

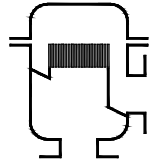


Type sheet

Uni-directional in-line detonation flame arrester, short-time burning proof

KITO® FD4-Det4-IIB-...

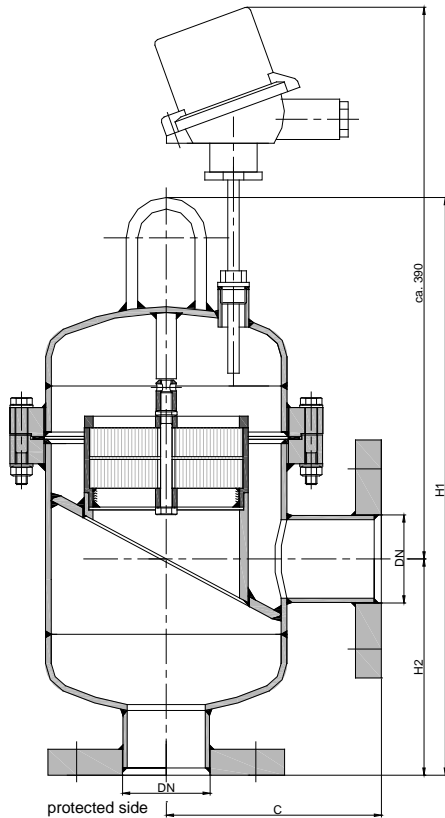
KITO® FD4-Det4-IIB-...-T



Application

For installation into pipes to protect containers and components against **stable** detonation of flammable liquids and gases. Tested and approved as detonation flame arrester **type 4**. Approved for all substances of explosion groups IIA1 to IIB with a maximum experimental safe gap (MESG) ≥ 0.5 mm. Working unidirectional in pipes, whereby an operating pressure of 1.1 bar abs. and an maximum operating temperature of 60 °C must not be exceeded. Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.

Dimensions (mm)



| DIN | DN | ASME | C | H1 | H2 | kg |
|----------|----|--------|-----|-----|-----|------|
| 25 PN 40 | | 1" | 150 | 400 | 150 | 18.5 |
| 32 PN 40 | | 1 1/4" | | | | 19 |
| 40 PN 40 | | 1 1/2" | | | | 20 |
| 50 PN 16 | | 2" | | | | 21 |

Weight refers to the standard design

Example for order

KITO® FD4-Det4-IIB-50-T

(design with flange connection DN 50 PN 16 and a temperature sensor)

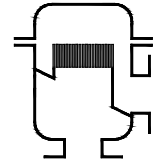
Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

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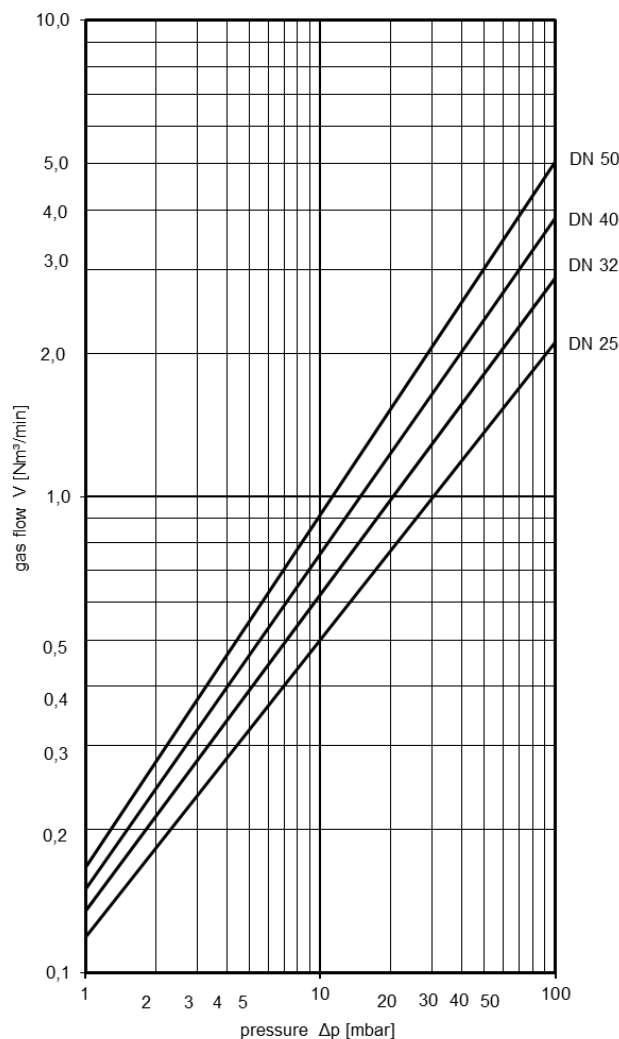
Design

| | standard | optionally |
|------------------------------|--|---------------------------------|
| housing / cover | steel | stainless steel mat. no. 1.4571 |
| gasket | HD 3822 | PTFE |
| KITO®-flame arrester element | completely interchangeable | |
| KITO®-casing / KITO®-grid | stainless steel mat. no. 1.4571 / 1.4571 | |
| temperature sensor | | PT 100, connection 3/8", 1.4571 |
| flange connection | EN 1092-1 Form 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

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



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