Atmospheric Discharge Safety Relief Valves

Seetru Limited

for compressed air or gases

Type 31180

Safety valves made from Brass < Atmospheric discharge with threaded connections <

Example Applications



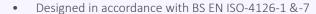
- Compressors
- Pressure vessels
- Pneumatic systems
- High pressure systems

Specifications

- Inlet connections: ¼" or 3/8"
- Temperature:-40°C to +200°C (depending on seal material)
- Pressure range: 20.6 to 134.5 bar



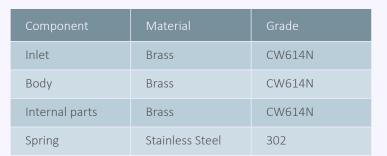
Approvals



- PED 2014/68/EU (CE)
- PE(S)R UK SI 2016 No. 1105 (UKCA)
- EAC

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Materials of Construction



Seal Materials

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

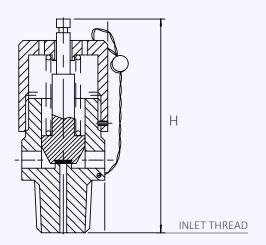
Easing Gear / Lifting Gear Options

Standard option – Spindle Lift



Technical information by bore size

| Bore size | 3.2mm | | | |
|--|-------------------|------|--|--|
| Inlet Size | 1/4" | 3/8" | | |
| Flow Area | 8.0mm² | | | |
| H - Height | 42mm | | | |
| TÜV alloted outflow coefficient | 0.54 | | | |
| Weight (approximate) Kg | 0.4 | | | |
| Set Pressure range - PED (CE) bar | 20.6 to 134.5 bar | | | |
| Relieving pressure/fully open pressure | Set pressure +10% | | | |
| Reseating pressure | Set pressure-15% | | | |



Standard Thread Connection Types

- BSP Parallel male thread (1/4" or 3/8")
- BSP Taper male thread (1/4")
- NPT male thread (1/4")

Valve Selection Guide



| Approval Required | Valve type | Inlet Size | Thread Type | Easing Gear | Seal Material |
|-------------------|------------|------------------------------------|--------------------|-------------------|---------------|
| PED (CE) | 31180 | Select inlet size from above table | Select thread type | Spindle lift only | Viton® (FKM) |
| PED (CE) | | | | | Nitrile (NBR) |

EAC marking available upon request

Example of Valve Selection Process



| Example | CE | 31180 | 1/4" | BSP Taper | Spindle Lift | | 100 bar |
|-----------|----------|------------|------------|-------------|--------------|------|--------------|
| Selection | Approval | Valve Type | Inlet Size | Thread Type | Easing Gear | Seal | Set Pressure |



^{*}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 31180: Flow rates at 10% above the set pressure



| | | Bore Size (D0) | | | | |
|--------------|--------|----------------|--|--|--|--|
| Set Pressure | | 3.2mm | | | | |
| bar | psi | Nm³/Hour | | | | |
| 20.6 | 298.7 | 70.0 | | | | |
| 30.0 | 435.0 | 100.6 | | | | |
| 40.0 | 580.0 | 133.2 | | | | |
| 50.0 | 725.0 | 165.7 | | | | |
| 60.0 | 870.0 | 198.2 | | | | |
| 70.0 | 1015.0 | 230.8 | | | | |
| 80.0 | 1160.0 | 263.3 | | | | |
| 100.0 | 1450.0 | 328.4 | | | | |
| 110.0 | 1595.0 | 360.9 | | | | |
| 120.0 | 1740.0 | 393.5 | | | | |
| 130.0 | 1885.0 | 426.0 | | | | |
| 134.5 | 1950.3 | 440.7 | | | | |
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