

for compressed air or gases

Type 86810

Safety valves with brass body and plastic outlet <
Enclosed discharge valve with threaded connections <

Example Applications

- Air / gas compressors (non-flammable)
- Pressure vessels
- Pneumatic systems
- Medical gases (non-flammable)
- Technical gases (non-flammable)

Specifications

- Inlet connections: 1/2" to 3/4"
- Temperature: -15°C to +200°C
- Available Set Pressures: 7.0, 8.0, 9.3, 10.0, 10.5, 11.0, 11.5, 14.5 & 16.0 bar

Materials of Construction

Component	Material	Grade
Inlet Body	Brass	CZ121
Outlet Body	PPS Plastic	40% glass filled
Internal parts	Brass	CZ121
Spring	Stainless Steel	1.4310 (302)



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)
- EAC



Seal Materials

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

Standard seal materials shown, others are available.

Easing Gear / Lifting Gear Options

- **Standard option** – Rota-lift cap, twist type (not gas tight)

Technical information by bore size

Bore size	10.0mm (86810)	
Inlet Size	1/2"	3/4"
Outlet Size	3/4"	
Flow Area	78.5mm ²	
H - Height (Rota-lift cap version)	84mm	
TÜV allotted outflow coefficient	0.78	
Weight (approximate) Kg	0.5	
Available Set Pressures, bar	7.0, 8.0, 9.3, 10.0, 10.5, 11.0, 11.5, 14.5 & 16.0	
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.

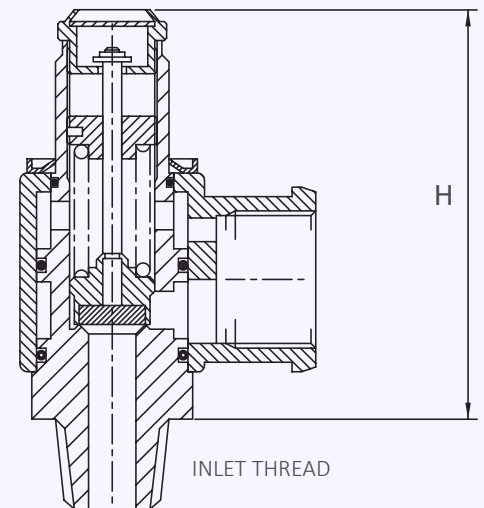
Standard Thread Connection Types

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

Standard OUTLET Thread Connection Types

- BSP Parallel female thread

Valves Drawing



Valve Selection Guide

Approval Required	Valve type	Inlet Size	Inlet Thread Type	Outlet Thread Type	Easing Gear	Seal Material
PED (CE)	86810	Select inlet size from above table	Select Inlet thread type	Select Outlet thread type	Select easing gear/top fitting	Viton® (FKM)
						Other

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	CE/PED	86810	1/2"	BSP Taper	BSP parallel	Rota-lift	Viton	10.5 bar
	Approval	Valve Type	Inlet Size	Inlet Thread Type	Outlet Thread Type	Easing Gear	Seal	Set Pressure

Capacity Table - In accordance with TÜV, AIR at 0°C and 1013mbar. Normal m³/hour
 Type 86810: Flow rates at 10% above the set pressure



Set Pressure 		Bore Size (D0)				
		10	15	20	25	30
bar	psi	Nm ³ /Hour				
7	101.5	363				
8	116	409				
9.3	134.85	468				
10	145	500				
10.5	152.25	524				
11	159.5	547				
11.5	166.75	570				
14.5	210.25	707				
16	232	776				