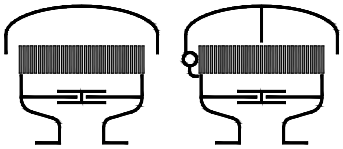
KITO Armaturen GmbH

Type sheet

Deflagration and endurance burning
proof pressure and vacuum relief valve
KITO® VD/KS-IIA-…-A
KITO® VD/KS-IIA-…-K

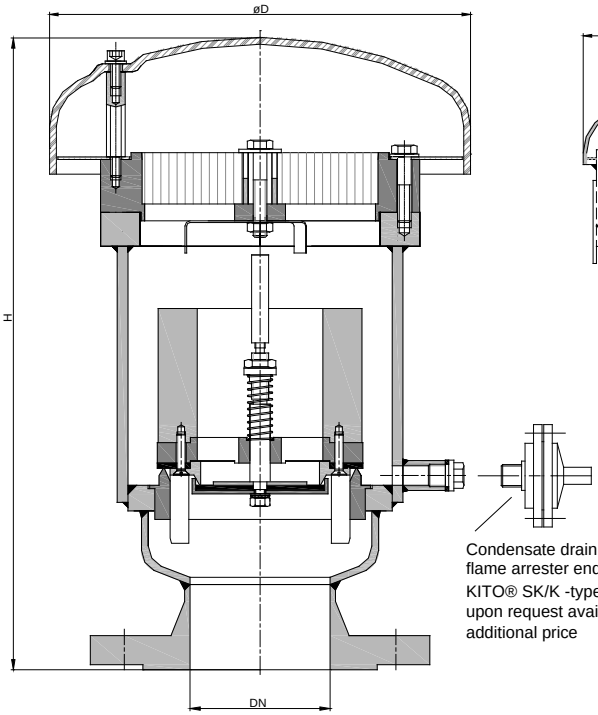


Application

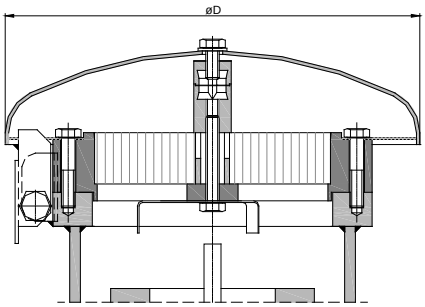
Proof for products of explosion group IIA with a maximum experimental safe gap (MESG) > 0.9 mm and an maximum operating temperature of 60 °C. Mainly used as equipment of fixed roof tanks for venting and inbreathing to prevent undue pressure resp. vacuum and undesired losses of vaporization, respectively undue emissions. Installation on top of storage vessels. Available with an explosion and endurance burning proofed condensate drain device.

Dimensions (mm) and settings (mbar)

KITO® VD/KS-IIA-...-A



KITO® VD/KS-IIA-...-K



Condensate drain flame arrester – End-of-line deflagration flame arrester endurance burning proof
KITO® SK/K -type sheet L30 N-
upon request available against additional price

DN		D	H		~kg	setting vacuum	setting pressure	
DIN	ASME		DIN	ASME		min. - max.	min. - max.	min. - max. *(with housing extension)*
50 PN 16	2“	220	315	335	13.5	3 -100	10 – 50	> 50 - 200
80 PN 16	3“	245	372	390	20.5	3 - 50	12 - 63	> 63 - 200
100 PN 16	4“		370	395	22	3 - 50	10 - 60	> 60 - 200

Indicated weights are understood without weight load and refer to the standard design
Attention !!! Dimension H for design with a weather hood from stainless steel 1.4571 ca. 10-15 mm lower
Higher settings see KITO® VD/KS-1-IIA-…-… (type sheet E 13.1 N)
For largr sizes, we recommend : DN 80-200→ KITO® VD/MC-IIA-…-K or -A (type sheet E 16.9 N)

Example for order

KITO® VD/KS-IIA-50-A
(design with weather hood from PMMA and flange connection DN 50 PN 16)

Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

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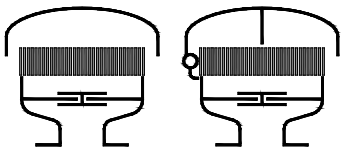


Design

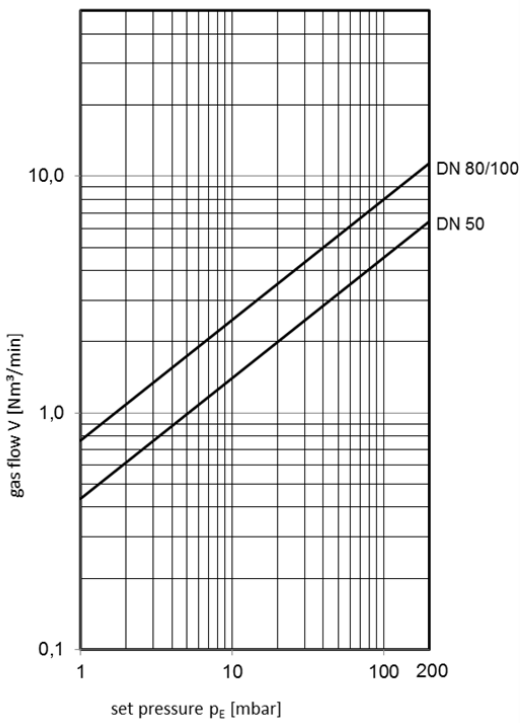
	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
valve seat, valve spindle	stainless steel mat. no. 1.4571	
load weight	stainless steel mat. no. 1.4571	
valve sealing	NBR	Viton, PTFE, EPDM, metal sealing
	≥ 100 mbar only PTFE or metal sealing (valve pallet for pressure)	
valve pallet (vacuum)	spring loaded	
valve pallet (pressure)	weight loaded	
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4308 / 1.4310	stainless steel mat. no. 1.4408 / 1.4571
weather hood **KITO® VD/KS-IIA-…-A**	PMMA	
weather hood **KITO® VD/KS-IIA-…-K**	stainless steel mat. no. 1.4571, hood can fold automatically as a result of folding mechanism and fusing element	
protective screen	PA6	
flange connection	EN 1092-1 type B1	ASME B16.5 Class 150 RF

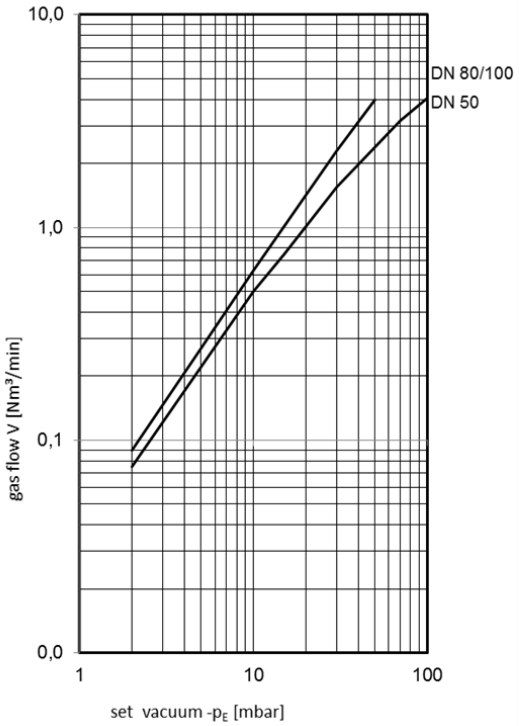
Performance curves

Flow capacity V based on air of a density ρ = 1.29 kg/m³ at T = 273 K and atmospheric pressure p = 1.013 mbar. For other gases the flow can be approximately calculated by

$$\dot{V}_{40\%} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \qquad or \qquad \dot{V}_b = \dot{V}_{40\%} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

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.





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