

Safety Valves

Type 06810, Type 06815 - O-ring



Safety Valves, angle type, stainless steel, type tested, TÜV-SV.1130. S/G/L

Standard safety valve
with O-ring valve seal, "cleaned and degreased"
closed bonnet, gastight cap or lifting device
Inlet: male thread type G (BSPP) acc. to ISO 228/1
Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06810.X.000002N (Pmax 15.99 bar)

Part No. 06815.X.000002N (Pmax 15.99 bar)

with NBR O-ring valve seal

Part No. 06810.X.000002F (Pmin 16.00 bar, Pmax 180.0 bar)

Part No. 06815.X.000002F (Pmin 16.00 bar, Pmax 180.0 bar)

with FKM O-ring valve seal

Available options - on request only:

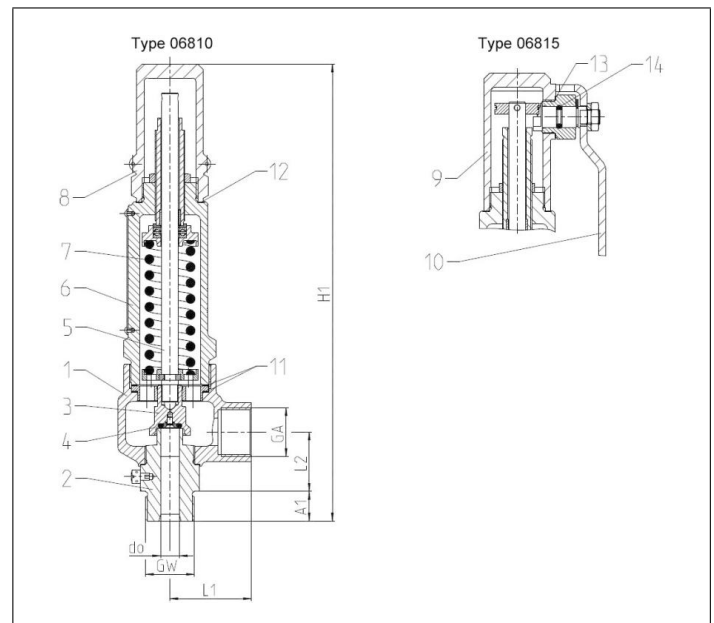
· Flange-, NPT- or Tri-Clamp connection for in- and outlet



Applications:

Provided as safety device for protection against excessive pressure in gas cylinders and pressure vessels. Approved for gases and liquids. Working temperature: -10°C / 14°F (263K) up to 70°C / 158°F (343K), suitable for horizontal installation from 20 bar.

| Materials | DIN EN | ASME/ASTM |
|--------------------|-------------------|--------------------|
| 1 Outlet body | 1.4408 | A 351 CF8M |
| 2 Inlet body | 1.4571 | A 276 Grade 316Ti |
| 3 Disc | 1.4571 | A 276 Grade 316Ti |
| 4 O-ring | NBR or FKM | |
| 5 Stem | 1.4404 | A 276 Grade 316L |
| 6 Bonnet | 1.4408 | A 351 CF8M |
| 7 Spring | 1.4571 | A 313 Grade 316Ti |
| 8 Cap | 1.4408 | A 351 CF8M |
| 9 Lifting cap | 1.4408 | A 351 CF8M |
| 10 Lever | 1.4301 | A 276 Grade 304 |
| Spare Parts | | |
| 3 Complete disc | 1.4571+NBR or FKM | 316Ti + NBR or FKM |
| 4 O-ring + screw | NBR or FKM | |
| 11 Gasket | 1.4404 Graphite | 316L Graphite |
| 12 Gasket | PTFE | |
| 13 Gasket | PTFE | |
| 14 O-ring | FPM (VITON) | |



| Type 06810, 06815 | Technical Data | | | |
|---------------------|----------------------|-------|-------|-------|
| D ₀ | [mm] | 10 | | |
| Inlet | GW | 1/2 | 1/2 | 3/4 |
| Outlet | GW | 1/2 | 3/4 | 3/4 |
| Dimension code | .X. | 1022 | 1023 | 1033 |
| Height | H1 | 245.0 | 245.0 | 245.0 |
| Length | L1 | 44.0 | 44.0 | 44.0 |
| Length | L2 | 32.0 | 32.0 | 32.0 |
| Length | A1 | 14.0 | 14.0 | 16.0 |
| Weight 06810 | ca. kg | 1.8 | 1.8 | 1.8 |
| Weight 06815 | ca. kg | 2.0 | 2.0 | 2.0 |
| Coeff. of discharge | α _w S/G/L | 0.50 | 0.50 | 0.50 |
| Min. set pressure | bar-g | 3.0 | 3.0 | 3.0 |
| Max. set pressure | bar-g | 180.0 | 180.0 | 180.0 |

Dimensions in mm.

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Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

A = Saturated steam in kg/h

B = Air in m³/h at 0°C and 1013,25 mbar

C = Water in kg/h at 20°C

The capacity indicated below is for a fully opened valve.

d_0 - orifice

A_0 - flow area

| Set pressure in bar (g) | GW | 1/2, 3/4 & 1 | | |
|-------------------------------|--------------------------|--------------|-------|---|
| | d_0 (mm) | 10.0 | | |
| | A_0 (mm ²) | 78.5 | | |
| | Medium | A | B | C |
| 3.0 | - | 116 | 3632 | |
| 4.0 | - | 145 | 4194 | |
| 5.0 | - | 175 | 4689 | |
| 6.0 | - | 205 | 5137 | |
| 7.0 | - | 234 | 5548 | |
| 8.0 | - | 264 | 5931 | |
| 9.0 | - | 294 | 6291 | |
| 10.0 | - | 324 | 6631 | |
| 12.0 | - | 384 | 7264 | |
| 14.0 | - | 443 | 7846 | |
| 16.0 | - | 503 | 8388 | |
| 18.0 | - | 562 | 8897 | |
| 20.0 | - | 627 | 9378 | |
| 25.0 | - | 777 | 10485 | |
| 30.0 | - | 936 | 11486 | |
| 35.0 | - | 1087 | 12406 | |
| 40.0 | - | 1249 | 13262 | |
| 45.0 | - | 1402 | 14067 | |
| 50.0 | - | 1568 | 14828 | |
| 60.0 | - | 1890 | 16243 | |
| 70.0 | - | 2216 | 17545 | |
| 80.0 | - | 2546 | 18756 | |
| 90.0 | - | 2878 | 19894 | |
| 100.0 | - | 3212 | 20970 | |
| 110.0 | - | 3531 | 21993 | |
| 120.0 | - | 3877 | 22971 | |
| 130.0 | - | 4197 | 23909 | |
| 140.0 | - | 4549 | 24812 | |
| 150.0 | - | 4872 | 25683 | |
| 160.0 | - | 5213 | 26525 | |
| 170.0 | - | 5537 | 27341 | |
| 180.0 | - | 5861 | 28134 | |