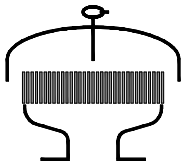
KITO Armaturen GmbH

Type sheet

Deflagration and short-time burning proof ventilation hood

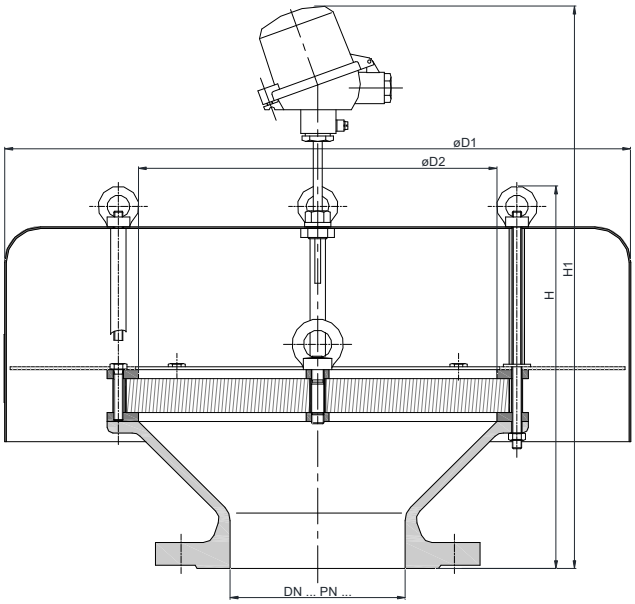
KITO® VH-...-IIC-T

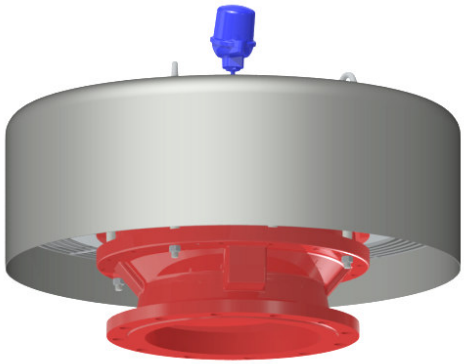


Application

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 IIC with a maximum experimental safe gap (MESG) < 0.5 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 DIN	DN ASME	D1	D2	H		H1		kg
50 PN 16	**2“**	285	110	225		410		10
80 PN 16	**3“**	295	150	254		438		18
100 PN 16	**4“**	350	185	316		474		25
150 PN 16	**6“**	600	315	366		524		54
200 PN 10	**8“**							57
250 PN 10	**10“**	800	395	487		629		105
300 PN 10	**12“**			482	529	624	671	105
350 PN 10	**14“**	1000	595	527	587	669	729	182
400 PN 10	**16“**			522	578	664	720	197
450 PN 10	**18“**	1200	700	-	631	-	773	
500 PN 10	**20“**			557	627	699	769	259
600 PN 10	**24“**		800	680	754	823	896	346
700 PN 10	**-**	1500	1000	711	-	854	-	500
800 PN 10	**-**	1700	1210	754	-	896	-	668

Weight refers to the standard design

Example for order

KITO® VH-300-IIC-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

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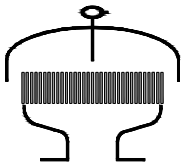


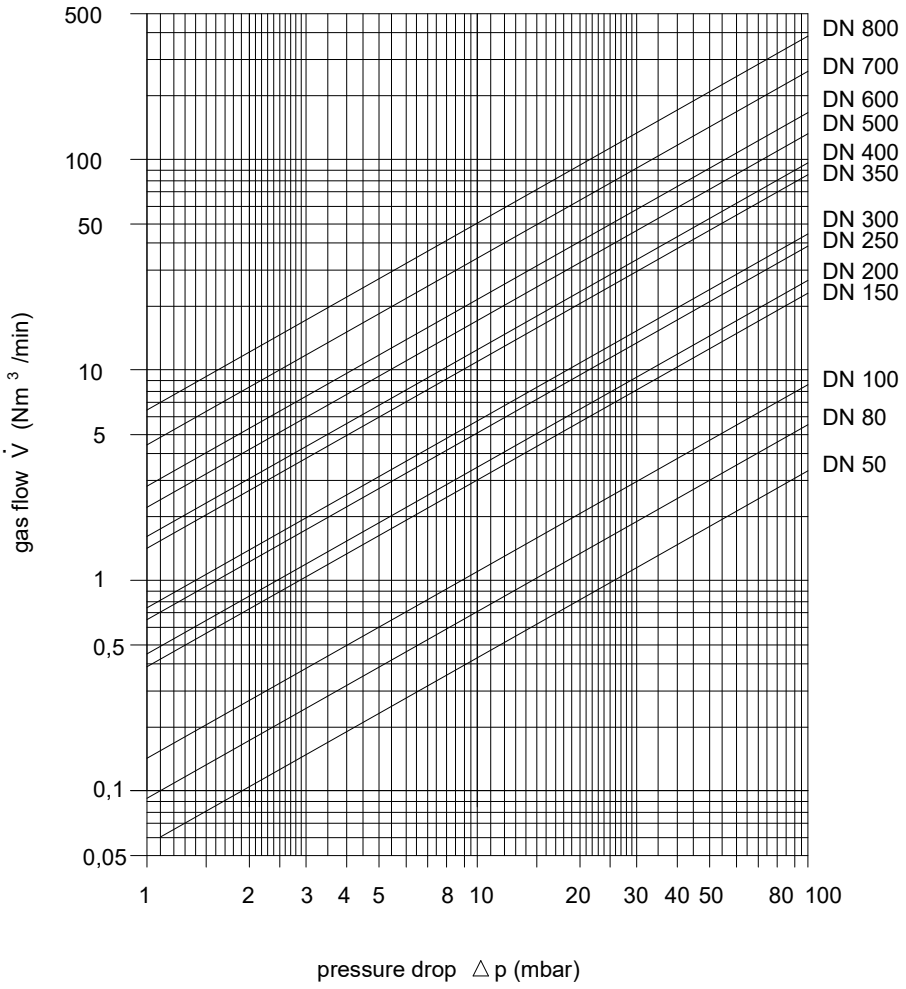
Design

	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	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 ρ = 1.29 kg/m³ at T = 273 K and atmospheric pressure p = 1.013 mbar. For other gases the flow can be approximately calculated by

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



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