Armaturen GmbH

## Type sheet

Bi-directional in-line deflagration flame arrester
KITO


## Application

Installation into pipelines as inline deflagration flame arrester e. g. for the protection of ignition gas lines of gas consumption devices (flare of biogas plants). Applicable for all materials of the explosion groups IIA1 up to IIA with a maximum experimental safe gap (MESG) $>0.9 \mathrm{~mm}$. Operating from both sides, for a maximum operating pressure of 1.2 bar abs. and a maximum operating temperature of $60^{\circ} \mathrm{C}$. The distance between the ignition source and the armature may not be larger than 50 x the inside pipe diameter

## Dimension (mm)




| thread | $\mathbf{D}$ | $\mathbf{H}$ | $\mathbf{S W}$ | $\mathbf{k g}$ |
| :---: | :---: | :---: | :---: | :---: |
| G $1 / 2^{\prime \prime}$ | 30 | 44 | 24 | 0.15 |
| G $3 / 4^{\prime \prime}$ | 35 | 46 | 30 | 0.2 |
| G $1^{\prime \prime}$ | 45 | 44 | 41 | 0.3 |
| G $1 / 4^{\prime \prime}$ | 55 | 65 | 55 | 0.5 |
| G 2" | 60 | 65 | 55 | 0.6 |

Weight refers to the standard design

## Example for order

## KITO ${ }^{\circledR}$ FS-Def0-IIA-1"-1.2

(design with threaded connection G 1")
Type examination certificate to EN ISO 16852 and ( $\epsilon$-marking in accordance to ATEX-Directive
2014/34/EU

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| D-38112 Braunschweig | 品 | www.kito.de | Created: | Abt. Doku KITO |
| VAT Reg.No DE812887561 | $\Delta$ | info@kito.de | Design subject to change |  |

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Bi－directional in－line deflagration flame arrester
KITO ${ }^{\circledR}$ FS－Def0－IIA－．．．＂－1．2


Design

|  | standard | optionally |
| :--- | :--- | :--- |
| housing | stainless steel mat．no． 1.4571 |  |
| KITO $^{(A)}$－grid | stainless steel mat．no． 1.4571 |  |
| interlayer | stainless steel mat．no． 1.4571 |  |
| retaining ring | Stainless steel |  |
| connections | thread inside and outside |  |

## Performance curves

Flow capacity $V$ based on air of a density $\rho=1.29 \mathrm{~kg} / \mathrm{m}^{3}$ at $\mathrm{T}=273 \mathrm{~K}$ and atmospheric pressure $\mathrm{p}=1.013 \mathrm{mbar}$ ．For other gases the flow can be approximately calculated by

$$
\dot{\mathrm{V}}=\dot{\mathrm{V}}_{\mathrm{b}} \cdot \sqrt{\frac{\rho_{\mathrm{b}}}{1.29}} \text { or } \quad \dot{\mathrm{V}}_{\mathrm{b}}=\dot{\mathrm{V}} \cdot \sqrt{\frac{1.29}{\rho_{\mathrm{b}}}}
$$



