

Type sheet

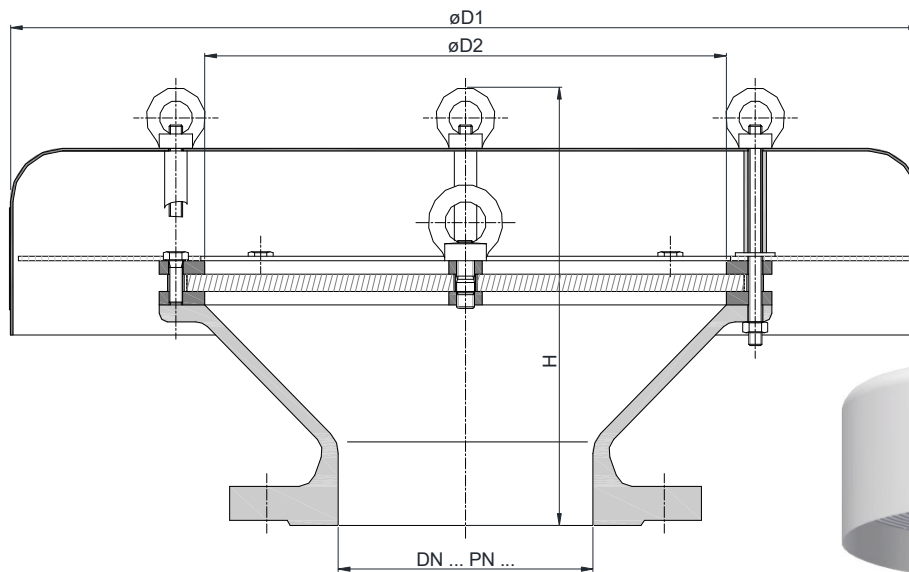
Deflagration proof ventilation hood KITO® VH-...-IIC



Application

As breather/venting safety device incorporating an explosion proof flame arrester element for installation on top of storage tanks, tank access covers or breather pipes. The breather allows the unimpeded flow of gases out to atmosphere and air into the tank/pipe thereby preventing vacuum locks whilst ensuring provision of a permanent and reliable protection against any flashback into the tank/pipe. This device is not permitted to be installed in enclosed areas. Approved for all materials of the explosion group IIC with a maximum experimental safe gap (MESG) < 0.5 mm and an maximum operating temperature of 60 °C.

Dimensions (mm)



DN			D1	D2	H		kg
DIN	ASME						
50 PN 16	2"		285	110	180		8
80 PN 16	3"		330	150	190		13
100 PN 16	4"		405	185	230		18
150 PN 16	6"		550	315	270		36
200 PN 10	8"	40					
250 PN 10	10"		600	395	365		74
300 PN 10	12"	73					
350 PN 10	14"		800	595	360	406	73
400 PN 10	16"	112					
450 PN 10	18"		1000	700	415	474	112
500 PN 10	20"	127					
600 PN 10	24"		1200	800	410	465	127
700 PN 10	-	173					
800 PN 10	-		1400	1000	425	495	173
			1600	1210	495	568	250
					530	-	348
					570	-	457

Weight refers to the standard design

Example for order

KITO® VH-300-IIC

(design with flange connection DN 300 PN 10)

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

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Deflagration proof ventilation hood

KITO® VH-...-IIC



Design

	standard	optionally
housing	cast steel 1.0619 (≥ DN 350 steel)	stainless cast steel 1.4408 (≥ DN 350 stainless steel mat. no. 1.4571)
gasket	HD 3822	PTFE
KITO®-flame arrester element	completely interchangeable	
KITO®-casing	steel	stainless steel mat. no. 1.4571
KITO®-grid	stainless steel mat. no. 1.4310	stainless steel mat. no. 1.4571
weather hood	stainless steel	
protective screen (not for DN 50-100)	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
flange connection	EN 1092-1 type B1	ASME B16.5 Class 150 RF

Performance curves

Flow capacity \dot{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

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

