

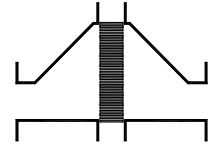


Type sheet

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

KITO® EFA-Def0-IIB3-.../...-1.2-X10

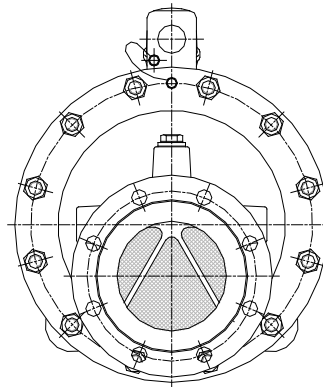
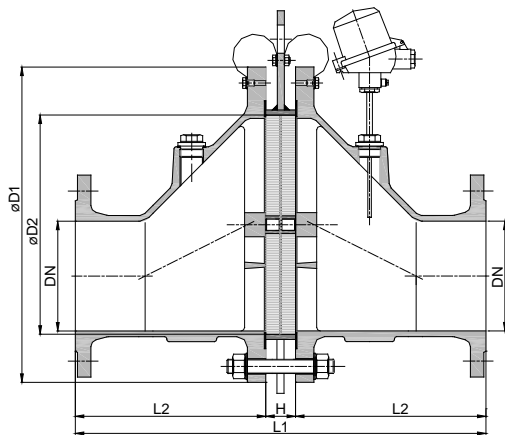
KITO® EFA-Def0-IIB3-.../...-1.2-X10-T (-TT)



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 groups IIA1 to IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm. Bi-directionally working in pipes, whereby an operating pressure of 1.2 bar abs. and an operating temperature of 100 °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	282	42	120	
	32 PN 40	1 1/4"						
100	40 PN 40	1 1/2"	220	106	332	42	145	
	50 PN 16	2"						
150	50 PN 16	2"	285	159	392	42	175	
	65 PN 16	2 1/2"						
	80 PN 16	3"						
200	80 PN 16	3"	340	206	464	64	200	62
	100 PN 16	4"						62
300	100 PN 16	4"	445	308	604	64	270	112
	125 PN 16	5"						115
	150 PN 16	6"						115
400	150 PN 16	6"	565	388	716	86	315	186
	200 PN 10	8"						206
500	200 PN 10	8"	670	485	846	86	380	292
	250 PN 10	10"						302
600	250 PN 10	10"	780	584	986	86	450	430
	300 PN 10	12"						446

Weight refers to the standard design

Example for order

KITO® EFA-Def0-IIB3-100/40-1.2-X10-T

(Design NG 100 with flange connection DN 40 PN 40 and a temperature sensor)

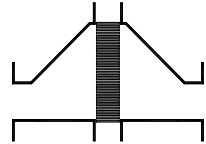
Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

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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

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

