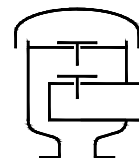


## Type sheet

Pressure and vacuum relief valve

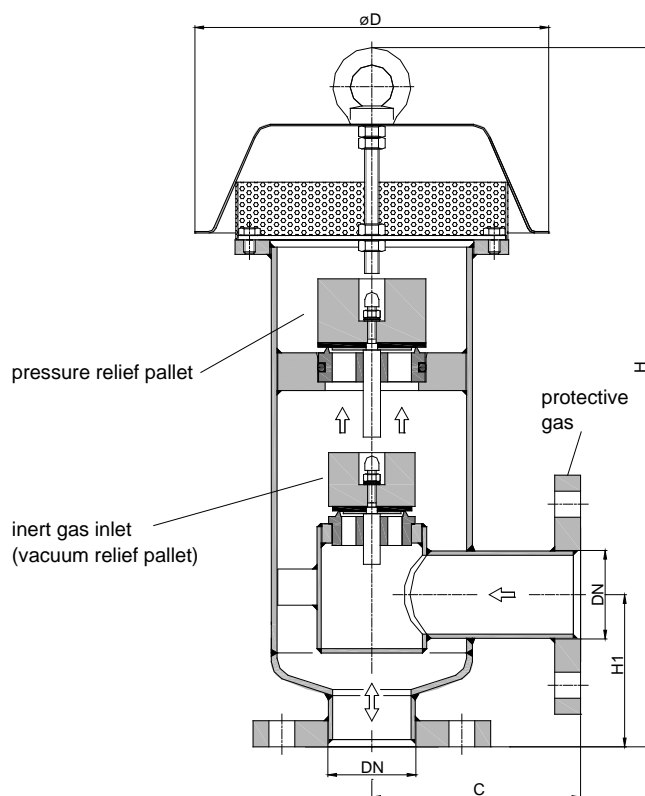
**KITO® VD/o2-...**



### Application

As end-of-line armature, preferably for non-flammable liquids stored under inert gas, for venting and breathing of fixed roof tanks and above-ground tanks, with lateral connection for the inert gas conduit. The upper valve arrangement, which consists of a pressure valve, prevents the development of inadmissible pressure. The lower valve serves to automatically control the supply of inert gas (e. g. nitrogen) and adjusts the necessary inert gas pressure in the tank. For the max. admission pressure see setting „vacuum“.

### Dimensions (mm) and settings (mbar)



DN		D	C	H	H1	kg	setting			
DIN	ASME						vacuum		pressure	
							min.	max.	min.	max.
50 PN 16	2"	220	145	500	105	16,0	2.0	140	2.9	75
80 PN 16	3"	260	175	600	163	28,0	1.6	95	2.0	115
100 PN 16	4"	340	190	655	190	39,0	1.6	85	1.6	100

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

Higher settings on request !

### Example for order

**KITO® VD/o2-50**

(design with flange connection DN 50 PN 16)

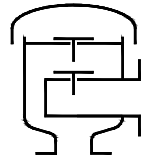
**Without EC certificate and CE-marking**

**KITO**

Armaturen GmbH

**Type sheet**

Pressure and vacuum relief valve

**KITO® VD/o2-...****Design**

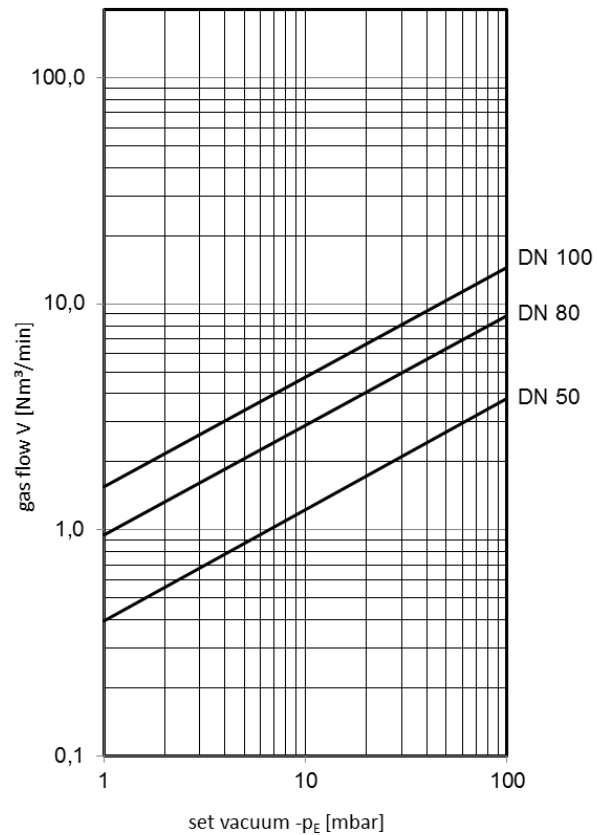
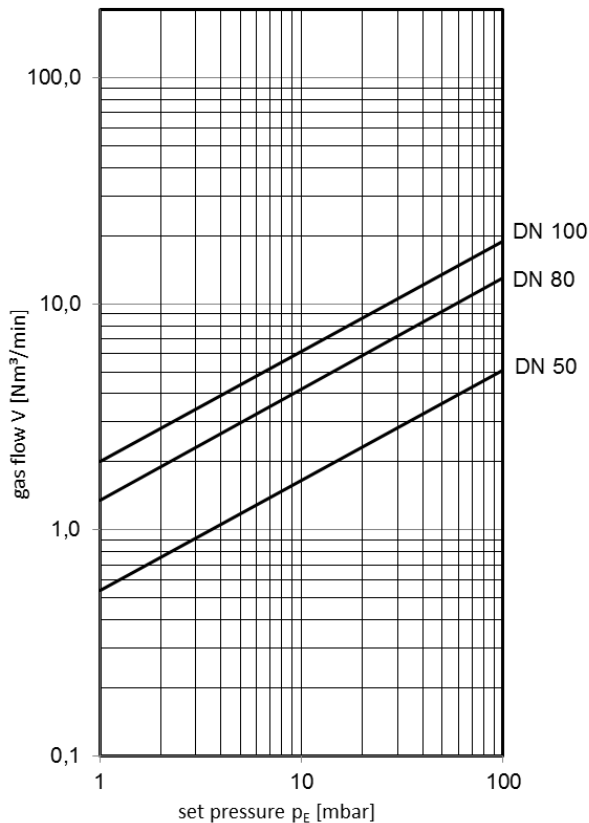
	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
valve seat, valve spindle	stainless steel mat. no. 1.4571	
valve seat seal (o-ring)	VMQ-FEP	Viton, NBR, VMQ-PFA
load weight	stainless steel mat. no. 1.4571	PE
valve sealing	NBR	Viton, PTFE, EPDM, metal sealing
	<i>≥ 100 mbar only PTFE or metal sealing</i>	
weather hood	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
protective screen	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
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.



page 2 of 2