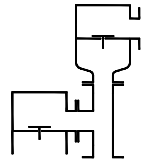


Type sheet

Pressure and vacuum relief valve

KITO® VD/oSR-...

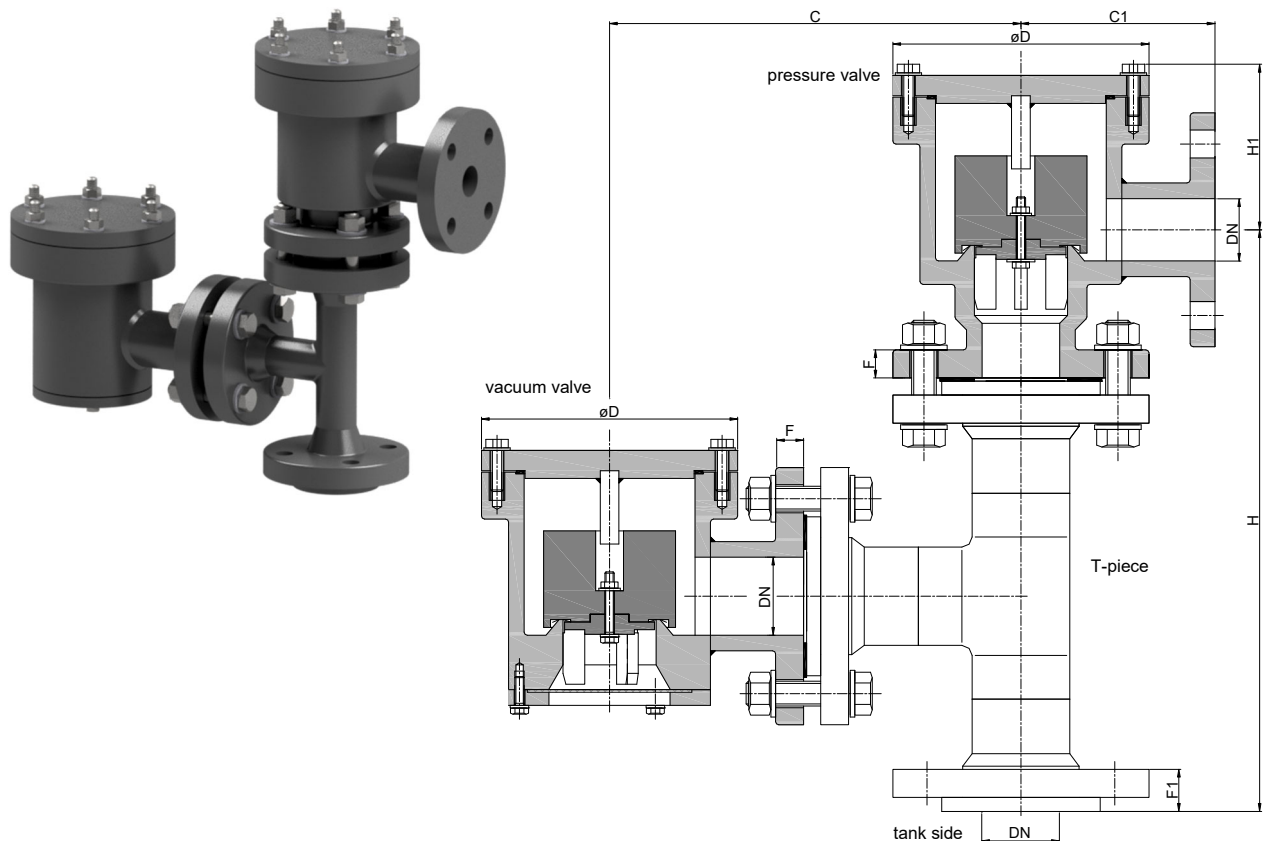


Application

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.

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)



DN		C	C1	D	H	H1	F	F1	kg
DIN	ASME								
25 PN 40	1"	220	120	130	260	110	16	28	5
50 PN 16	2"	244	125	165	317	110	18	34	9,5
80 PN 16	3"	317	150	210	433	130	20	35	16
100 PN 16	4"	376	175	245	520	160	24	36	24
150 PN 16	6"	490	250	320	647	185	26	49	42
200 PN 10	8"	572	275	394	807	218	28	56	

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

Example for order

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

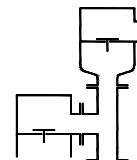
Without EC certificate and CE-marking

page 1 of 2

Type sheet

Pressure and vacuum relief valve

KITO® VD/oSR-...



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	
protective screen	polyamide 6	
connection	flange EN 1092-1 type A	flange ASME B16.5 Class 150 RF, weld end

Settings (mbar)

DIN	DN	ASME	vacuum min. - max.	setting pressure	
				min. - max.	min. - max. <i>(with housing extension)</i>
25 PN 40		1"	3.1 - 30	3.1 - 48	> 48 - 100
50 PN 16		2"	2.4 - 30	2.4 - 35	> 35 - 100
80 PN 16		3"	2.4 - 30	2.4 - 55	> 55 - 100
100 PN 16		4"	2.3 - 30	2.3 - 66	> 66 - 100
150 PN 16		6"	2.3 - 30	2.3 - 100	-
200 PN 10		8"	2.7 - 30	2.7 - 100	-

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.

