Type	Bore = 9.5mm	Inlet Size	Inlet Thread Type	Outlet Thread Type	Top Fitting	Seal	Set Pressure

Capacity Table - In accordance with TÜV, AIR at 0°C and 1013mbar. Normal m³/hour

Type 346/356: Flow rates at 10% above the set pressure

Set Pressure		Bore Size (D0)				
		9.5mm				
bar	psi	Nm³/Hour				
0.83	12.04	63.8				
1.0	14.50	71.4				
2.0	29.00	119.4				
3.0	43.50	160.3				
4.0	58.00	201.3				
5.0	72.50	242.1				
6.0	87.00	283.0				
7.0	101.50	323.9				
8.0	116.00	364.8				
9.0	130.50	405.7				
10.0	145.00	446.6				
15.0	217.50	651.1				
20.0	290.00	855.5				
25.0	362.50	1060.0				
30.0	435.00	1264.5				
30.76	446.02	1295.6				

For any intermediate pressures/flows please contact Seetru