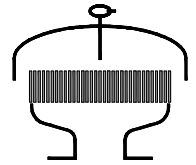


Type sheet

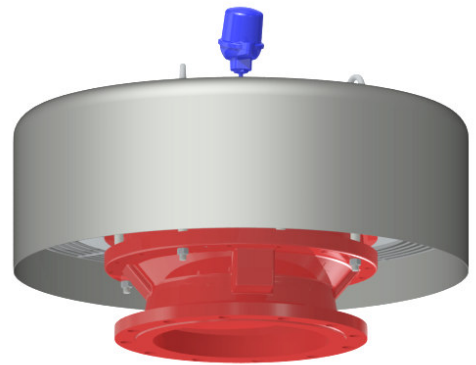
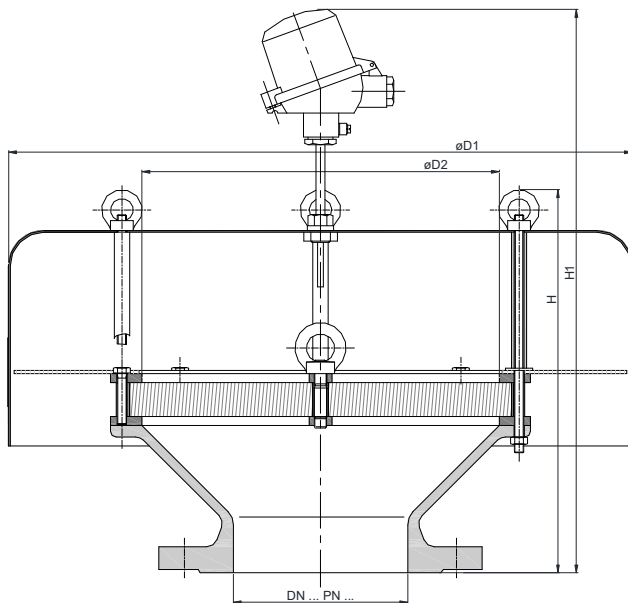
Deflagration and short-time burning proof ventilation hood KITO® VH-...-IIB3-T



Application

As breather/venting safety device incorporating an explosion and short-time burn 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 mm and an maximum operating temperature of 60 °C. Design with temperature sensor, to detect a "stabilized burning" (burn time 1 minute).

Dimensions (mm)



DN		ASME	D1	D2	H		H1		kg
DIN									
50	PN 16	2"	285	110	214		390		8.5
80	PN 16	3"	295	150	242		430		14.5
100	PN 16	4"	350	185	297		454		20
150	PN 16	6"	600	315	342		500		41
200	PN 10	8"							45
250	PN 10	10"	800	395	474		614		84
300	PN 10	12"			462	509	604	651	81
350	PN 10	14"	1000	595	507	567	649	709	136
400	PN 10	16"			502	558	644	700	152
450	PN 10	18"	1200	700	-	611	-	753	
500	PN 10	20"			537	607	679	749	188
600	PN 10	24"		800	660	734	803	876	253
700	PN 10	-	1500	1000	691	-	834	-	376
800	PN 10	-	1700	1210	734	-	876	-	495

Weight refers to the standard design

Example for order

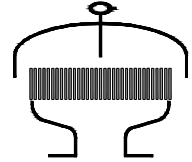
KITO® VH-300-IIB3-T

(design with flange connection DN 300 PN 10 and a temperature sensor)

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

Type sheet

Deflagration and short-time burning proof ventilation hood
KITO® VH-...-IIB3-T



Design

	standard	optionally
housing	cast steel 1.0619 (≥ DN 350 steel)	stainless cast steel 1.4408 (≥ DN 350 stainless steel mat. no. 1.4571)
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	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
temperature sensor	PT 100, connection 3/8", 1.4571	
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

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

