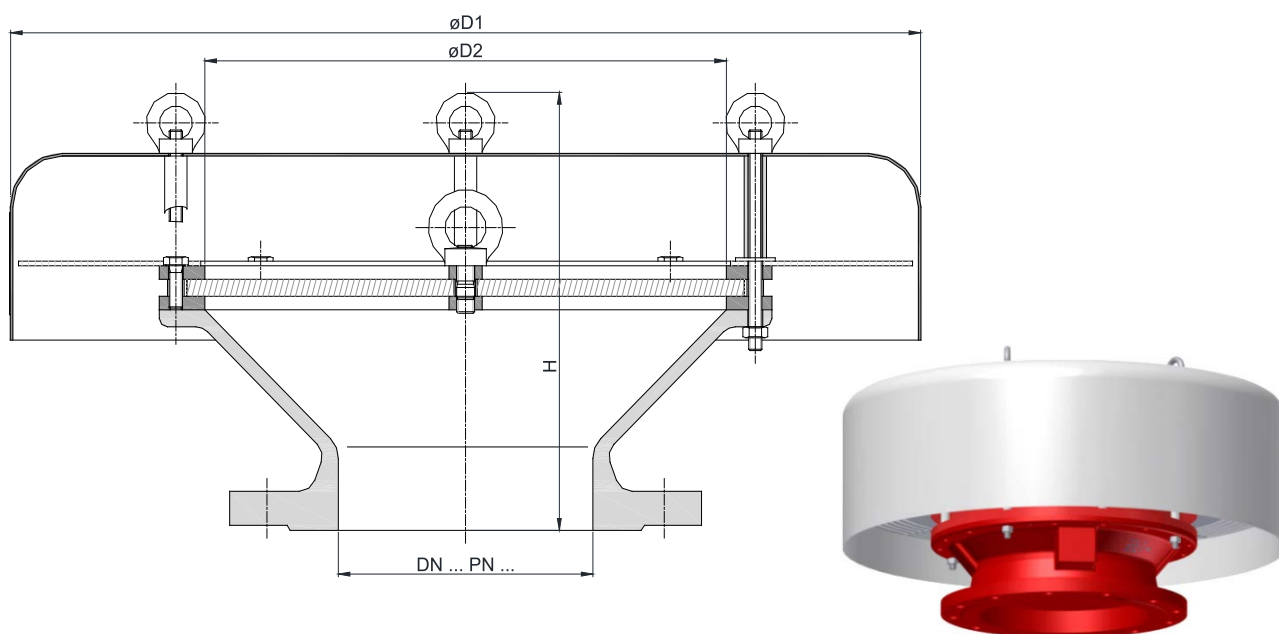


Application

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)



DIN	DN	ASME	D1	D2	H		kg
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	415	474	112
400 PN 10		16"			410	465	127
450 PN 10		18"	1000	700	-	499	
500 PN 10		20"			425	495	173
600 PN 10		24"	1200	800	495	568	250
700 PN 10		-	1400	1000	530	-	348
800 PN 10		-	1600	1210	570	-	457

Weight refers to the standard design

Example for order

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

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
flame arrester element	completely interchangeable	
casing	steel	stainless steel mat. no. 1.4571
grid	stainless steel mat. no. 1.4310	stainless steel mat. no. 1.4571
weather hood	stainless steel mat. no. 1.4301	stainless steel mat. no. 1.4571
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

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

