

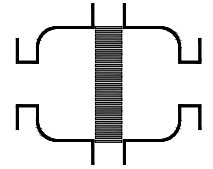


Type sheet

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

KITO® CFA-Det4-IIA-.../...-...

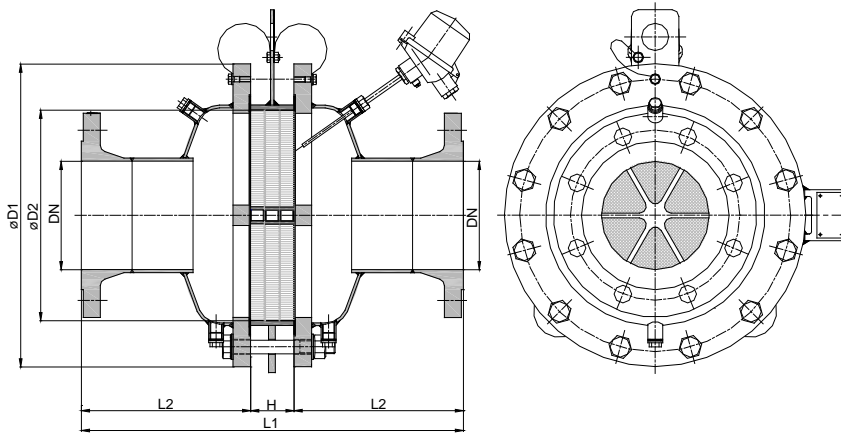
KITO® CFA-Det4-IIA-.../...-T (-TT)



Application

For installation into pipes to the protection of vessels 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 IIA with a maximum experimental safe gap (MESG) > 0.9 mm. Bi-directionally working in pipes, whereby an operating pressure of 2.5 bar abs. up to NG 300, $p_{max} = 2.0$ bar abs. from NG 400 and an operating temperature of 60 °C must not be exceeded. The installation of the detonation flame arrester into horizontal and vertical pipes is permissible. Provided with one or two temperature sensors (PT 100) the armature is certified against short time burning from one or both sides. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected. Equipped with two head pipes plugs for draining condensate.

Dimension (mm)



| NG | DN | | D1 | D2 | L1 | H | L2 | p _{max.} (bar abs.) | kg |
|-----|-----------|--------|------|-----|------|-----|-----|---------------------------------|-----|
| | DIN | ASME | | | | | | | |
| 150 | 50 PN 16 | 2" | 285 | 159 | 324 | 64 | 130 | 2.5 | 35 |
| | 65 PN 16 | 2 1/2" | | | | | | | 36 |
| | 80 PN 16 | 3" | | | | | | | 38 |
| 200 | 80 PN 16 | 3" | 340 | 206 | 374 | 64 | 155 | 2.5 | 53 |
| | 100 PN 16 | 4" | | | | | | | 54 |
| | 100 PN 16 | 4" | | | | | | | 94 |
| 300 | 125 PN 16 | 5" | 445 | 308 | 586 | 86 | 250 | 2.5 | 102 |
| | 150 PN 16 | 6" | | | | | | | 105 |
| | 150 PN 16 | 6" | | | | | | | 161 |
| 400 | 200 PN 10 | 8" | 565 | 388 | 686 | 86 | 300 | 2.0 | 168 |
| | 200 PN 10 | 8" | | | | | | | 237 |
| 500 | 250 PN 10 | 10" | 670 | 485 | 846 | 86 | 380 | 2.0 | 245 |
| | 250 PN 10 | 10" | | | | | | | 361 |
| 600 | 300 PN 10 | 12" | 780 | 584 | 986 | 86 | 450 | 2.0 | 366 |
| | 300 PN 10 | 12" | | | | | | | |
| 800 | 350 PN 10 | 14" | 1015 | 815 | 1010 | 110 | 450 | 2.0 | |
| | 400 PN 10 | 16" | | | | | | | |

Weight refers to the standard design

Example for order

KITO® CFA- Det4-IIA-150/50-2.5-T

(design NG 150 with flange connection DN 50 PN 16 and a temperature sensor)

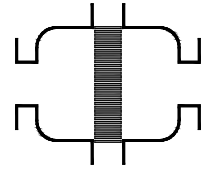
Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

Type sheet

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

KITO® CFA-Det4-IIA-.../...-...

KITO® CFA-Det4-IIA-.../...-...-T (-TT)



Design

| | standard | optionally |
|------------------------------|---------------------------------|---|
| housing | steel | stainless steel mat. no. 1.4571 |
| gasket | HD 3822 | PTFE |
| KITO®-flame arrester element | completely interchangeable | |
| KITO®-casing | steel (galvanized to NG 400) | stainless steel mat. no. 1.4571 or 1.4581 |
| KITO®-grid | stainless steel mat. no. 1.4310 | stainless steel mat. no. 1.4571 |
| bolts / nuts | galvanized steel | A2 |
| 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

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

