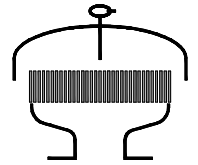


Type sheet

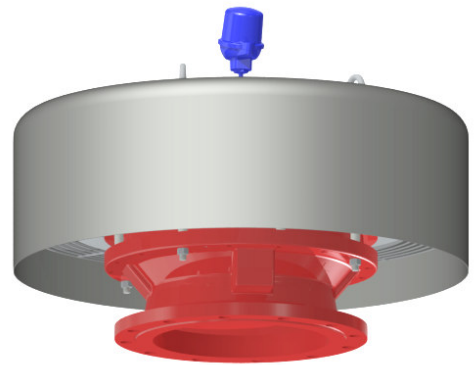
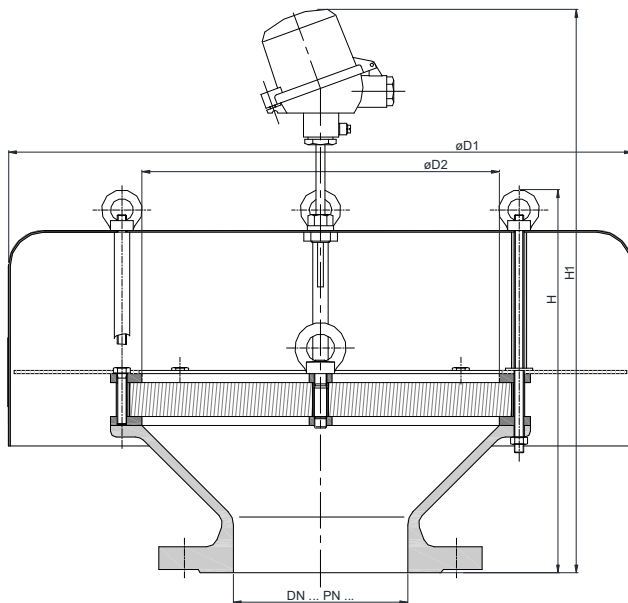
Deflagration and short-time burning proof ventilation hood KITO® VH-...-IIB3-T



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

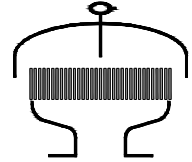
KITO® VH-300-IIB3-T

(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

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

