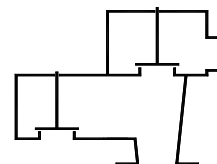


Type sheet

In-line pressure and vacuum relief valve

KITO® VD/oG-PA-...

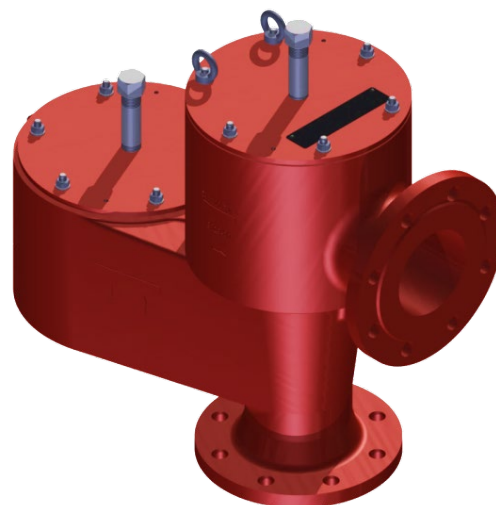
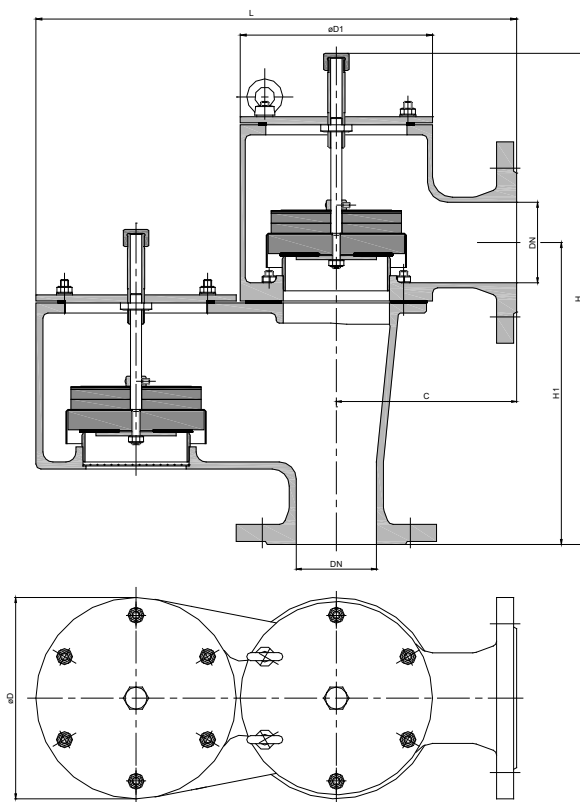
-End of line device for use in pipeline-



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. **The product vapours can be discharged through a collective line into the atmosphere connected to the line flange on the pressure side.**

Dimensions (mm) and settings (mbar)



DN		C	D	D1	H	H1	L	kg	setting	
DIN	ASME								vacuum	pressure
50 PN 16	2"	150	165	165	389	240	405	23	2-60	2-60
80 PN 16	3"	180	200	192	487	300	480	33		
100 PN 16	4"	200	250	240	547	330	600	48		
150 PN 16	6"	250	350	350	655	390	805	101		
200 PN 10	8"	300	400	390	775	480	925	140		
250 PN 10	10"	305	460	460	875	555	1010	193		
300 PN 10	12"	305	460	460	875	582	1010	201		

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

Example for order

KITO® VD/oG-PA-50

(design DN 50 with flange connection DN 50 PN 16)

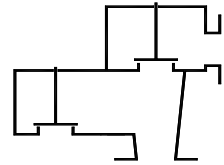
Without EC certificate and CE-marking

**KITO**

Armaturen GmbH

Type sheet

In-line pressure and vacuum relief valve

KITO® VD/oG-PA-...**-End of line device for use in pipeline-****Design**

	standard	optionally
housing upper part (PN 1)	cast steel mat. no. 1.0619	stainless cast steel mat. no. 1.4408
housing lower part	cast steel mat. no. 1.0619	stainless cast steel mat. no. 1.4408
cover	steel	stainless steel mat. no. 1.4301
gasket	PTFE	
valve seat	stainless steel mat. no. 1.4571	
flange connection	EN 1092-1 type B1	ASME B16.5 Class 150 RF

Design valve pallet

design	pressure range I 2 - < 3.5 mbar	pressure range II ≥ 3.5 - 14 mbar	pressure range III > 14 - 35 mbar	pressure range IV > 35 - 60 mbar	pressure range M-I ≥ 3.5 - < 10 mbar*	pressure range M-II ≥ 10 - 60 mbar
pallet	aluminum	stainless steel	stainless steel	stainless steel	aluminum*	stainless steel
valve spindle	aluminum / stainless steel	stainless steel	stainless steel	stainless steel	aluminum	stainless steel
valve sealing	FEP & HD3822	FEP & HD3822	PTFE	PTFE	metallic	metallic

* DN 50 ≥ 4.4 - pallet DN 50 aluminum / stainless steel

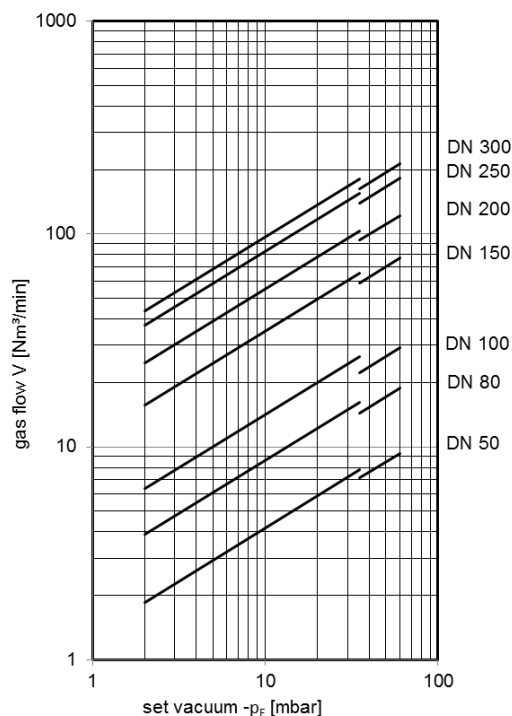
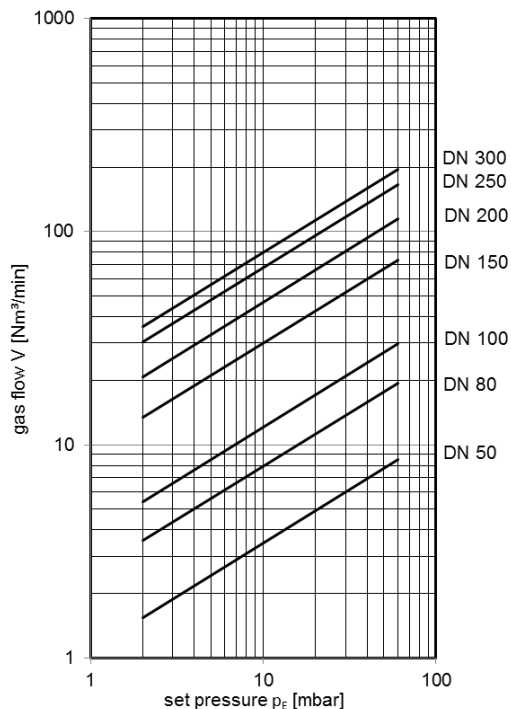
stainless steel = 1.4571

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

$$\dot{V}_{20\%} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \quad \text{or} \quad \dot{V}_b = \dot{V}_{20\%} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

The indicated flow rates will be reached by an accumulation of 20 % above valve's setting (see DIN 4119).



page 2 of 3

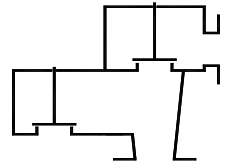


Type sheet

In-line pressure and vacuum relief valve

KITO® VD/oG-PA-...

-End of line device for use in pipeline-



$$\dot{V}_{10\%} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \quad \text{or} \quad \dot{V}_b = \dot{V}_{10\%} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

The volume flow at reduced lift will be reached by an accumulation of 10 % above valve's setting (see DIN 4119).

