

Safety Valves

Type 06316

HEROSE



Safety Valves, angle type, stainless steel, type tested, TÜV-SV.980. S/G/L

Standard safety valve

metal to metal seated, closed bonnet

Inlet: male thread type G (BSPP) acc. to ISO 228/1

Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06316.X.N000 (0.1 - 68.0 bar)

Part No. 06316.X.L000 (68.0 - 330.0 bar)

with lifting device - head A

Part No. 06316.X.N020 (0.1 - 68.0 bar)

Part No. 06316.X.L020 (68.0 - 330.0 bar)

with gastight cap - head C

Available options - on request only:

· Threads NPT acc. to ANSI B 1.20.1

· Disc with soft sealing (NBR, CR, EPDM, FKM, FFKM, PCTFE, PTFE-FDA)



Applications:

Provided as safety device for protection against excessive pressure in pressure vessels. Approved for gases, vapours and fluids.

Working temperature (metal to metal seated, pay attention to AD-Merkblatt W10: Temperature-Pressure-Overview): -270°C / -454°F (6K) up to +280°C / +536°F (553K)

Working temperatures for discs with soft seals on request

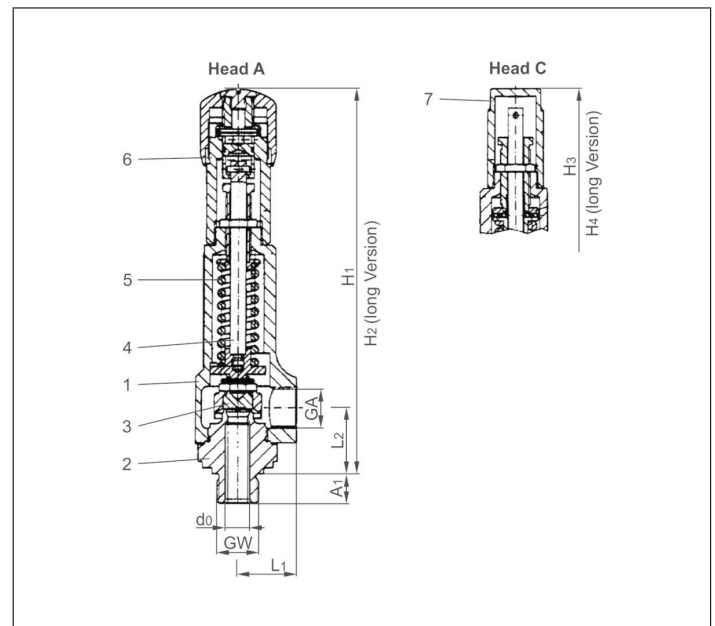
| Materials | DIN EN | ASME/ASTM |
|------------------|--------|------------------|
| 1 Outlet body | 1.4404 | A 276 Grade 316L |
| 2 Inlet body | 1.4404 | A 276 Grade 316L |
| 3 Disc | 1.4404 | A 276 Grade 316L |
| 4 Stem | 1.4404 | A 276 Grade 316L |
| 5 Spring | 1.4310 | A 313 Grade 301 |
| 6 Lifting device | 1.4404 | A 276 Grade 316L |
| 7 Cap | 1.4404 | A 276 Grade 316L |

Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



Marking acc. to ASME Code Section VIII.



| Technical data | Type 06316.X.N000/N020 | | | | Type 06316.X.L000/L020 | | | |
|------------------------------------|------------------------|--------|--------|--|------------------------|---------|--------|--------|
| | GW | 1/2 | 3/4 | | 1/2 | 3/4 | 1/2 | 3/4 |
| Nominal size | GW | 1/2 | 3/4 | | 1/2 | 3/4 | 1/2 | 3/4 |
| Orifice | d ₀ | 10 | 10 | | 6 | 6 | 10 | 10 |
| Dimension code | .X. | 1004 | 1006 | | 0604 | 0606 | 1004 | 1006 |
| Set pressure range | bar | 0.1-68 | 0.1-68 | | 180-330 | 180-330 | 68-180 | 68-180 |
| Outlet | GA | 1/2 | 1/2 | | 1/2 | 1/2 | 1/2 | 1/2 |
| Height | H ₁ | 195 | 195 | | - | - | - | - |
| Height | H ₂ | - | - | | 201 | 201 | 216 | 216 |
| Height | H ₃ | 180 | 180 | | - | - | - | - |
| Height | H ₄ | - | - | | 191 | 191 | 191 | 191 |
| Length | L ₁ | 30 | 30 | | 30 | 30 | 30 | 30 |
| Length | L ₂ | 33 | 33 | | 33 | 33 | 33 | 33 |
| Length | A ₁ | 15 | 16 | | 15 | 16 | 15 | 16 |
| Weight | ca. kg | 1.2 | 1.2 | | 1.4 | 1.4 | 1.4 | 1.4 |
| Coeff. of discharge gases, vapours | α _w | 0.50 | 0.50 | | 0.72 | 0.72 | 0.50 | 0.50 |
| Coeff. of discharge fluids | α _w | 0.35 | 0.35 | | - | - | 0.35 | 0.35 |

Dimensions in mm.

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Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

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 | | | |
|-------------------------|--------------------------|----------|-----------|----------|----------|--|
| | d_0 (mm) | 6 | 10 | | | |
| | A_0 (mm ²) | 28.3 | 78.5 | | | |
| | Medium | B | A | B | C | |
| 0.1 | - | 12 | 14 | 630 | | |
| 0.5 | - | 29 | 34 | 1080 | | |
| 1.0 | - | 43 | 51 | 1470 | | |
| 2.0 | - | 70 | 84 | 2070 | | |
| 3.0 | - | 94 | 115 | 2540 | | |
| 4.0 | - | 118 | 145 | 2930 | | |
| 5.0 | - | 141 | 174 | 3280 | | |
| 6.0 | - | 164 | 204 | 3590 | | |
| 8.0 | - | 209 | 262 | 4150 | | |
| 10.0 | - | 255 | 321 | 4640 | | |
| 15.0 | - | 369 | 468 | 5680 | | |
| 20.0 | - | 483 | 615 | 6560 | | |
| 25.0 | - | 596 | 762 | 7330 | | |
| 30.0 | - | 712 | 909 | 8030 | | |
| 40.0 | - | 943 | 1204 | 9270 | | |
| 50.0 | - | 1181 | 1498 | 10400 | | |
| 60.0 | - | 1421 | 1792 | 11400 | | |
| 70.0 | - | 1670 | 2086 | 12300 | | |
| 80.0 | - | 1921 | 2380 | 13100 | | |
| 100.0 | - | 2451 | 2969 | 14700 | | |
| 150.0 | - | 4044 | 4439 | 18000 | | |
| 180.0 | 2759 | - | 5322 | 19700 | | |
| 200.0 | 3064 | - | - | - | | |
| 250.0 | 3826 | - | - | - | | |
| 300.0 | 4589 | - | - | - | | |
| 330.0 | 5046 | - | - | - | | |