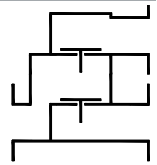


Type sheet

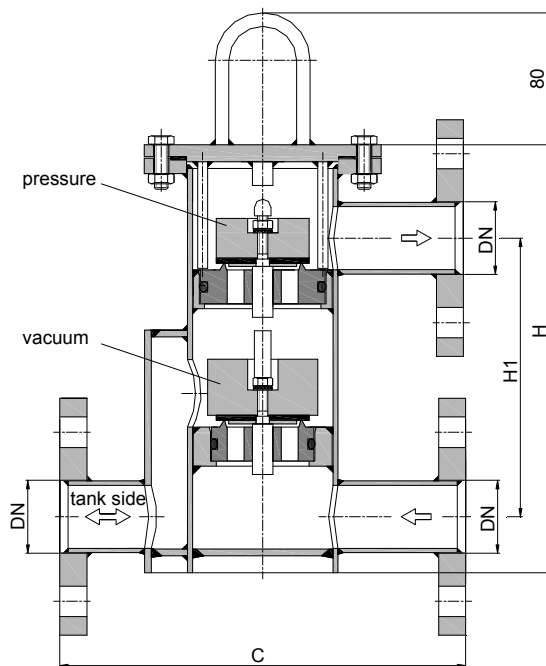
In-line pressure and vacuum relief valve
KITO® VD/T3-...



Application

As inline armature with venting and breathing function for application on fixed roof tanks and vessels. Equipped with a lateral connection for the tank connecting pipe, a lower flange connection for a venting conduit and an upper flange connection for a breather conduit. The lower valve can be used to automatically control a supply of inert gas (e. g. nitrogen). For flammable liquids, a detonation flame arrester, e.g. KITO® EFA-Det-... should be provided between the tank and the KITO® VD/T3-...

Dimensions (mm) and settings (mbar)



Construction length C can be adapted to customers wish to local situation.

DN		C	~H	H1	~kg	vacuum		setting		pressure	
DIN	ASME					min. - max. (load weight from PE)	min. - max.	min. - max. (load weight from PE)	min. - max.	min. - max. (with housing extension)	
25 PN 40	1"	240	240	150	12	2.7 - 10.4	10.5 - 75	2.5 - 10.4	10.5 - 70	> 70 - 200	
32 PN 40	1 1/4"	240	255	165	14	2.7 - 10.4	10.5 - 73	2.5 - 10.4	10.5 - 68	> 68 - 200	
40 PN 40	1 1/2"	350	340	195	26	2.1 - 10.4	10.5 - 148	1.8 - 10.3	10.4 - 200	-	
50 PN 16	2"	350	350	204	27	2.1 - 10.4	10.5 - 145	1.8 - 10.3	10.4 - 200	-	
65 PN 16	2 1/2"	350	425	224	31	1.7 - 7.4	7.5 - 90	1.7 - 7.4	7.5 - 130	> 130 - 200	
80 PN 16	3"	350	425	253	36	1.7 - 7.9	8.0 - 105	1.7 - 7.8	7.9 - 130	> 130 - 200	
100 PN 16	4"	450	485	279	40	1.7 - 7.6	7.7 - 97	1.7 - 7.6	7.7 - 180	> 180 - 200	
125 PN 16	5"	500	485	332	48	1.7 - 6.7	6.8 - 80	1.7 - 6.7	6.8 - 135	> 135 - 150	
150 PN 16	6"	550	525	387	59	1.9 - 11.9	12 - 100	1.7 - 11.9	12 - 150	-	

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

Higher settings see KITO® VD/T3-1-... (type sheet F 37.1 N)

Example for order

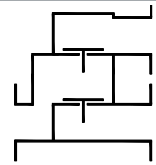
KITO® VD/T3-50
 (design with flange connection DN 50 PN 16)

Without EC certificate and CE-marking

Type sheet

In-line pressure and vacuum relief valve

KITO® VD/T3-...



Design

	standard	optionally
housing / cover	steel	stainless steel mat. no. 1.4571
gasket	HD 3822	PTFE
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
		<i>≥ 100 mbar only PTFE or metal sealing</i>
flange connection	EN 1092-1 type A	ASME B16.5 Class 150 RF

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.

