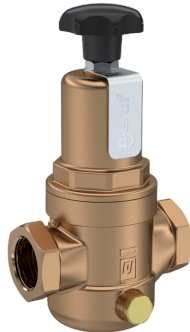


# Overflow valve TYPE UV05 / UV06 / UV07 / UV08



### Specification:

Overflow valves for the protection of pumps against overloading in closed circuits.

### Product features:

- suitable for neutral and non-neutral, not adhesive liquid and gaseous media.
- Can be set and adjusted during the operating conditions
- Installation possible in any position
- G 1/4"inch axial for pressure gauge

### Connection:

1/2", 3/4", 1", 1 1/4", 1 1/2", 2"

### Temperature:

-20°C to max. +120°C  
- depending on set pressure

### Pressure range:

0,5 bar – 10,0 bar

### Materials:

#### Component

Body  
Internal parts  
Spring  
Valve seat  
Seal

#### Type UV05

Gunmetal CC499K  
Gunmetal/brass  
Spring steel 1.1200  
Stainless steel 1.4404  
FKM

#### Type UV06

Gunmetal CC499K  
Gunmetal/brass  
Spring steel 1.1200  
Stainless steel 1.4404  
PTFE

#### Type UV07

Stainless steel 1.4408  
Stainless steel 1.4404/1.4408  
Spring steel 1.1200  
Stainless steel 1.4404  
FKM

#### Type UV08

Stainless steel 1.4408  
Stainless steel 1.4404/1.4408  
Spring steel 1.1200  
Stainless steel 1.4404  
PTFE

### Seal / Elastomere:

**EPDM** Ethylen-Propylene-Diene

set pressure up to 6 bar: -20°C to +120°C

set pressure starting 6 bar: -20°C to +95°C

**FKM** Fluorcarbon

set pressure up to 6 bar: -20°C to +120°C

set pressure starting 6 bar: -20°C to +95°C

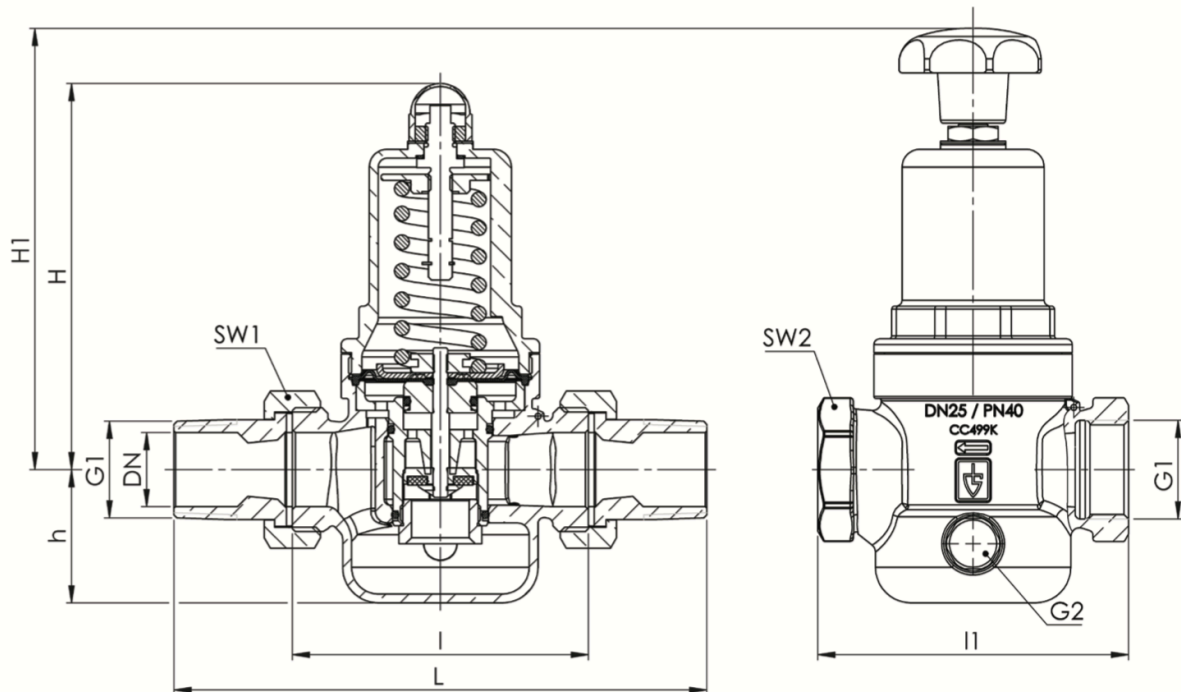
### Approvals:

- European Pressure Equipment Directive
- GOST-R
- DGR 97/23/EG
- Germanischer Lloyd GL
- Lloyd 's Register EMEA LR EMEA
- American Bureau of Shipping ABS
- Bureau Veritas BV

**Dimensions:**

| <b>Diameter DN</b>                           | <b>15</b>                | <b>20</b>                | <b>25</b>                | <b>32</b>                | <b>40</b>                | <b>50</b>                |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Inlet G*                                     | 1/2"                     | 3/4"                     | 1"                       | 1 1/4"                   | 1 1/2"                   | 2"                       |
| Outlet G*                                    | 1/2"                     | 3/4"                     | 1"                       | 1 1/4"                   | 1 1/2"                   | 2"                       |
| L  | 142                      | 158                      | 180                      | 193                      | 226                      | 252                      |
| I  | 80                       | 90                       | 100                      | 105                      | 130                      | 140                      |
| I1   | 85                       | 95                       | 105                      | -                        | -                        | -                        |
| H  | 102                      | 102                      | 130                      | 130                      | 165                      | 165                      |
| H1   | 124                      | 124                      | 161                      | 161                      | 198                      | 198                      |
| h  | 33                       | 33                       | 45                       | 45                       | 70                       | 70                       |
| SW1  | 30                       | 37                       | 46                       | 52                       | 65                       | 75                       |
| SW2  | 28                       | 35                       | 43                       | 48                       | 57                       | 68                       |
| Pressure gauge connection G2                 | 1/4" axial               | 1/4" axial               | 1/4" axial               | 1/4" axial               | 1/4" axial               | 1/4" axial               |
| Weight UV05/UV06 in kg                       | 1,2                      | 1,4                      | 2,4                      | 2,6                      | 5,5                      | 6,0                      |
| Weight UV07/UV08 in kg                       | 1,2                      | 1,3                      | 2,3                      | 2,5                      | 5,2                      | 5,7                      |
| Coefficient of flow Kvs in m <sup>3</sup> /h | 2,1                      | 2,4                      | 5,1                      | 5,5                      | 10,5                     | 11,5                     |
| Set pressure                                 | 0,5-10                   | 0,5-10                   | 0,5-10                   | 0,5-10                   | 0,5-10                   | 0,5-10                   |
| Range of adjustment                          | 0,5-2<br>1,5-6<br>5,5-10 | 0,5-2<br>1,5-6<br>5,5-10 | 0,5-2<br>1,5-6<br>5,5-10 | 0,5-2<br>1,5-6<br>5,5-10 | 0,5-2<br>1,5-6<br>5,5-10 | 0,5-2<br>1,5-6<br>5,5-10 |

\* Male thread    BSP-T / BSP-T    DIN EN 10226, ISO 7-1 / DIN EN 10226, ISO 7-1  
 Female thread    BSP-P / BSP-P    DIN EN ISO 228-1 / DIN EN ISO 228-1 -> **available in sizes 1/2", 3/4" and 1"**



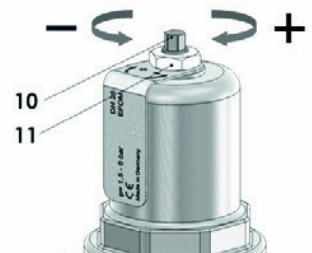
**Installation and Assembly:**

To ensure a satisfactory operation of the valves they must be assembled in such a way that the safety valve is not exposed to any impermissible static, dynamic or thermal loads. The installation has to be flushed before installing the valve. If an installation is not sufficiently cleaned or the valve is installed improperly, the valve may leak even the first time it responds. Appropriate safety measures must be taken at the place of installation of the valves if the medium that discharges upon actuation of the valve can lead to direct or indirect hazards to people or the environment. Pressure limiting valves are to be installed vertically, if possible, and with the bonnet pointing upward. A different installation position must be clarified with the manufacturer. Overflow valves can be installed in any position. The function of the valves is guaranteed in every position. During assembly always make sure not to apply any force when fastening the connecting thread and not to screw it in too far, as this could otherwise damage the seat of the valve. Do not allow sealing material such as hemp or Teflon to penetrate into the valve.

**Setting:**

The valves can be delivered with a set pressure and sealed by the factory or without set pressure with the desired range of adjustment.

Valves which have been set and sealed by the factory are marked with the set pressure. Before changing the set pressure the seal has to be removed. If valves are unsealed, the desired pressure can be set within the pressure range of the spring.

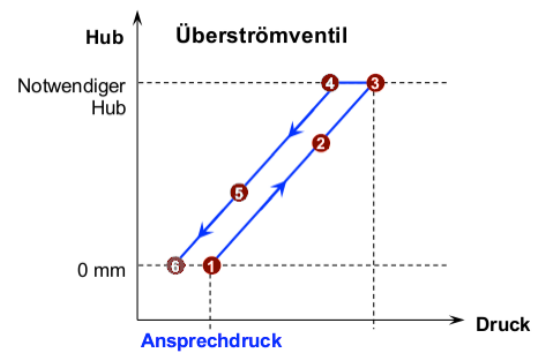


1. Remove plastic protective cap; loosen counter-nut (11).
2. Adjust pressure at adjusting spindle (10). Turn clockwise to increase pressure, turn counter clockwise to reduce pressure. By connecting a pressure gauge (available as accessory) the set pressure can be conveniently read from the pressure gauge.
3. Tighten locknut (11) again.

The setting can be secured by means of a seal.

**Function:**

1. Set pressure is reached; Overflow valve is still closed
2. Set pressure is exceeded; Overflow valve opens in proportion to the pressure increase and results from performance
3. Required overflow rate is reached; accordingly necessary Hub sets in.
4. System pressure drops again; Starting the closing operation
5. System pressure continues to fall and stroke is less
6. Valve is just below set pressure again closed and sealed; Lift equal to zero



Capacity table:

| Kv-values at 1 bar overpressure |             |       |        |             |       |        |             |       |        |             |       |        |             |       |        |             |       |        |
|---------------------------------|-------------|-------|--------|-------------|-------|--------|-------------|-------|--------|-------------|-------|--------|-------------|-------|--------|-------------|-------|--------|
| DN                              | 15          |       |        | 20          |       |        | 25          |       |        | 32          |       |        | 40          |       |        | 50          |       |        |
|                                 | Air (Nm3/h) |       |        | Air (Nm3/h) |       |        | Air (Nm3/h) |       |        | Air (Nm3/h) |       |        | Air (Nm3/h) |       |        | Air (Nm3/h) |       |        |
| Bar                             | 0,5-2       | 1,5-6 | 5,5-10 | 0,5-2       | 1,5-6 | 5,5-10 | 0,5-2       | 1,5-6 | 5,5-10 | 0,5-2       | 1,5-6 | 5,5-10 | 0,5-2       | 1,5-6 | 5,5-10 | 0,5-2       | 1,5-6 | 5,5-10 |
| 0,5                             | 73          |       |        | 77          |       |        | 189         |       |        | 193         |       |        | 417         |       |        | 445         |       |        |
| 1                               | 89          |       |        | 94          |       |        | 231         |       |        | 239         |       |        | 498         |       |        | 537         |       |        |
| 1,5                             | 102         |       |        | 108         | 107   |        | 264         | 185   |        | 273         | 196   |        | 587         | 370   |        | 624         | 408   |        |
| 2                               | 117         | 103   |        | 121         | 126   |        | 303         | 226   |        | 314         | 238   |        | 636         | 429   |        | 683         | 472   |        |
| 3                               |             | 119   |        |             | 153   |        |             | 282   |        |             | 291   |        |             | 506   |        |             | 557   |        |
| 4                               |             | 146   |        |             | 176   |        |             | 330   |        |             | 338   |        |             | 543   |        |             | 615   |        |
| 5                               |             | 170   |        |             | 194   |        |             | 367   |        |             | 379   |        |             | 625   |        |             | 684   |        |
| 5,5                             |             | 187   | 139    |             | 206   | 157    |             | 386   | 183    |             | 394   | 186    |             | 653   | 375    |             | 719   | 417    |
| 6                               |             | 195   | 147    |             | 216   | 163    |             | 405   | 194    |             | 418   | 202    |             | 708   | 395    |             | 760   | 443    |
| 7                               |             | 203   | 162    |             |       | 178    |             |       | 223    |             |       | 229    |             |       | 400    |             |       | 502    |
| 8                               |             |       | 179    |             |       | 190    |             |       | 259    |             |       | 264    |             |       | 407    |             |       | 517    |
| 9                               |             |       | 218    |             |       | 225    |             |       | 285    |             |       | 289    |             |       | 432    |             |       | 564    |
| 10                              |             |       | 255    |             |       | 261    |             |       | 303    |             |       | 314    |             |       | 465    |             |       | 601    |

| Kv-values at 1 bar overpressure |               |       |        |               |       |        |               |       |        |               |       |        |               |       |        |               |       |        |
|---------------------------------|---------------|-------|--------|---------------|-------|--------|---------------|-------|--------|---------------|-------|--------|---------------|-------|--------|---------------|-------|--------|
| DN                              | 15            |       |        | 20            |       |        | 25            |       |        | 32            |       |        | 40            |       |        | 50            |       |        |
|                                 | Water (Nm3/h) |       |        | Water (Nm3/h) |       |        | Water (Nm3/h) |       |        | Water (Nm3/h) |       |        | Water (Nm3/h) |       |        | Water (Nm3/h) |       |        |
| Bar                             | 0,5-2         | 1,5-6 | 5,5-10 | 0,5-2         | 1,5-6 | 5,5-10 | 0,5-2         | 1,5-6 | 5,5-10 | 0,5-2         | 1,5-6 | 5,5-10 | 0,5-2         | 1,5-6 | 5,5-10 | 0,5-2         | 1,5-6 | 5,5-10 |
| 0,5                             | 2,7           |       |        | 2,9           |       |        | 5,5           |       |        | 6,2           |       |        | 12,4          |       |        | 12,9          |       |        |
| 1                               | 2,9           |       |        | 3,3           |       |        | 6,1           |       |        | 6,9           |       |        | 12,9          |       |        | 13,8          |       |        |
| 1,5                             | 3,4           | 3,1   |        | 3,6           | 3,4   |        | 6,6           | 5,6   |        | 7,5           | 6,4   |        | 13,2          | 9,0   |        | 14,4          | 9,4   |        |
| 2                               | 3,6           | 3,2   |        | 3,9           | 3,4   |        | 6,9           | 5,7   |        | 7,8           | 6,4   |        | 13,5          | 9,1   |        | 14,9          | 9,4   |        |
| 3                               |               | 3,3   |        |               | 3,5   |        |               | 5,9   |        |               | 6,5   |        |               | 9,3   |        |               | 9,5   |        |
| 4                               |               | 3,4   |        |               | 3,7   |        |               | 6,1   |        |               | 7,2   |        |               | 9,5   |        |               | 9,9   |        |
| 5                               |               | 3,3   |        |               | 3,7   |        |               | 6,2   |        |               | 7,5   |        |               | 9,7   |        |               | 10,2  |        |
| 5,5                             |               | 3,0   | 2,3    |               | 3,6   | 2,7    |               | 5,8   | 3,2    |               | 6,9   | 4,1    |               | 10,1  | 7,2    |               | 10,5  | 7,7    |
| 6                               |               | 2,9   | 2,4    |               | 3,6   | 2,7    |               | 5,4   | 3,3    |               | 6,7   | 4,2    |               | 10,4  | 7,3    |               | 10,9  | 8,0    |
| 7                               |               |       | 2,4    |               |       | 2,6    |               |       | 3,9    |               |       | 4,5    |               |       | 7,5    |               |       | 8,1    |
| 8                               |               |       | 2,4    |               |       | 2,6    |               |       | 3,8    |               |       | 4,4    |               |       | 7,3    |               |       | 7,8    |
| 9                               |               |       | 2,3    |               |       | 2,5    |               |       | 3,7    |               |       | 4,2    |               |       | 6,9    |               |       | 7,4    |
| 10                              |               |       | 2,2    |               |       | 2,5    |               |       | 3,6    |               |       | 4,0    |               |       | 6,5    |               |       | 7,1    |

## Article number:

| Component      | type UV05 | type UV06 | type UV07       | type UV08       |
|----------------|-----------|-----------|-----------------|-----------------|
| Body           | Gunmetal  | Gunmetal  | Stainless steel | Stainless steel |
| Internal parts | Brass     | Brass     | Stainless steel | Stainless steel |
| Seal           | EPDM      | FKM       | EPDM            | FKM             |

| Type | pressure range   | connection          | diameter    |
|------|------------------|---------------------|-------------|
| UV05 | 01 – 0,5-2,0 bar | 00 – male thread    | 03 – 1/2"   |
| UV06 | 02 – 1,5-6,0 bar | 01 – female thread* | 04 – 3/4"   |
| UV07 | 03 – 5,5-10 bar  |                     | 05 – 1"     |
| UV08 |                  |                     | 06 – 1 1/4" |
|      |                  |                     | 07 – 1 1/2" |
|      |                  |                     | 08 – 2"     |

### Example UV05010004:

|             |           |           |           |
|-------------|-----------|-----------|-----------|
| <b>UV05</b> | <b>01</b> | <b>00</b> | <b>04</b> |
|-------------|-----------|-----------|-----------|

Article No. UV05010004

Overflow valve made of gunmetal

Internal parts brass

Pressure range: 0.5 – 2.0 bar

Connection: male thread

Diameter: 3/4" Inch

\* available in sizes 1/2", 3/4" and 1"

Image similar, subject change without notice.

