# KITO Armaturen GmbH

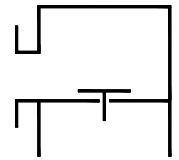## Type sheet
### Vacuum relief valve
### KITO® VS/ScS-…

## Application

Not explosion-proof valve to prevent dangerous vacuums in tank installations. For installation on tank roofs, if desired by the customer, in connection with a pressure valve.
**In case of use in explosive atmospheres of gas/vapour-air mixtures ignition hazards need to be considered. Plastic material tends to electrostatic charging. The use should be completed respectively decided by a risk analysis considering country-specific rules and regulations.**

## Dimensions (mm) and settings (mbar)
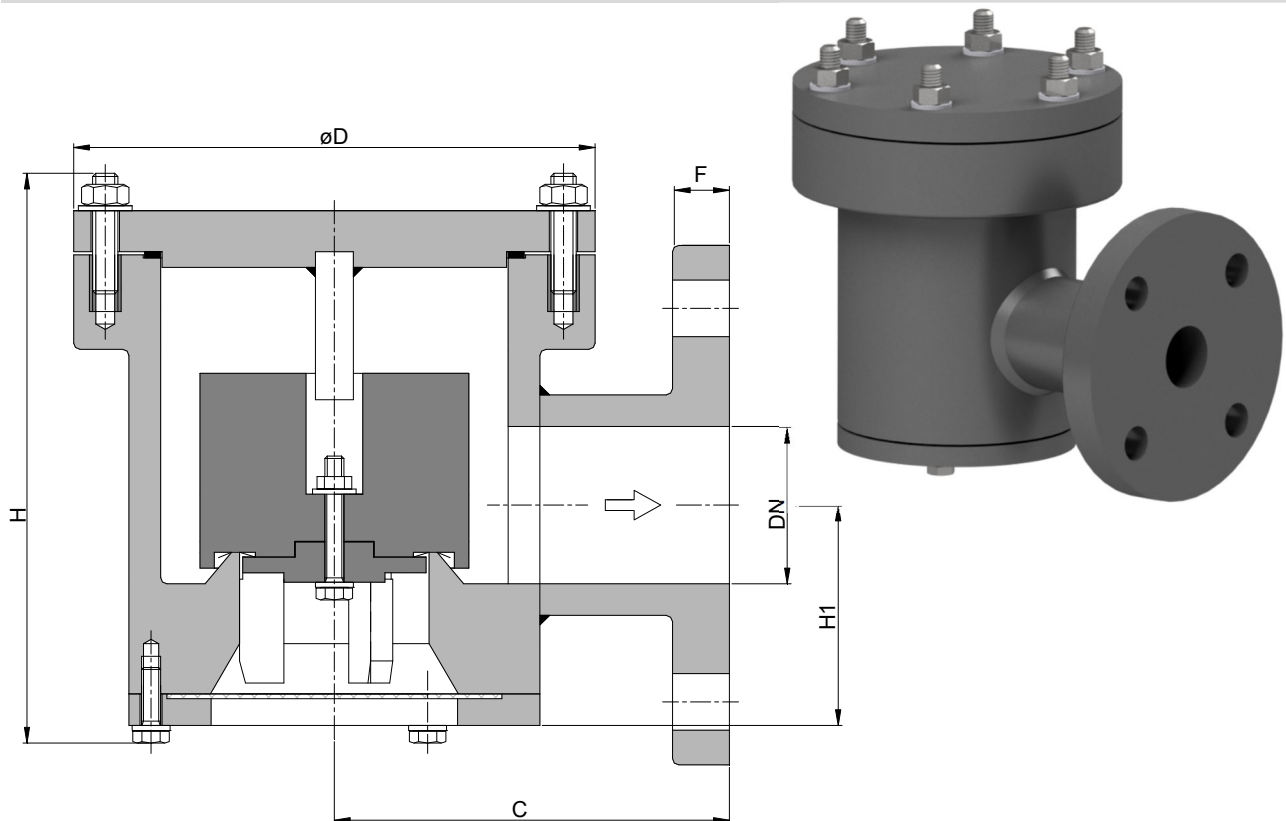


| DN DIN | DN ASME | C | D | H | H1 | F | setting min. | setting max. | kg |
|---|---|---|---|---|---|---|---|---|---|
| 25 PN 40 | 1" | 120 | 130 | 167 | 50 | 16 | 3.1 | | 1.5 |
| 50 PN 16 | 2" | 125 | 165 | 186 | 70 | 18 | 2.4 | | 2.0 |
| 80 PN 16 | 3" | 150 | 210 | 234 | 96 | 20 | 2.4 | 30 | 3.5 |
| 100 PN 16 | 4" | 175 | 245 | 284 | 115 | 24 | 2.3 | | 5.0 |
| 150 PN 16 | 6" | 250 | 320 | 350 | 158 | 26 | 2.3 | | 9.5 |
| 200 PN 10 | 8" | 275 | 394 | 435 | 210 | 28 | 2.7 | | 17.0 |

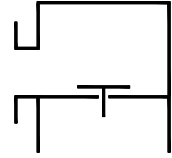*Indicated weights are understood without weight load and refer to the standard design*

## Example for order

*KITO® VS/SCS-50*
*(design with flange connection DN 50 PN 16)*

## Without EC certificate and CE-marking

# Type sheet
Vacuum relief valve
**KITO® VS/ScS-…**

## Design

|  | standard | optionally |
|---|---|---|
| housing / cover | polyethylene (PE) | polypropylene (PP) |
| gasket | Gylon |  |
| valve pallet / guidance | polyethylene (PE) | polypropylene (PP) |
| sealing foil | FEP |  |
| load weight | polyethylene (PE) *(at higher settings PE/stainless steel)* | polypropylene (PP) *(at higher settings PP/stainless steel)* |
| bolts / nuts (inside) | PEEK | Hastelloy C4 |
| bolts / nuts (outside) | A2 |  |
| protective screen | polyamide 6 |  |
| connection | flange EN 1092-1 type A | flange ASME B16.5 Class 150 RF, weld end |

## Performance curves

Flow capacity V based on air of a density $\rho$ = 1.29 kg/m³ at T = 273 K and atmospheric pressure p = 1.013 mbar. For other gases the flow can be approximately calculated by

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

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.