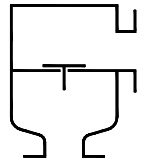


## Type sheet

In-line pressure or vacuum relief valve  
**KITO® VD/ScS-...**

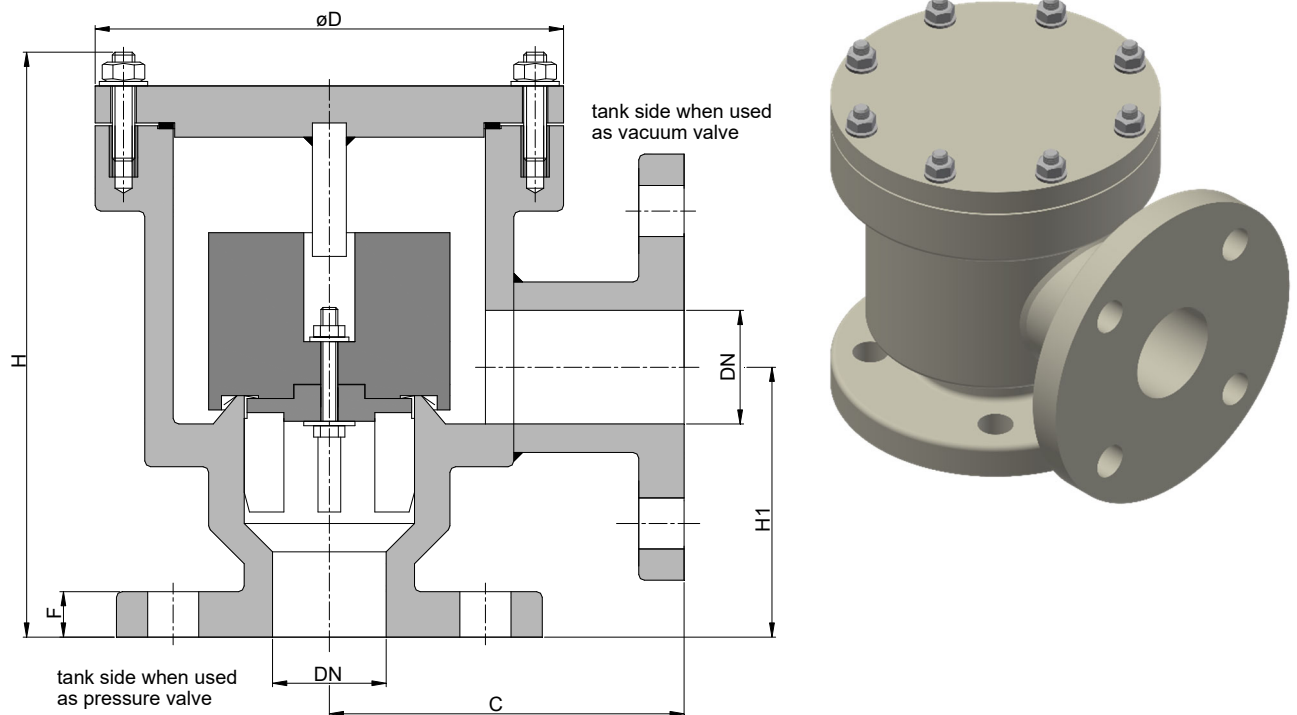


### Application

Not explosion-proof intermediate armature, with venting or breathing function for containers. For installation in pipe. The armature either serves as vacuum valve or as pressure valve, this depending on the fact which flange is connected to the tank side. Also used as non-return valve or overflow 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)



DIN	DN ASME	C	D	H	H1	F	setting		kg
							min. - max.	min. - max. (with housing extension)	
25 PN 40	1"	120	130	173	62	16	3.1 - 48	> 48 - 100	1.5
50 PN 16	2"	125	165	190	80	18	2.4 - 35	> 35 - 100	2.0
80 PN 16	3"	150	210	231	101	20	2.4 - 55	> 55 - 100	3.5
100 PN 16	4"	175	245	293	120	24	2.3 - 66	> 66 - 100	5.5
150 PN 16	6"	250	320	348	162	26	2.3 - 100	-	9.0
200 PN 10	8"	275	394	435	215	28	2.7 - 100	-	17.0

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

### Example for order

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

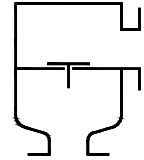
**Without EC certificate and CE-marking**



## Type sheet

In-line pressure or vacuum relief valve

KITO® VD/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) <i>(at higher settings PE/stainless steel)</i>	polypropylene (PP) <i>(at higher settings PP/stainless steel)</i>
bolts / nuts (inside)	PEEK	Hastelloy C4
bolts / nuts (outside)	A2	
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  $\rho = 1.29 \text{ kg/m}^3$  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.

