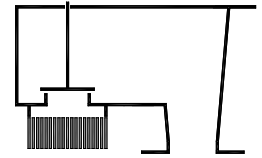


Type sheet

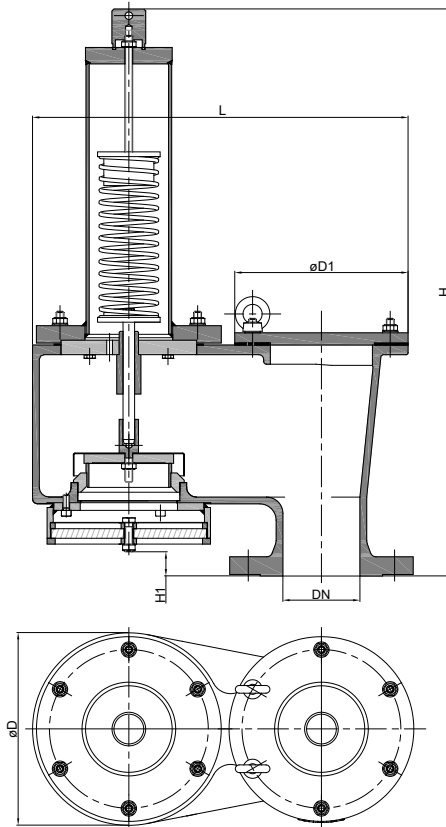
Deflagration proof vacuum relief valve
KITO® VS/KG-IIB3-... V



Application

As explosions proof end-of-line armatures, for venting apertures on tank installations for ventilation and to prevent inadmissible vacuum. Usually mounted on top of a tank. Approved for flammable liquids of explosion group IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm and an maximum operating temperature of 60 °C.

Dimensions (mm) and settings (mbar)



DIN	DN	ASME	D	D1	H	H1	L	setting	kg
50 PN 16		2"	165	140	462	3	325	>60-415	
80 PN 16		3"	200	180	589		390		
100 PN 16		4"	250	210	719		505		
150 PN 16		6"	350	315	956		713		
200 PN 10		8"	420	365	1140	12	808		
250 PN 10		10"	460	440	1190		925		
300 PN 10		12"	460	440	1190		925		

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

Example for order

KITO® VS/KG-IIB3-50 V

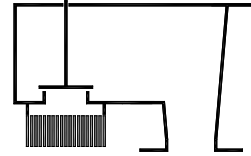
(design with flange connection DN 50 PN 16)

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

Type sheet

Deflagration proof vacuum relief valve

KITO® VS/KG-IIB3-... V



Design

	standard	optionally
housing	cast steel mat. no. 1.0619	stainless cast steel mat. no. 1.4408
cover	steel	stainless steel mat. no. 1.4301
gasket	PTFE	
design valve pallet	spring loaded	
valve seat	stainless steel mat. no. 1.4571	
valve pallet, valve spindle	stainless steel mat. no. 1.4571	
valve sealing	metal sealing	
spring loaded parts	stainless steel mat. no. 1.4571	
compression spring	stainless steel	
KITO®-flame arrester element	interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4571 / 1.4310	stainless steel mat. no. 1.4571 / 1.4571
flange connection	EN 1092-1 type B1	ASME B16.5 Class 150 RF

Performance curves

The flow capacity V refers to a density of air with $\rho = 1.29 \text{ kg/m}^3$ at a temperature of 273 K and a pressure of 1.013 mbar. The flow capacity for gases with different densities can be calculated sufficiently accurate by the following approximation equation:

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

Indicated flow rates will be reached by an accumulation of 20% above valve's setting. If the allowable overpressure is less than 20%, please consult the factory for the corrected volume flow.

