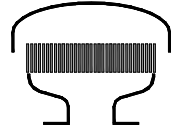


Type sheet

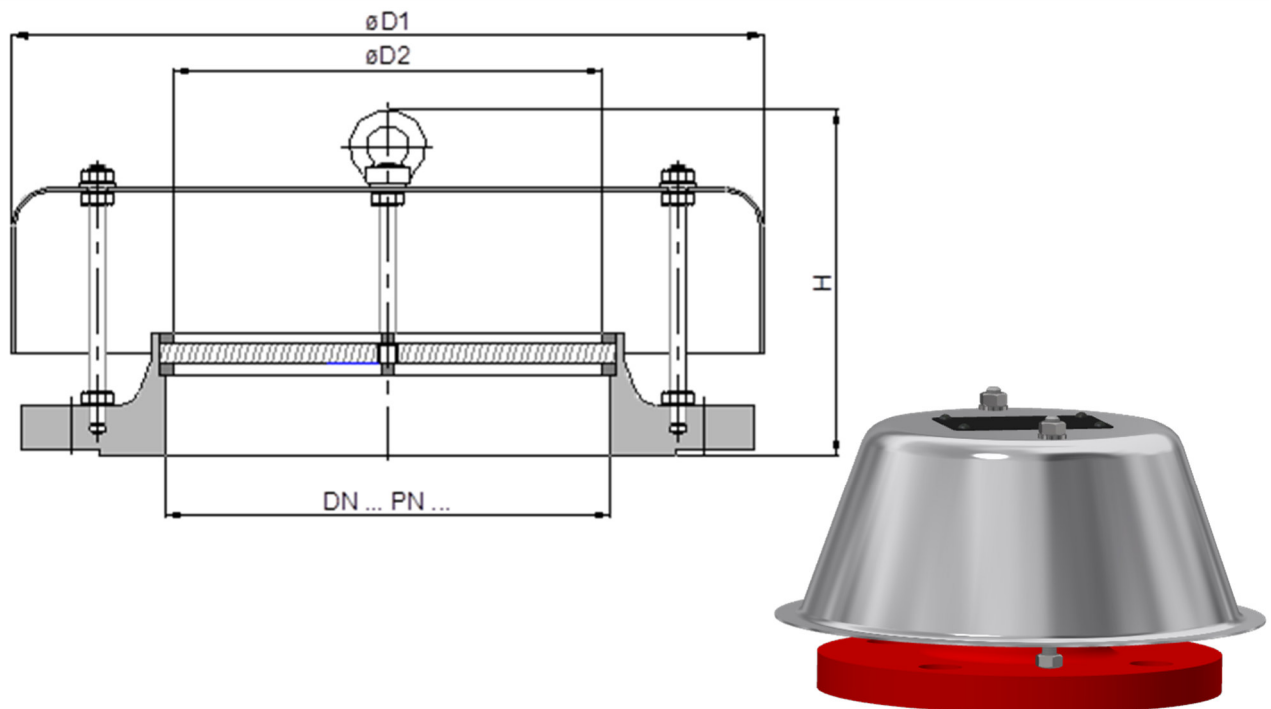
Deflagration proof ventilation hood
KITO® VND-...-IIB3



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 IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 and an maximum operating temperature of 60 °C.

Dimensions (mm)



DN		D1	D2	H (DIN)	H (ASME)	kg	
DIN	ASME						
25	PN 40	1"	200	26	111	128	2,0
32	PN 40	1 1/4"	200	33	111	129	2,3
40	PN 40	1 1/2"	200	39	120	135	2,5
50	PN 16	2"	205	46	121	142	3,2
65	PN 16	2 1/2"	246	62	116	125	3,7
80	PN 16	3"	286	74	171	190	5,3
100	PN 16	4"	331	100	192	216	6,5
125	PN 16	5"	406	125	210	244	8,5
150	PN 16	6"	406	152	210	244	10,8
200	PN 10	8"	465	200	217	256	17,6
250	PN 10	10"	465	253	223	256	22,0
300	PN 10	12"	550	305	223	268	26,0

Weight refers to the standard design

Example for order

KITO® VND-50-IIB3
 (design with 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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Type sheet

Deflagration proof ventilation hood
KITO® VND-...-IB3



Design

	variant I	variant II
housing	steel	stainless steel mat. no. 1.4571
KITO®-flame arrester element	not 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	
flange connection	EN 1092-1 type B1 <i>optionally</i> 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

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

