

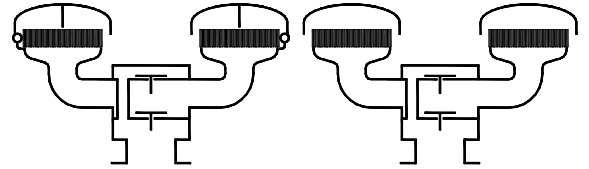


Type sheet

Deflagration and endurance burning proof pressure and vacuum relief valve

KITO® VD/MC-IIA-...-A

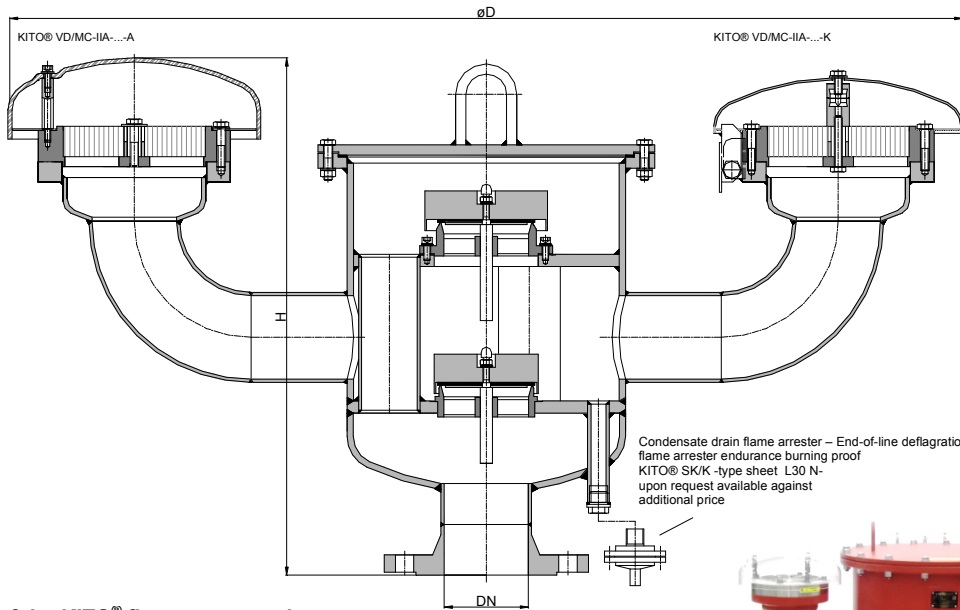
KITO® VD/MC-IIA-...-K



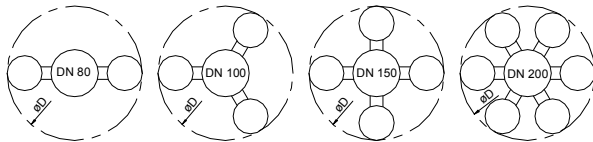
Application

Installations, explosion-proof and endurance burning proof for certain flammable liquids of the explosion group IIA with a maximum experimental safe gap (MESG) > 0.9 mm and an maximum operating temperature of 60 °C. As venting and breather device for fixed roof tanks to prevent inadmissible pressure and vacuum and to minimize gas losses by variable pressure setting of the weight-loaded and/or spring-loaded valve devices. Installation of an explosion-proof condensate drain device is possible.

Dimensions (mm) and settings (mbar)



Arrangement of the KITO® flame arrester elements



DN		D	H	number of KITO® flame arrester elements	setting		kg	
DIN	ASME				vacuum min. - max.	pressure min. - max.		
80	PN 16	3"	940	500	2	2.9 - 60	1.8 - 100	58
100	PN 16	4"	1054	530	3	2.5 - 70	1.7 - 100	110
125	PN 16	5"						
150	PN 16	6"	1234	535	4	2.9 - 60	2.1 - 110	
200	PN 10	8"	1634	680	6	2.9 - 65	2.1 - 105	235
250	PN 10	10"						240
300	PN 10	12"						245

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 on request !

Example for order

KITO® VD/MC-IIA-80-A

(design with weather hood from PMMA and flange connection DN 80 PN 16)

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

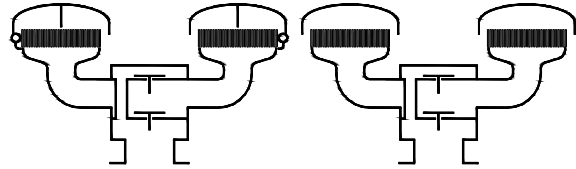


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KITO® VD/MC-IIA-....-K



Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
gasket	HD 3822	PTFE
design valve pallet	orifice plate	
valve seat, valve spindle	stainless steel mat. no. 1.4571	
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>	
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/MC-IIA-....-A	PMMA	
weather hood KITO® VD/MC-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 $\rho = 1.29 \text{ kg/m}^3$ 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.

