

Safety Valves

Type 50051.0011



Safety Valves, angle type, brass, type tested TÜV-SV.1009. S/G

Standard safety valve
 with EPDM valve seal for vapours and gases
 open bonnet, with lifting device
 Outlet: female thread M15x1 with installed hose nozzle
 Inlet: male thread type G (BSPP) acc. to ISO 228/1

Part No. 50051.0011.0000

Available options - on request only:

- hose nozzle acc. to customer specification
- body material CW509L

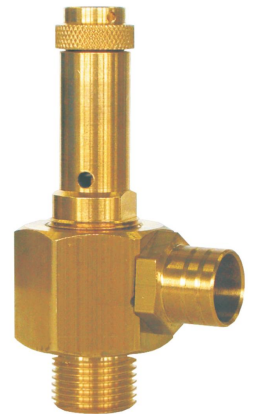
Applications:

Provided as safety device for protection against excessive pressure in pressure vessels, especially for coffee machines.

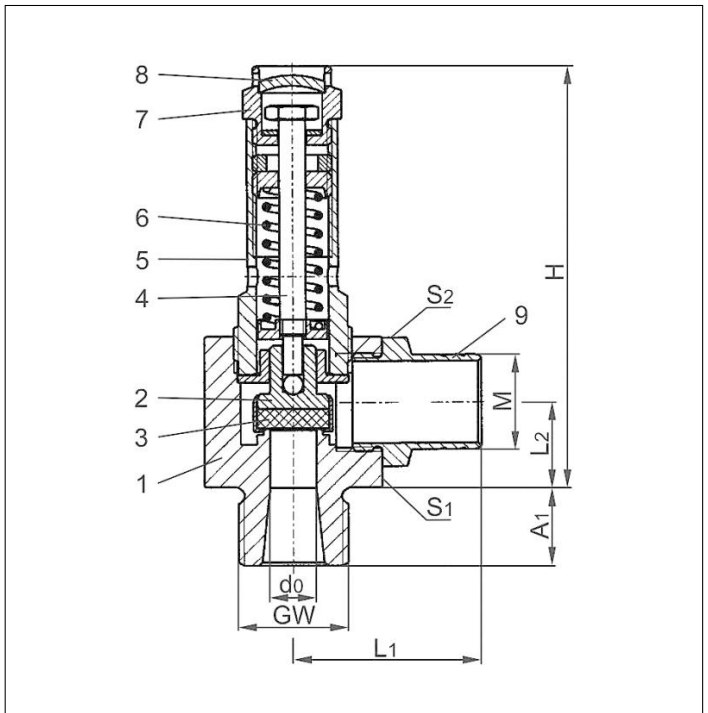
Approved for non-toxic gases and vapours.

Working temperature: -10°C / +14°F (263K) up to +160°C / +320°F (433K)

For saturated steam use only up to 4 bar and +150°C / +302°F (423K)



| Materials | DIN EN | ASME/ASTM |
|------------------|--------|-------------------|
| 1 Body | CW614N | B 249 UNS C38500 |
| 2 Disc | CW614N | B 249 UNS C38500 |
| 3 Valve seal | EPDM | |
| 4 Stem | CW614N | B 249 UNS C38500 |
| 5 Bonnet | CW614N | B 249 UNS C38500 |
| 6 Spring | 1.4571 | A 313 Grade 316Ti |
| 7 Lifting device | CW614N | B 249 UNS C38500 |
| 8 Closing cap | CC507L | B 36 UNS C26800 |
| 9 Hose nozzle | CW614N | B 249 UNS C38500 |



| Type 50051.0011 | Technical data | |
|----------------------------------|----------------|------------|
| Nominal size | GW | 3/8 |
| Orifice | d ₀ | 7 |
| Set pressure range | bar | 1.5-5.0 |
| Hose nozzle-Ø | M | 14.5 |
| Height | H | 64 |
| Length | L ₁ | 28.5 |
| Length | L ₂ | 13 |
| Length | A ₁ | 12 |
| Wrench size across flats | S ₁ | 27 |
| Wrench size across flats | S ₂ | 17 |
| Weight | ca. kg | 0.16 |
| Coeff. of discharge from 2.0 bar | α _w | 0.42 |

Dimensions in mm.

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Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2

Medium:

Air in m³/h at 0°C and 1013.25 mbar

Saturated steam in kg/h

The capacity indicated below is for a fully opened valve.

d_0 - orifice

A_0 - flow area

| Set pressure in bar (g) | GW | 3/8 | 3/8 |
|-------------------------------|--------------------------|------------|------------------------|
| | d_0 (mm) | 7.0 | 7.0 |
| | A_0 (mm ²) | 38.48 | 38.48 |
| | Medium | Air | Saturated steam |
| 1.5 | | 28 | 22 |
| 2.0 | | 35 | 27 |
| 2.5 | | 41 | 32 |
| 3.0 | | 47 | 37 |
| 3.5 | | 53 | 41 |
| 4.0 | | 59 | 46 |
| 4.5 | | 65 | 51 |
| 5.0 | | 72 | 55 |