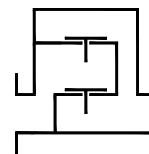


## Type sheet

In-line pressure and vacuum relief valve

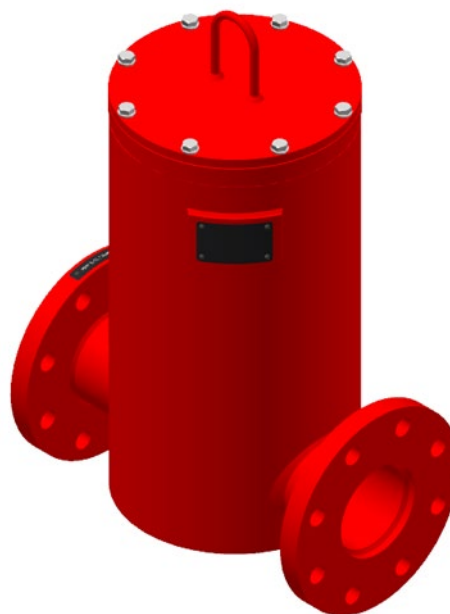
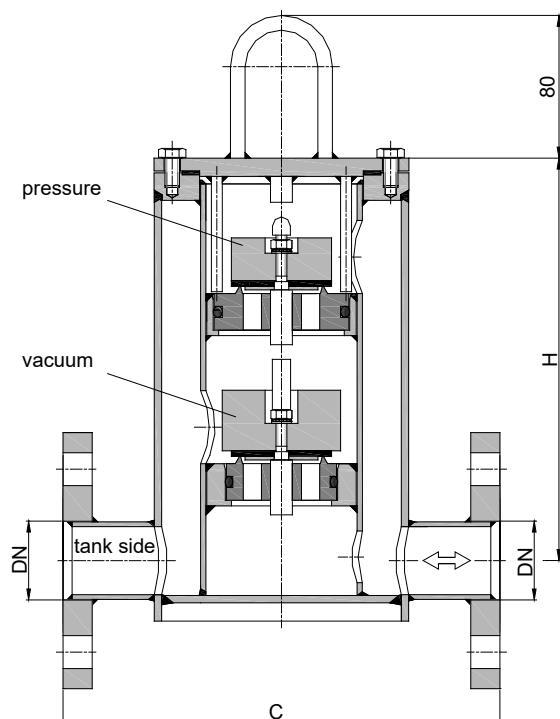
**KITO® VD/TG-...**



### Application

As inline armature with venting and breather valve function for vessels. Preferably used for installation in pipes.

### Dimensions (mm) and settings (mbar)



Construction length C can be adapted to customers wish to local situation.

| DN        |        | C   | H   | ~kg | vacuum                               |             | setting                              | pressure    | min. - max.<br>(with housing extension) |
|-----------|--------|-----|-----|-----|--------------------------------------|-------------|--------------------------------------|-------------|-----------------------------------------|
| DIN       | ASME   |     |     |     | min. - max.<br>(load weight from PE) | min. - max. | min. - max.<br>(load weight from PE) | min. - max. |                                         |
| 25 PN 40  | 1"     | 240 | 210 | 12  | 2.7 - 10.4                           | 10.5 - 75   | 2.5 - 10.4                           | 10.5 - 70   | > 70 - 200                              |
| 32 PN 40  | 1 1/4" | 240 | 220 | 13  | 2.7 - 10.4                           | 10.5 - 73   | 2.5 - 10.4                           | 10.5 - 68   | > 68 - 200                              |
| 40 PN 40  | 1 1/2" | 350 | 308 | 27  | 2.1 - 10.4                           | 10.5 - 148  | 1.8 - 10.3                           | 10.4 - 200  | -                                       |
| 50 PN 16  | 2"     | 350 | 308 | 29  | 2.1 - 10.4                           | 10.5 - 145  | 1.8 - 10.3                           | 10.4 - 200  | -                                       |
| 65 PN 16  | 2 1/2" | 350 | 316 | 34  | 1.7 - 7.4                            | 7.5 - 90    | 1.7 - 7.4                            | 7.5 - 130   | > 130 - 200                             |
| 80 PN 16  | 3"     | 350 | 364 | 35  | 1.7 - 7.9                            | 8.0 - 105   | 1.7 - 7.8                            | 7.9 - 130   | > 130 - 200                             |
| 100 PN 16 | 4"     | 450 | 415 |     | 1.7 - 7.6                            | 7.7 - 97    | 1.7 - 7.6                            | 7.7 - 180   | > 180 - 200                             |
| 125 PN 16 | 5"     | 500 | 400 | 86  | 1.7 - 6.7                            | 6.8 - 80    | 1.7 - 6.7                            | 6.8 - 135   | > 135 - 150                             |
| 150 PN 16 | 6"     | 550 | 441 |     | 1.9 - 11.9                           | 12 - 100    | 1.7 - 11.9                           | 12 - 150    | -                                       |

Indicated weights are understood without weight load and refer to the standard design

Higher settings see KITO® VD/TG-1-... (type sheet F 31.1 N)

### Example for order

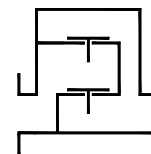
**KITO® VD/TG-50**

(design with flange connection DN 50 PN 16)

**Without EC certificate and CE-marking**

**Type sheet**

In-line pressure and vacuum relief valve

**KITO® VD/TG-...****Design**

|                           | standard                                     | optionally                       |
|---------------------------|----------------------------------------------|----------------------------------|
| housing / cover           | steel                                        | stainless steel mat. no. 1.4571  |
| gasket                    | HD 3822                                      | PTFE                             |
| valve seat, valve spindle | stainless steel mat. no. 1.4571              |                                  |
| valve seat seal (o-ring)  | VMQ-FEP                                      | Viton, NBR, VMQ-PFA              |
| load weight               | stainless steel mat. no. 1.4571              | PE                               |
| valve sealing             | NBR                                          | Viton, PTFE, EPDM, metal sealing |
|                           | <i>≥ 100 mbar only PTFE or metal sealing</i> |                                  |
| flange connection         | EN 1092-1 type A                             | ASME B16.5 Class 150 RF          |

**Performance curves**

Flow capacity  $V$  based on air of a density  $\rho = 1.29 \text{ kg/m}^3$  at  $T = 273 \text{ K}$  and atmospheric pressure  $p = 1.013 \text{ mbar}$ . For other gases the flow can be approximately calculated by

$$\dot{V}_{40\%} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \quad \text{or} \quad \dot{V}_b = \dot{V}_{40\%} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

The indicated flow rates will be reached by an accumulation of 40% above valve's setting (see DIN 4119).

If the allowable overpressure is less 40%, please consult der factory for the corrected volume flow.

