

# Safety Valves

## Type 06506



**Safety Valves, stainless steel,  
type tested TÜV-SV.948. Liquid/ Granular/ Powder**

Standard safety valve  
with FPM valve seal, closed bonnet,  
with diaphragm for protection of the spring, with lifting device,  
discharge holes with protection cap  
Inlet: male thread type G (BSPP) acc. to ISO 228/1

**Part No. 06506.X.1000**

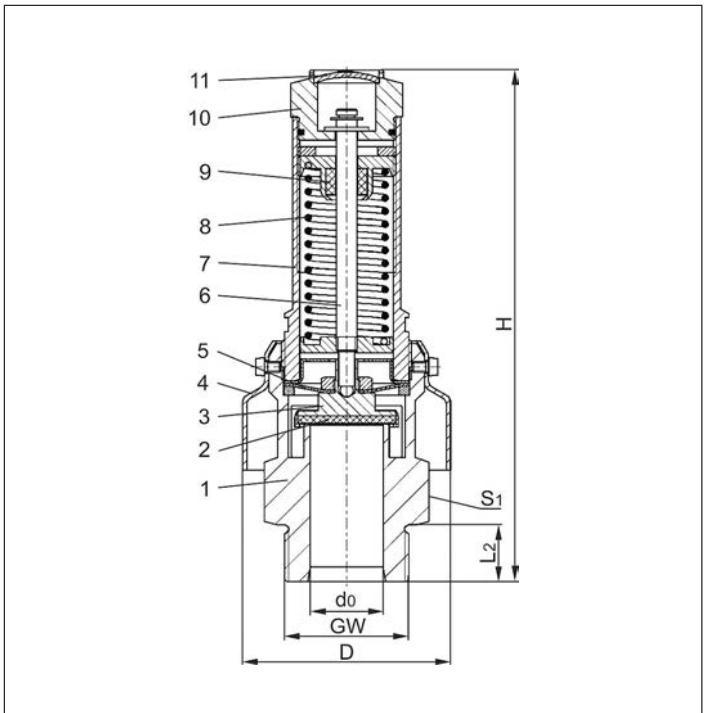


### Applications:

Provided as safety device for protection against excessive pressure in vehicle containers and pressure vessels. Approved for liquid, granular and powdery goods.

Working temperature: -40°C / -40°F (233K) up to +200°C / +392°F (473K)

| Materials         | DIN EN          | ASTM              |
|-------------------|-----------------|-------------------|
| 1 Body            | 1.4408          | A 351 CF8M        |
| 2 Valve seal      | FPM (Viton-GLT) |                   |
| 3 Disc            | 1.4401          | A 479 Grade 316   |
| 4 Protection cap  | 1.4301          | A 479 Grade 304   |
| 5 Diaphragm       | Silicon         |                   |
| 6 Stem            | 1.4401          | A 479 Grade 316   |
| 7 Bonnet          | 1.4401          | A 479 Grade 316   |
| 8 Spring          | 1.4571          | A 313 Grade 316Ti |
| 9 Stem guide      | PTFE            |                   |
| 10 Lifting device | 1.4401          | A 479 Grade 316   |
| 11 Closing cap    | 1.4401          | A 479 Grade 316   |



**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 97/23/EC (PED).



| Type 06506                       | Technical data (GW 2 in preparation) |         |         |         |       |
|----------------------------------|--------------------------------------|---------|---------|---------|-------|
|                                  |                                      | GW      | 1       | 1-1/4   | 1-1/2 |
| Nominal size                     | d <sub>0</sub>                       | 24      | 31      | 31      | -     |
| Dimension code                   | .X.                                  | 1000    | 3112    | 3114    | -     |
| Set pressure range               | bar                                  | 0.5-6.0 | 0.5-6.0 | 0.5-6.0 | -     |
| Height                           | H                                    | 194     | 191     | 191     | -     |
| Length                           | L <sub>2</sub>                       | 18      | 22      | 22      | -     |
| Protection cap diameter          | D                                    | 80      | 80      | 80      | -     |
| Wrench size across flats         | S <sub>1</sub>                       | 55      | 55      | 55      | -     |
| Weight                           | ca. kg                               | 1.75    | 2.00    | 2.30    | -     |
| Coeff. of discharge from 3.0 bar | α <sub>w</sub>                       | 0.62    | 0.68    | 0.68    | -     |
| Coeff. of discharge from 3.5 bar | α <sub>w</sub>                       | -       | 0.65    | 0.65    | -     |
| Coeff. of discharge from 4.5 bar | α <sub>w</sub>                       | 0.57    | -       | -       | -     |

Dimensions in mm.

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### Discharge capacities

Calculation of mass flow acc. to AD2000-Merkblatt A2

Medium:

Air in m<sup>3</sup>/h at 0°C and 1013.25 mbar

The capacity indicated below is for a fully opened valve.

d<sub>0</sub> - orifice

A<sub>0</sub> - flow area

| Set pressure in bar (g) | GW                                | 1     | 1-1/4 | 1-1/2 | 2 |
|-------------------------|-----------------------------------|-------|-------|-------|---|
|                         | d <sub>0</sub> (mm)               | 24.0  | 31.0  | 31.0  | - |
|                         | A <sub>0</sub> (mm <sup>2</sup> ) | 452.4 | 754.8 | 754.8 | - |
|                         | Medium                            | Air   |       |       |   |
| 0.5                     |                                   | 237   | 435   | 435   | - |
| 0.6                     |                                   | 268   | 486   | 486   | - |
| 0.7                     |                                   | 299   | 535   | 535   | - |
| 0.8                     |                                   | 329   | 579   | 579   | - |
| 0.9                     |                                   | 353   | 631   | 631   | - |
| 1.0                     |                                   | 372   | 669   | 669   | - |
| 1.2                     |                                   | 414   | 753   | 753   | - |
| 1.4                     |                                   | 456   | 840   | 840   | - |
| 1.6                     |                                   | 504   | 941   | 941   | - |
| 1.8                     |                                   | 553   | 1031  | 1031  | - |
| 2.0                     |                                   | 604   | 1123  | 1123  | - |
| 2.2                     |                                   | 648   | 1200  | 1200  | - |
| 2.4                     |                                   | 694   | 1277  | 1277  | - |
| 2.6                     |                                   | 740   | 1354  | 1354  | - |
| 2.8                     |                                   | 782   | 1431  | 1431  | - |
| 3.0                     |                                   | 825   | 1511  | 1511  | - |
| 3.2                     |                                   | 868   | 1588  | 1588  | - |
| 3.4                     |                                   | 910   | 1665  | 1665  | - |
| 3.5                     |                                   | 931   | 1628  | 1628  | - |
| 3.6                     |                                   | 952   | 1665  | 1665  | - |
| 3.8                     |                                   | 994   | 1739  | 1739  | - |
| 4.0                     |                                   | 1036  | 1812  | 1812  | - |
| 4.2                     |                                   | 1078  | 1886  | 1886  | - |
| 4.4                     |                                   | 1120  | 1960  | 1960  | - |
| 4.5                     |                                   | 1049  | 1997  | 1997  | - |
| 4.6                     |                                   | 1069  | 2034  | 2034  | - |
| 4.8                     |                                   | 1107  | 2107  | 2107  | - |
| 5.0                     |                                   | 1148  | 2185  | 2185  | - |
| 5.2                     |                                   | 1187  | 2259  | 2259  | - |
| 5.4                     |                                   | 1226  | 2333  | 2333  | - |
| 5.6                     |                                   | 1265  | 2407  | 2407  | - |
| 5.8                     |                                   | 1304  | 2481  | 2481  | - |
| 6.0                     |                                   | 1343  | 2555  | 2555  | - |