# **Atmospheric Discharge Safety Relief Valves**

for compressed air or gases

#### **Seetru** Limited

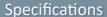
Type 106 / 116

Safety valves made from Brass or Aluminum <

Atmospheric discharge with threaded connections – FKS approved <

### **Example Applications**

- Compressors
- Pressure vessels
- Pneumatic systems
- Particle laden air/gas (FKS)
- Transport vehicles



- Inlet connections: 1" to 2"
- Temperature:-40°C to +200°C (depending on seal material)
- Pressure range: 0.5 to 12.0 bar



Component	Material	Grade	
Inlet	Brass	CW614N	
	Aluminium Alloy	6082	
Body	Brass	CW614N	
	Aluminium Alloy	6082	
Internal parts	Brass	CW614N	
	Aluminium Alloy	6082	
Spring	Stainless Steel	1.4310 (302)	



#### **Approvals**

- FKS approval for particle laden gases
- Designed in accordance with BS EN ISO-4126-1 &-7
- PED 2014/68/EU (CE)
- PE(S)R UK SI 2016 No. 1105 (UKCA)
- ASME BPVC VIII.1 & XIII (UV)
- CRN



#### Seal Materials

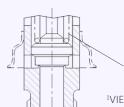
Seal Material	Temperature Range
Viton® (FKM)	-15°C to +200°C
Nitrile (NBR)	-40°C to +120°C

## Easing Gear / Lifting Gear Options

Standard option – Rota-lift cap, twist type

#### Other options:

<sup>1</sup>Downward deflecting shroud available



<sup>1</sup>VIEW SHOWING OPTIONAL SHROUD AVAILABLE



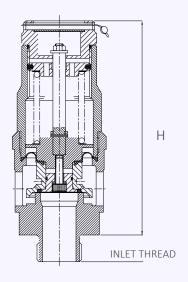
# Technical information by bore size



# Valves with Rota-lift Easing Gear



Bore Size	25mm				
Inlet Size	1"	1 1/4"	1 1/2"	2"	
Flow Area	491mm²				
H - Height (Rota-lift cap version)		172	mm		
TÜV allotted outflow coefficient <sup>1</sup>	0.79 (above 0.8 bar) 0.70 (0.8 bar and below)				
NB Certified rated slope (ASME)	11.3 scfm/psia				
Weight (approximate) Kg	2.8 (for brass valve)				
Set Pressure range - PED (CE) bar	0.5-12.0 bar				
Set Pressure range - ASME (UV) psi	7.25-174.0 psi				
Relieving pressure/fully open pressure	Set pressure +10%				
Reseating pressure	Set pressure-10%				



# Standard Thread Connection Types



- BSP Parallel male thread
- BSP Taper male thread
- NPT male thread

### Valve Selection Guide



	Approval Required	Valve type	Bore Size	Inlet Size	Thread Type	Easing Gear	Downward Deflecting Shroud Required?	Seal Material
PED (CE)	DED (CE)	106 (Brass valve)	25=25mm	Select inlet size from above table	Select thread type	Select easing gear (rota-lift is the standard option)	Yes or No	Viton® (FKM)
	PED (CE)	116 (Aluminium valve)						
	PED (CE), ASME	101 (Brass valve)						Nitrail - (ALDD)
	(UV) & CRN	111 (Aluminium valve)						Nitrile (NBR)

EAC marking available upon request

## Example of Valve Selection Process

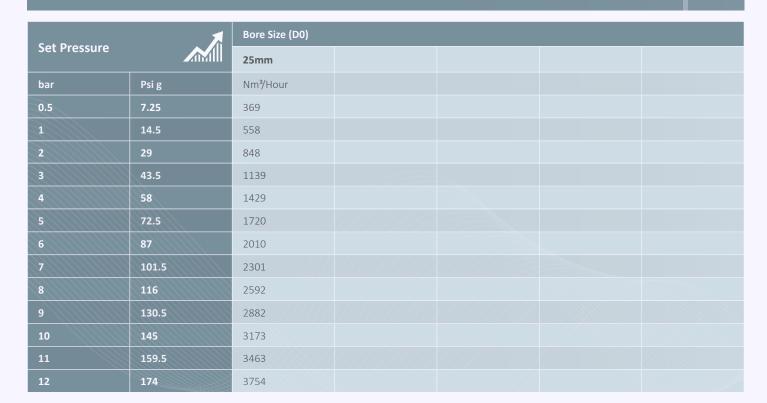


Example Selection	CE	106	25	1"	BSP Taper	Rota-lift	Shroud?	Viton	3.1 bar
	Approval	Valve Type	Bore = 25mm	Inlet Size	Thread Type	Easing Gear	No	Seal	Set Pressure



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

# Capacity Table - In accordance with TÜV, AIR at 0°C and 1013mbar. Normal m³/hour Type 106/116: Flow rates at 10% above the set pressure



Capacity Table - In accordance with ASME BPVC.XIII, AIR at 60°F and 14.7 psia/scfm. SCFM Type 106/116: Flow rates at 10% above the set pressure.

Cal Bassass		Bore Size (D0)		
Set Pressure		25mm		
psi	bar	SCFM		
7.25	0.50	282		
10	2.50	313		
20	1.38	426		
30	2.80	539		
40	2.76	663		
50	3.45	786		
60	4.14	912		
70	4.83	1036		
80	5.52	1161		
90	6.21	1285		
100	6.90	1409		
150	10.34	2031		
174	12.00	2329		

