

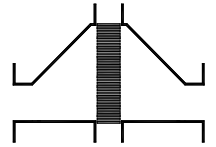


Type sheet

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

KITO® EFA-Det4-IIA-.../...-...

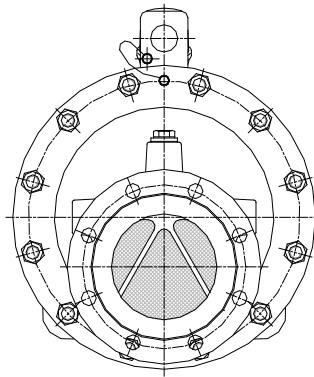
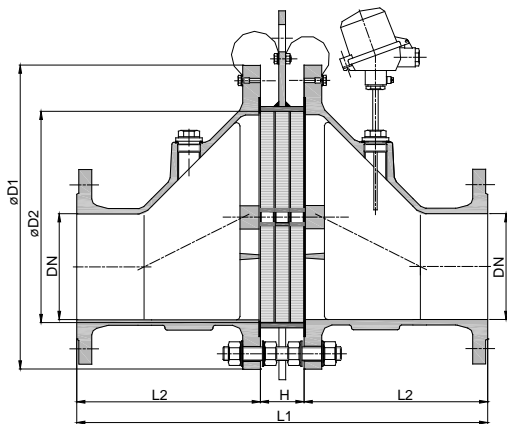
KITO® EFA-Det4-IIA-.../...-...-T (-TT)



Application

For installation into pipes to the protection of vessels 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 IIA with a maximum experimental safe gap (MESG) > 0.9 mm. Bi-directionally working in pipes, whereby an operating pressure of 2.5 bar abs. up to NG 300, $p_{max} = 2.0$ bar abs. from NG 400 and an operating temperature of 60 °C must not be exceeded. The installation of the detonation flame arrester into horizontal and vertical pipes is permissible. Provided with one or two temperature sensors (PT 100) the armature is certified against short time burning from one or both sides. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.

Dimension (mm)



NG	DN		D1	D2	L1	H	L2	p _{max.} (bar abs.)	kg
	DIN	ASME							
65	25 PN 40	1"	155	70	304	64	120	2.5	12
	32 PN 40	1 1/4"							
100	40 PN 40	1 1/2"	220	106	354	64	145	2.5	26
	50 PN 16	2"							26
150	50 PN 16	2"	285	159	414	64	175	2.5	43
	65 PN 16	2 1/2"							44
	80 PN 16	3"							46
200	80 PN 16	3"	340	206	464	64	200	2.5	64
	100 PN 16	4"							64
	100 PN 16	4"							119
300	125 PN 16	5"	445	308	626	86	270	2.5	122
	150 PN 16	6"							122
	150 PN 16	6"							186
400	200 PN 10	8"	565	388	716	86	315	2.0	206
	200 PN 10	8"							292
500	250 PN 10	10"	670	485	846	86	380	2.0	302
	250 PN 10	10"							430
600	300 PN 10	12"	780	584	986	86	450	2.0	446
	300 PN 10	12"							
800	350 PN 10	14"	1015	810	1350	110	620	2.0	
	400 PN 10	16"							

Weight refers to the standard design

Example for order

KITO® EFA-Det4-IIA-100/40-2.5-T

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

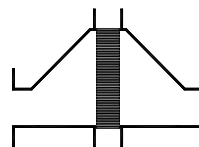
Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

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KITO® EFA-Det4-IIA-.../.....

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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

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

