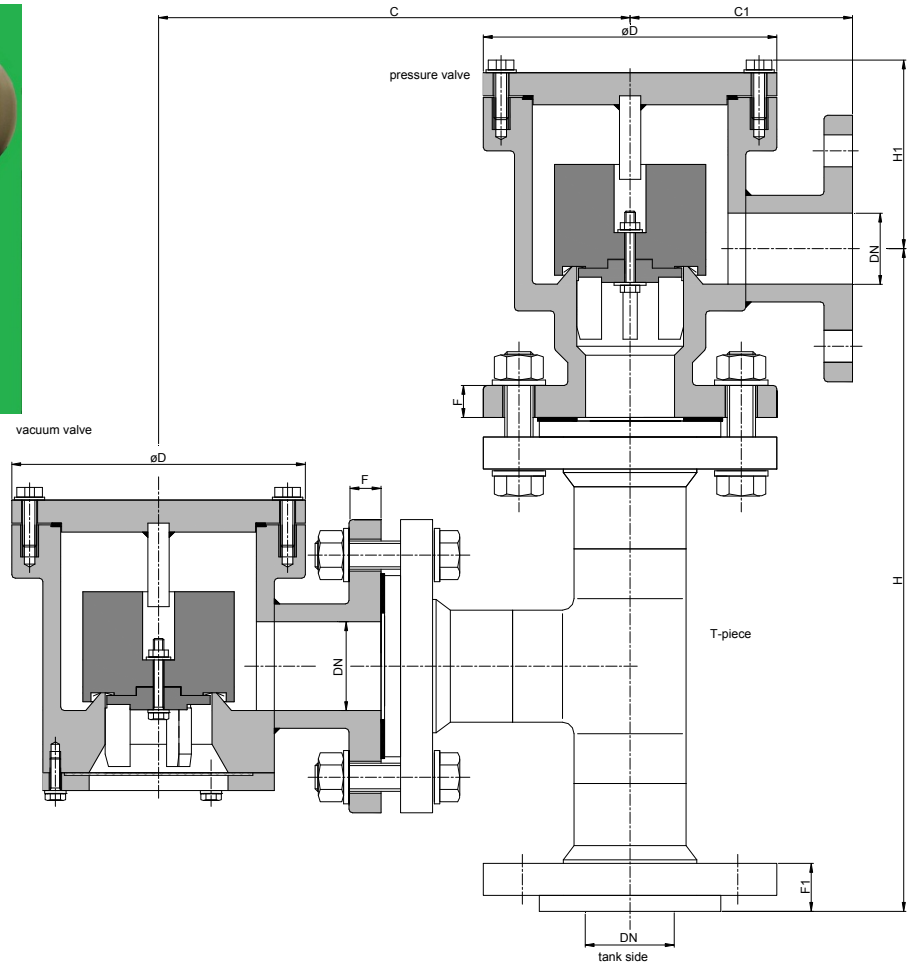
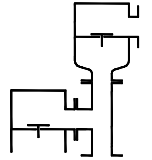


Combined Vacuum/Pressure Relief Valve

KITO® VD/oSR



Without EC certificate and € -designation

| DN | C | C1 | D | H | H1 | F | F1 | kg* |
|-----------|-----|-----|-----|-----|-----|----|----|-----|
| 25 PN 40 | 220 | 120 | 130 | 260 | 110 | 16 | 28 | 7.4 |
| 50 PN 16 | 238 | 125 | 165 | 304 | 100 | 18 | 32 | 12 |
| 80 PN 16 | 321 | 150 | 210 | 444 | 125 | 20 | 35 | 31 |
| 100 PN 16 | 373 | 175 | 245 | 518 | 148 | 24 | 36 | |
| 150 PN 16 | 490 | 250 | 320 | 647 | 175 | 26 | 49 | |
| 200 PN 10 | 570 | 275 | 394 | 805 | 210 | 28 | 56 | |

Dimensions in mm

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

Standard valve setting 3-30 mbar

Design subject to change

performance curves: K 0.10 N

Standard design

housing / T-piece : polyethylene (PE), polypropylene (PP)
(T-piece DN 25 from St/coated with Halar)

valve disc / guidance : polyethylene (PE), polypropylene (PP)

sealing foil : FEP

gasket : Gylon

bolts / nuts : Hastelloy C4, PEEK
(inside), A2 (outside)

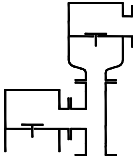
filter screen : polyethylene (PE), polypropylene (PP)

flange connection : DIN EN 1092-1 form A

Application

Not explosion-proof valve combination for venting and breathing of containers, in which non-combustible but aggressive media e. g. acids are stored. The pressure side is intended for connection to a pipe, in which the vapors are transported to a waste disposal installation.

Not suitable for flammable, flammable, highly or extremely flammable media.



Combined Vacuum/Pressure Relief Valve KITO® VD/oSR

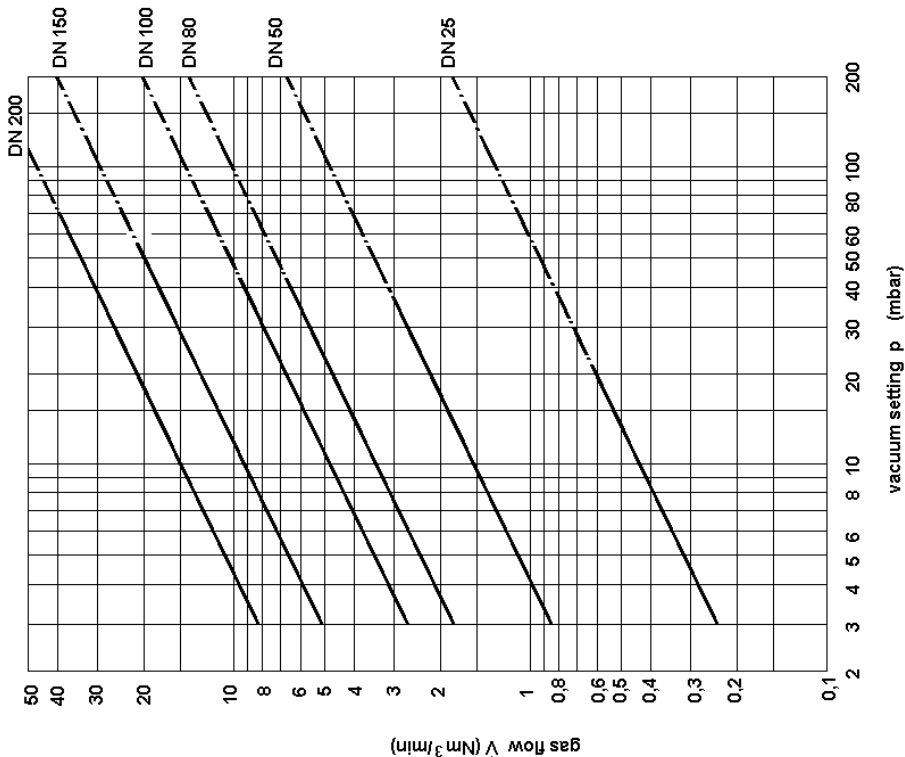
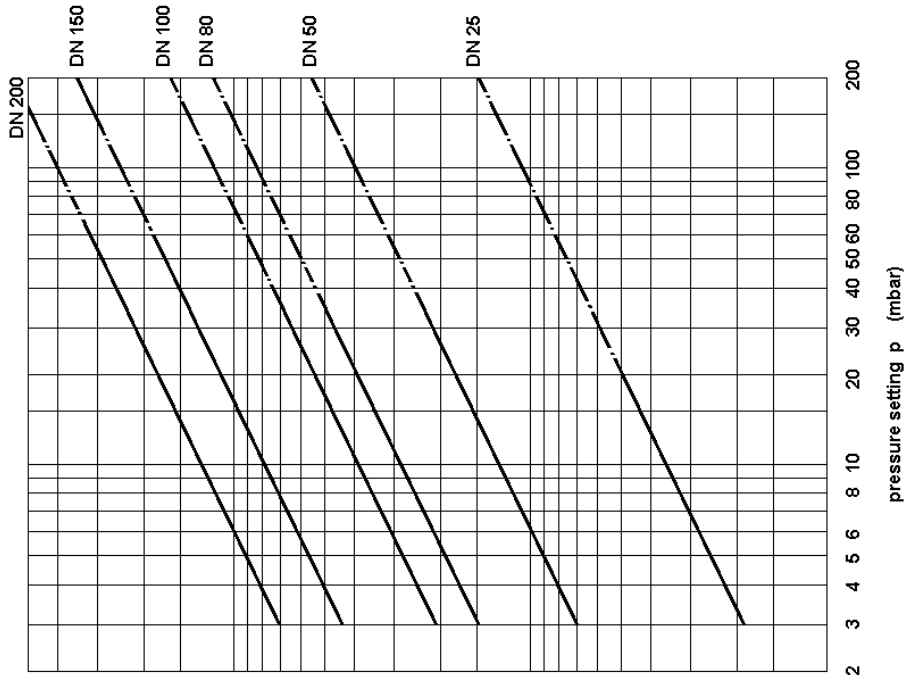
K 10 N

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

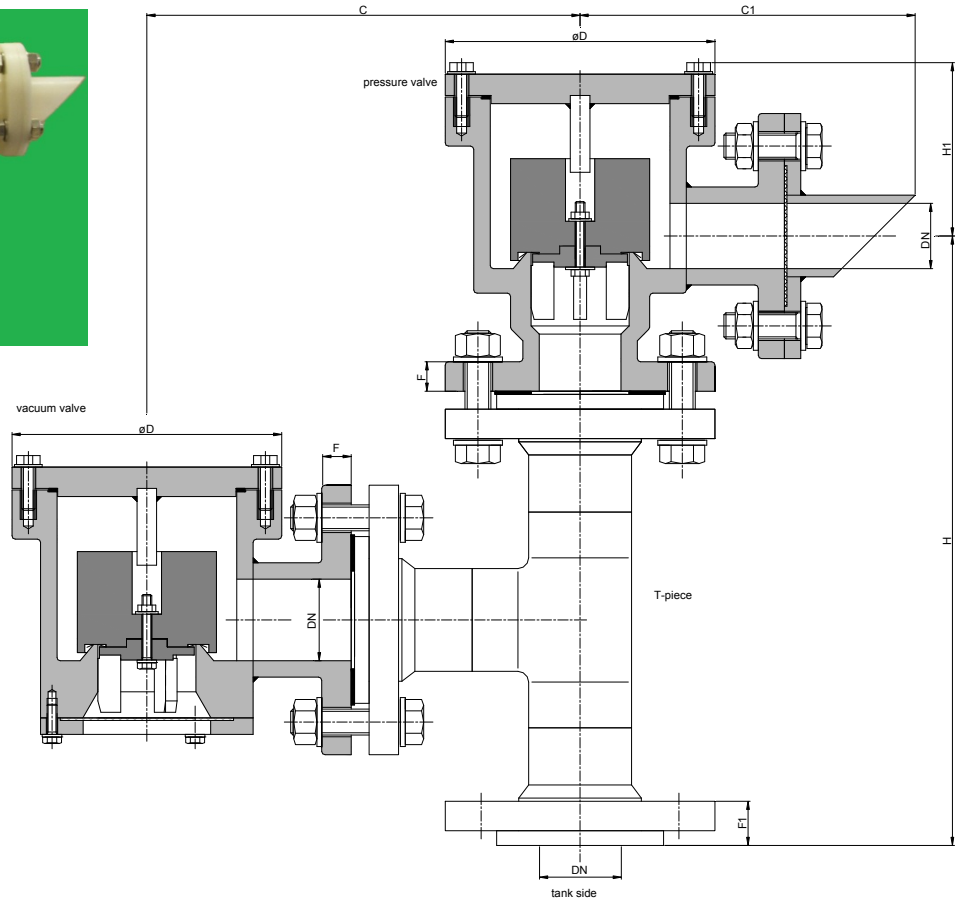
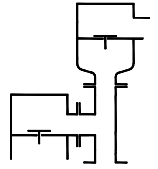
$$\dot{V} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \quad \text{or} \quad \dot{V}_b = \dot{V} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

Air flow capacity at 40% above valve setting (see DIN 4119). If different accumulations are required see page A 31.
Curves indicated by - - - - - require special weight loads



Design subject to change

Combined Vacuum/Pressure Relief Valve KITO® VD/oSA



Without EC certificate and $\text{C} \text{ } \text{€}$ -designation

| DN | C | C1 | D | H | H1 | F | F1 | kg* |
|-----------|-----|-----|-----|-----|-----|----|----|-----|
| 25 PN 40 | 220 | 190 | 130 | 260 | 110 | 16 | 28 | 7.4 |
| 50 PN 16 | 244 | 225 | 165 | 317 | 110 | 18 | 34 | 12 |
| 80 PN 16 | 317 | 275 | 210 | 433 | 130 | 20 | 35 | 31 |
| 100 PN 16 | 373 | 325 | 245 | 518 | 148 | 24 | 36 | |
| 150 PN 16 | 490 | 500 | 320 | 647 | 175 | 26 | 49 | |
| 200 PN 10 | 572 | 575 | 394 | 807 | 218 | 28 | 56 | |

Dimensions in mm

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

standard valve setting 3-30 mbar

Design subject to change

performance curves: K 0.11 N

Standard design

housing / T-piece : polyethylene (PE), polypropylene (PP)
(T-piece DN 25 from St/coated with Halar)

valve disc / guidance : polyethylene (PE), polypropylene (PP)

sealing foil : FEP

gasket : Gylon

bolts / nuts : Hastelloy C4, PEEK
(inside), A2 (outside)

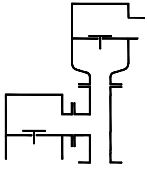
filter screen : polyethylene (PE), polypropylene (PP)

flange connection : DIN EN 1092-1 form A

Application

Not explosion-proof valve combination for venting and breathing of containers, in which non-combustible but aggressive media e. g. acids are stored.

Not suitable for flammable, flammable, highly or extremely flammable media.



Combined Vacuum/Pressure Relief Valve KITO® VD/oSA

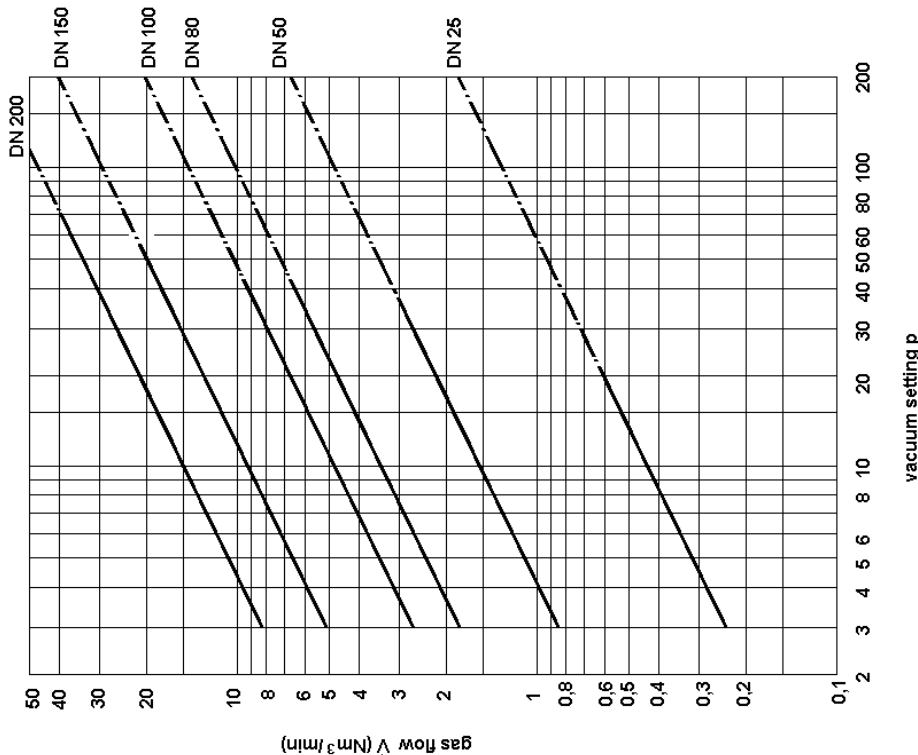
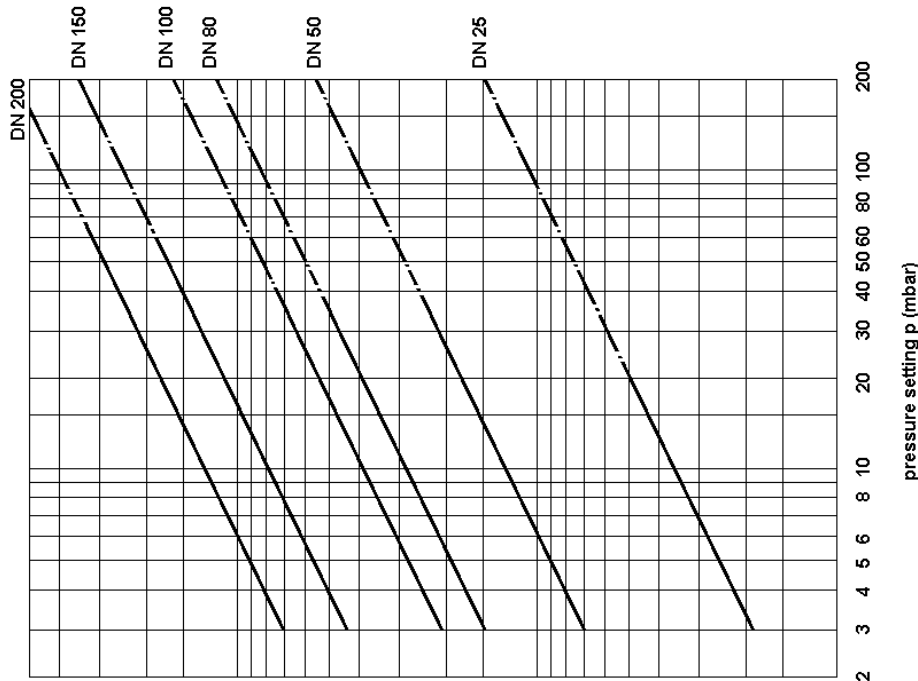
K 11 N

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

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

Air flow capacity at 40% above valve setting (see DIN 4119). If different accumulations are required see page A 31.
Curves indicated by - - - - - require special weight loads



Design subject to change