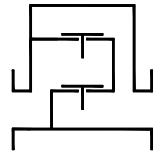


Type sheet

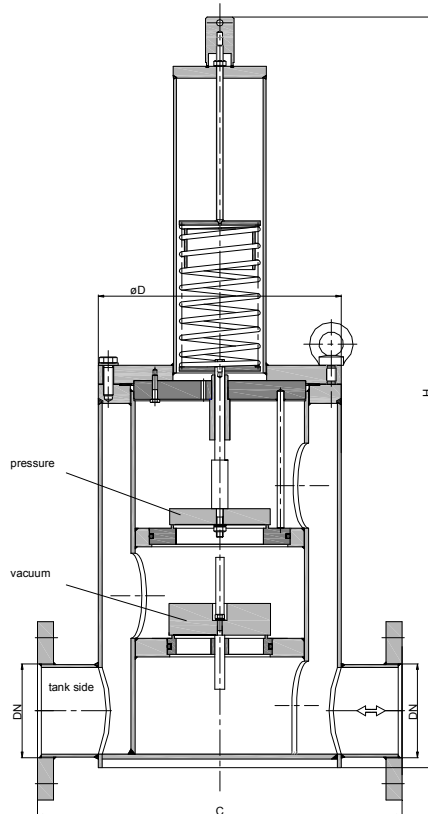
In-line pressure and vacuum relief valve
KITO® VD/TG-1-...



Application

As inline armature with venting and breather valve function for vessels. Preferably used for installation in pipes.

Dimensions (mm) and settings (mbar)



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

DN	ASME	D	C	H	kg	setting		pressure	
						vacuum min.	vacuum max.	min.	max.
25 PN 40	1"	140	240	492		6	93	>200	350
32 PN 40	1 1/4"	140	240	492		6	91		
40 PN 40	1 1/2"	220	350	601		6	158		
50 PN 16	2"	220	350	601		6	154		
65 PN 16	2 1/2"	220	350	805		7	105		
80 PN 16	3"	220	350	860		7	120		
100 PN 16	4"	300	450	926		7	140	>150	
125 PN 16	5"	324	500			7	140		
150 PN 16	6"	370	550	1286		8	150		

Indicated weights are understood without weight load and refer to the standard design
 Lower settings see KITO® VD/TG-... (type sheet F 31 N), higher settings on request

Example for order

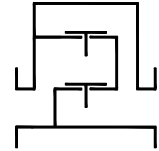
KITO® VD/TG-1-50
 (design with flange connection DN 50 PN 16)

Without EC certificate and CE-marking

Type sheet

In-line pressure and vacuum relief valve

KITO® VD/TG-1-...



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	
valve sealing	metal sealing	
valve pallet (pressure)	spring loaded	
valve pallet (vacuum)	weight loaded	
spring loaded parts	stainless steel mat. no. 1.4571	
compression spring	stainless steel	
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.

