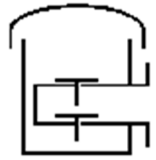




Type sheet

Pressure and vacuum relief valve

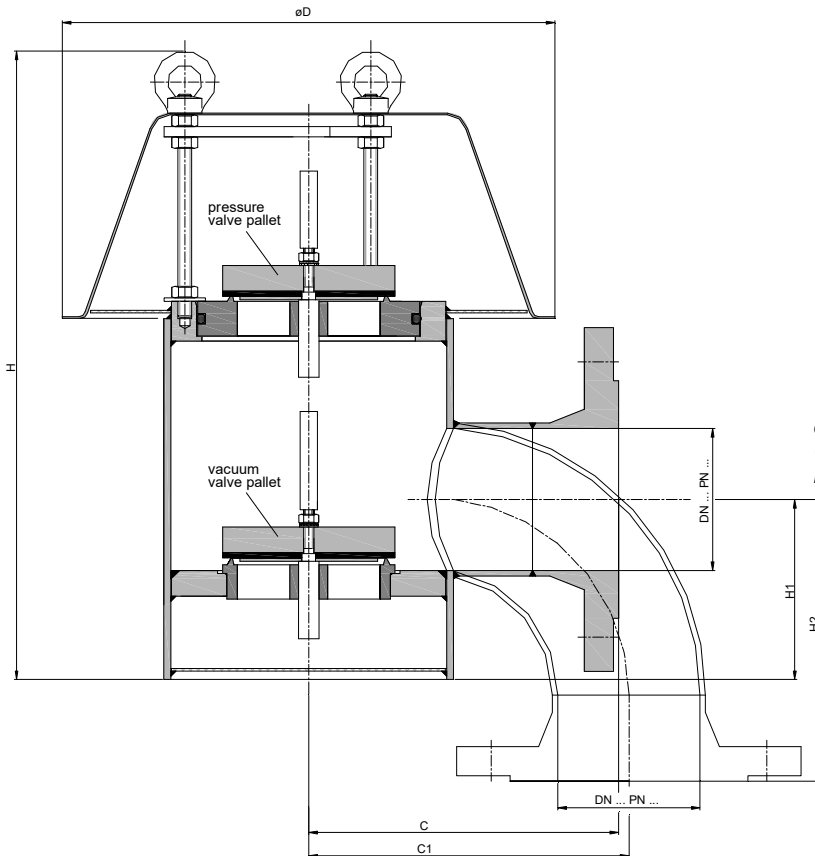
KITO® VD/oL-.../...



Application

As end-of-line armature, for venting apertures on tank installations. Used mainly as venting and breather device for fixed roof tanks. Used to prevent inadmissible pressure and vacuum and to minimize unwelcome gas losses or inadmissible emissions respectively. The housing is mounted perpendicularly on a tank roof. Valve is not explosion-proof or endurance-burning proof.

Dimensions (mm)



Vertical connection from size DN 100 only after prior agreement!!!
On-site support of the device may be necessary!!!

DN		D	H	H1	H2		C		C1	~kg
DIN	ASME				DIN	ASME	DIN	ASME		
50	PN 16	285	326	77	121	139	155	174	140	11
80	PN 16	285	365	105	165	184	180	200	186	16
100	PN 16	330	395	126	204	228	200	224	248	21
125	PN 16	405	450	152	244	278	245	279	291	30
150	PN 16	405	469	160	285	320	245	279	340	40
200	PN 10	465	573	217	367	407	288	288	533	58
250	PN 10	600	650	248	449	483	350	350	645	89

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

Example for order

KITO® VD/oL-50/25 (lateral)

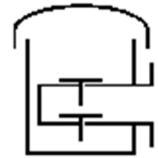
(design lateral flange connection DN 50 PN 16, with vacuum valve pallet DN 50 and pressure valve pallet DN 25)

Without EC certificate and €-marking

Type sheet

Pressure and vacuum relief valve

KITO® VD/oL-.../...



Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
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
	≥ 100 mbar only PTFE or metal sealing	
weather hood	stainless steel	
protective screen	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
flange connection	EN 1092-1 type B1	ASME B16.5 Class 150 RF
connection	lateral	vertical

settings (mbar)

DN	size	vacuum valve pallet		size	pressure valve pallet		
		min. - max. (load weight from PE)	min. - max.		min. - max. (load weight from PE)	min. - max.	min. - max. (with housing extension)
50 PN 16	50/...	2.0 - 10.8	10.9 - 100	.../25	3.0 - 11.0	11.1 - 200	-
				.../50	2.0 - 10.4	10.5 - 140	> 140 - 200
80 PN 16	80/...	2.0 - 8.0	8.1 - 90	.../50	2.3 - 10.8	10.9 - 150	> 150 - 200
				.../80	1.9 - 7.8	7.9 - 90	> 90 - 200
100 PN 16	100/...	1.9 - 7.7	7.8 - 100	.../50	2.5 - 11.1	11.2 - 200	-
				.../80	1.9 - 8.1	8.2 - 100	> 100 - 200
				.../100	1.8 - 7.6	7.7 - 90	> 90 - 200
125 PN 16	125/...	1.6 - 7.0	7.1 - 110	.../50	3.7 - 12.2	12.3 - 200	-
				.../80	2.2 - 8.6	8.7 - 120	> 120 - 200
				.../100	1.9 - 8.0	8.1 - 100	> 100 - 200
				.../125	2.0 - 7.3	7.4 - 65	> 65 - 150
150 PN 16	150/...	2.0 - 11.9	12.0 - 100	.../50	3.7 - 12.2	12.3 - 200	-
				.../80	2.5 - 8.6	8.7 - 130	> 130 - 200
				.../100	1.9 - 8.0	8.1 - 120	> 120 - 200
				.../150	2.1 - 12.0	12.1 - 90	> 90 - 150
200 PN 10	200/...	2.2 - 12.0	12.1 - 90	.../80	3.0 - 9.3	9.4 - 120	> 120 - 200
				.../100	2.5 - 8.5	8.6 - 110	> 110 - 200
				.../150	2.1 - 12.2	12.3 - 80	> 80 - 150
				.../200	2.0 - 12	12.1 - 65	> 65 - 100
250 PN 10	250/...	2.3 - 11.9	12.0 - 70	.../100	2.5 - 8.5	8.6 - 130	> 130 - 200
				.../150	2.2 - 12.3	12.4 - 100	> 100 - 150
				.../200	2.1 - 12.1	12.2 - 80	> 80 - 100
				.../250	2.3 - 11.9	12.0 - 55	> 55 - 100

The size of the vacuum valve pallet is always identical to the size of the flange connection.

The size of pressure valve pallet can be selected in accordance with required capacity!

Higher settings see KITO® VD/oL-1-...-... (type sheet E 17.10.1 N).



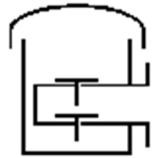
page 2 of 3



Type sheet

Pressure and vacuum relief valve

KITO® VD/oL-.../...



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.

