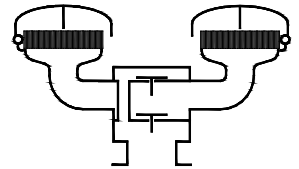


Type sheet

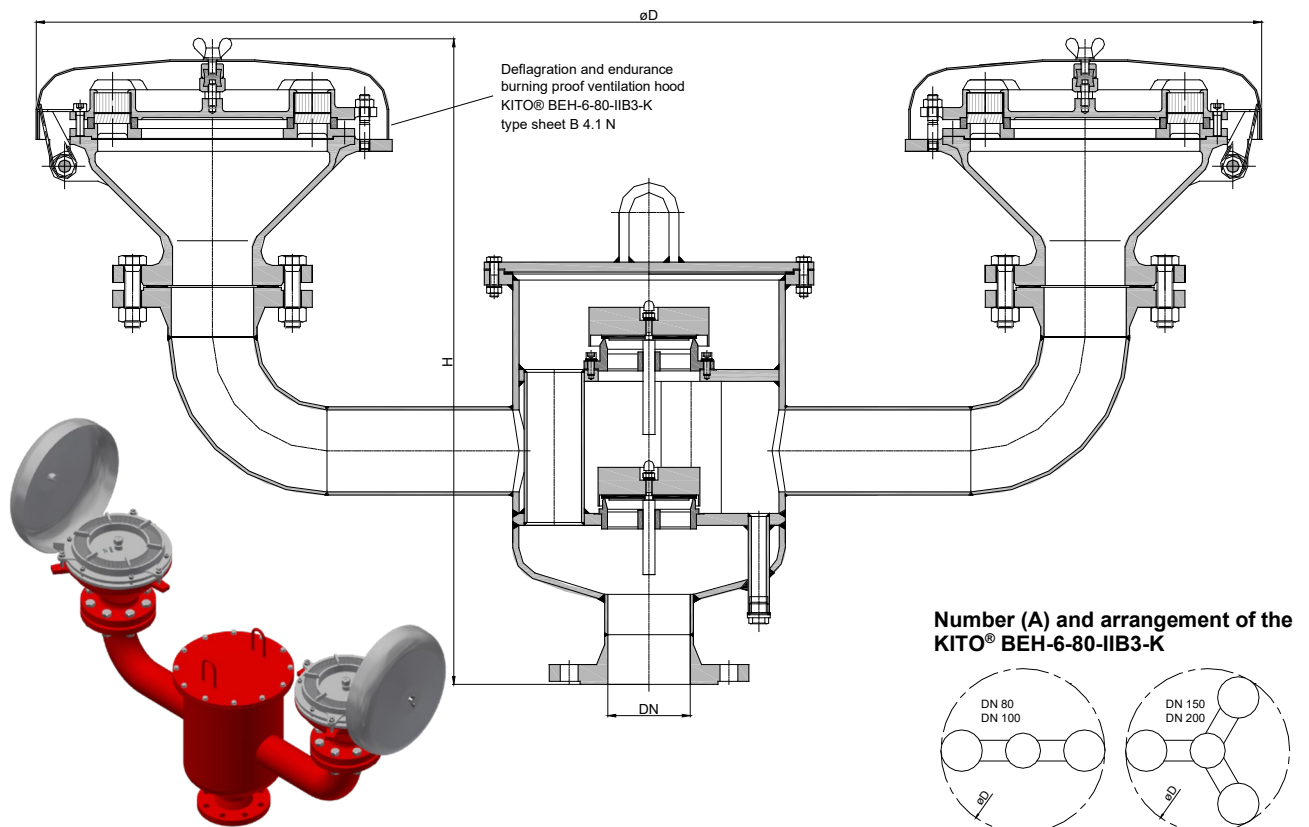
Deflagration and endurance burning
proof pressure and vacuum relief valve
KITO® VD/MC-IIB3-...



Application

Installations, explosion-proof and endurance burning proof for certain flammable liquids of the explosion group IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 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)



DN		D	H		A	setting		kg
DIN	ASME		DIN	ASME		vacuum min. - max.	pressure min. - max.	
80 PN 16	3"	1538	660	700	2	2,9 - 60	1,8 - 100	101
100 PN 16	4"		679	723		2,5 - 70	1,7 - 100	
150 PN 16	6"		695	749		2,9 - 60	2,1 - 110	
200 PN 10	8"	1723	732	792	3	2,9 - 65	2,1 - 105	

Indicated weights are understood without weight load and refer to the standard design
Higher settings on request !

Example for order

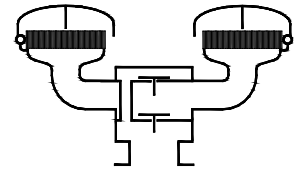
KITO® VD/MC-IIB3-80-A
(design with flange connection DN 80 PN 16)

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



Type sheet

Deflagration and endurance burning
proof pressure and vacuum relief valve
KITO® VD/MC-IIB3-...



Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
housing KITO® BEH-6-80-IIB3-K	cast steel 1.0619	stainless cast steel 1.4408
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
	$\geq 100 \text{ mbar}$ only PTFE or metal sealing	
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4408 / 1.4310	stainless steel mat. no. 1.4408 / 1.4571
weather hood	steel, hood can fold automatically as a result of folding mechanism and fusing element	stainless steel mat. no. 1.4571, hood can fold automatically as a result of folding mechanism and fusing element
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.

