

# Type sheet

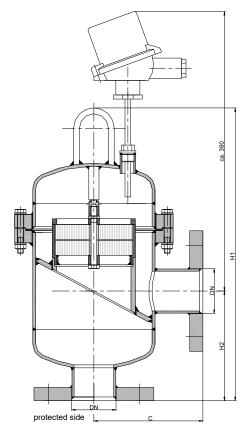
Uni-directional in-line detonation flame arrester, short-time burning proof KITO<sup>®</sup> FD4-Det4-IIB1-...-1.2 KITO<sup>®</sup> FD4-Det4-IIB1-...-1.2-T



### 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 IIB1 with a maximum experimental safe gap (MESG)  $\geq$  0.85 mm. Working unidirectional in pipes, whereby an operating pressure of 1.2 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)**





Size DN 50 / 2": the dimensions C und H2 can be adopted to older devices (e.g. KITO<sup>®</sup> xRd/T) in case of replacement.

DN		<b>^</b>		110	k a
DIN	ASME	U U	H1	H2	kg
25 PN 40	1"	150	400	150	18.5
32 PN 40	1 ¼"				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-IIB1-50-1.2-T

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

Type examination certificate to EN ISO 16852 and  $C \in Marking$  in accordance to ATEX-Directive 2014/34/EU

KITO Armaturen GmbH

→ +49 (0) 531 23000-0
 → +49 (0) 531 23000-10

Grotrian-Steinweg-Str. 1c

g 📃 www.kito.de

VAT Reg.No DE812887561 info@kito.de

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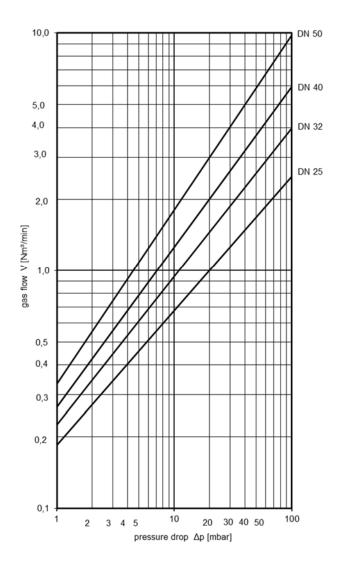
# Design

	standard	optionally
housing / cover	steel	stainless steel mat. no. 1.4571
gasket	HD 3822	PTFE
KITO <sup>®</sup> -flame arrester element	completely interchangeable	
KITO <sup>®</sup> -casing / KITO <sup>®</sup> -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 kg/m<sup>3</sup> at T = 273 K and atmospheric pressure p = 1.013 mbar. For other gases the flow can be approximately calculated by

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



KITO Armaturen GmbH Grotrian-Steinweg-Str. 1c D-38112 Braunschweig VAT Reg.No DE812887561 +49 (0) 531 23000-0 +49 (0) 531 23000-10

= +49 (0) 531 2
■ www.kito.de

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