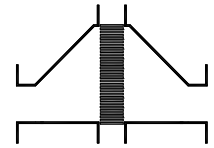


Type sheet

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

KITO® EFA-Def0-I-.../...-2.5

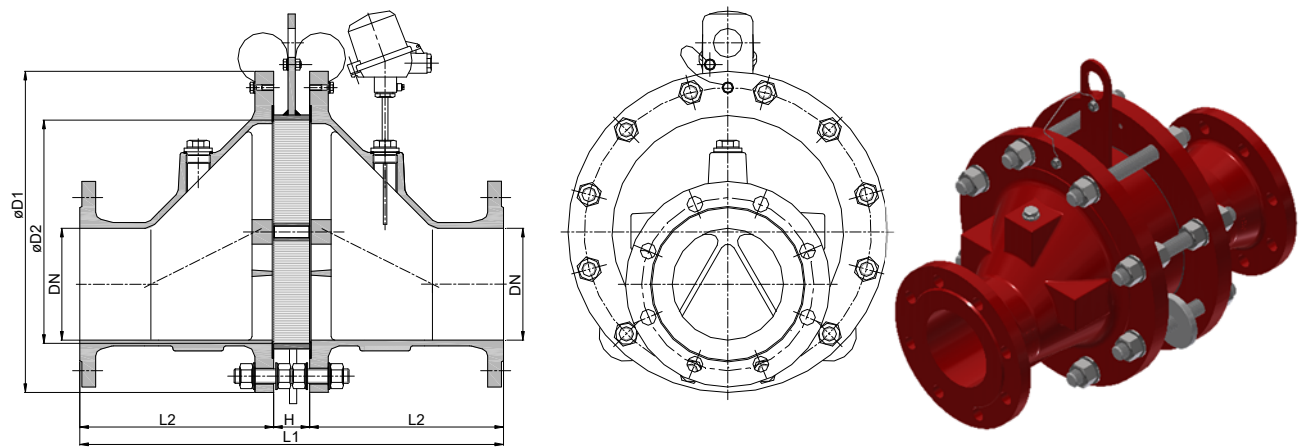
KITO® EFA-Def0-I-.../...-2.5-T (-TT)



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 2.5 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 $t_{BT} = 1.0$ 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	H	L2	kg
	DIN	ASME						
65	25 PN 40	1"	155	70	290	50	120	11
	32 PN 40	1 1/4"						12
100	40 PN 40	1 1/2"	220	106	340	50	145	24
	50 PN 16	2"						26,5
150	50 PN 16	2"	285	159	400	50	175	26
	65 PN 16	2 1/2"						42
	80 PN 16	3"						44
200	80 PN 16	3"	340	206	450	50	200	62
	100 PN 16	4"						
300	100 PN 16	4"	445	308	590	50	270	110
	125 PN 16	5"						
	150 PN 16	6"						
400	150 PN 16	6"	565	388	680	50	315	182
	200 PN 10	8"						
500	200 PN 10	8"	670	485	810	50	380	
	250 PN 10	10"						
600	250 PN 10	10"	780	584	950	50	450	
	300 PN 10	12"						

Weight refers to the standard design

Example for order

KITO® EFA-Def0-I-100/40-2.5-T

(Design NG 100 with flange connection DN 40 PN 40 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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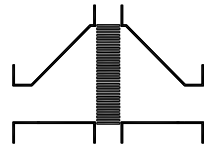
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 Date: 05-2018
 Created: Abt. Doku KITO
 Design subject to change

Type sheet

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

KITO® EFA-Def0-I-.../...-2.5

KITO® EFA-Def0-I-.../...-2.5-T (-TT)



Design

	standard	optionally
housing	cast steel 1.0619	stainless cast steel 1.4408
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

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

