# ▲ KTO Armaturen GmbH

Type sheet Bi-directional in-line deflagration flame arrester, short-time burning proof KITO<sup>®</sup> EFA-Def0-I-.../...-6.0 KITO<sup>®</sup> EFA-Def0-I-.../...-6.0-T (-TT)



# Application

For installation into pipes to the protection of vessels and components against deflagration of flammable liquids and gases. Approved for all substances of explosion group IIA1 (old: I) with a maximum experimental safe gap (MESG) ≥ 1.14 mm. Bi-directionally working in pipes, whereby an operating pressure of 6.0 bar abs. and an operating temperature of 60 °C must not be exceeded. The distance between a potential ignition source and the flame arrester must not exceed 50 times the inner pipe diameter. The installation of the deflagration flame arrester into horizontal and vertical pipes is permissible. When equipped with one or two temperature sensors, the devices are protected under atmospheric conditions against a short time burning by a burning time t<sub>BT</sub> = 1.0 min. If only one temperature sensor, then it is to be placed on the device side where a burning could be expected.

# **Dimension (mm)**







NG	DN		D1	D2	L1	н	L2	ka
	DIN	ASME	וט	02	LI	п	LZ	kg
65	25 PN 40	1"	155	70	290	50	120	11
05			155	70	290	50	120	
	50 PN 16	2"						26
150	65 PN 16	<b>2</b> ½"	285	159	400	50	175	
	80 PN 16	3"						43

Weight refers to the standard design

### Example for order

#### KITO<sup>®</sup> EFA-Def0-I-65/25-6.0-T

(Design NG 65 with flange connection DN 25 PN 40 and a temperature sensor)

Type examination certificate to EN ISO 16852 and CE-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 www.kito.de

D-38112 Braunschweig

VAT Reg.No DE812887561 info@kito.de  $\bowtie$ 

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# Design

	standard	optionally
housing	cast steel 1.0619	stainless cast steel 1.4408
gasket	HD 3822	PTFE
KITO <sup>®</sup> -flame arrester element	completely interchangeable	
KITO <sup>®</sup> -flame arrester element	steel	stainless steel mat. no. 1.4571
KITO <sup>®</sup> -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 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

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



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