

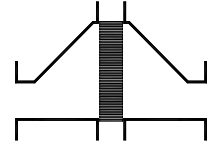


Type sheet

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

KITO® EFA-Det4-IIA-.../...-1.2

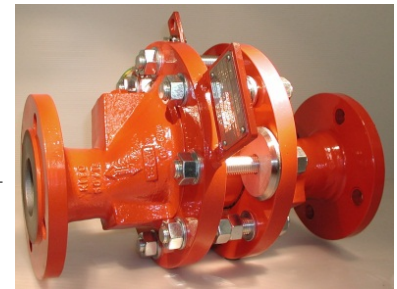
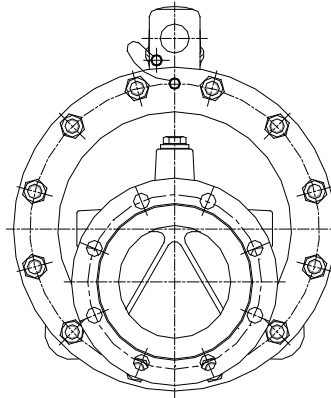
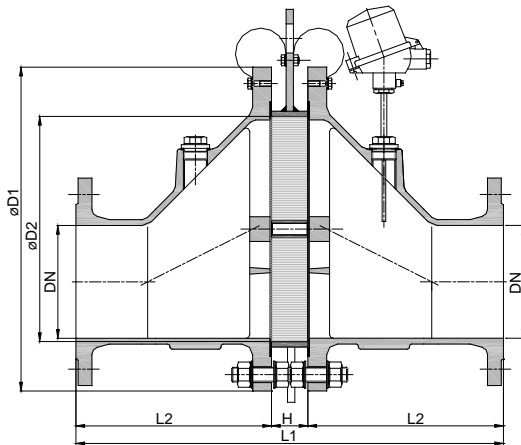
KITO® EFA-Det4-IIA-.../...-1.2-T (-TT)



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 1.2 bar abs. 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	kg
	DIN	ASME						
65	25 PN 40	1"	155	70	290	50	120	11
	32 PN 40	1 ¼"						12
100	40 PN 40	1 ½"	220	106	340	50	145	24
	50 PN 16	2"						25
150	50 PN 16	2"	285	159	400	50	175	40
	65 PN 16	2 ½"						41
	80 PN 16	3"						43
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	694	64	315	167
	200 PN 10	8"						186
500	200 PN 10	8"	670	485	824	64	380	259
	250 PN 10	10"						269
600	250 PN 10	10"	780	584	964	64	450	366
	300 PN 10	12"						382
800	350 PN 10	14"	1015	810	1350	110	620	
	400 PN 10	16"						760

Weight refers to the standard design

Example for order

KITO® EFA-Det4-IIA-100/40-1.2-T

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

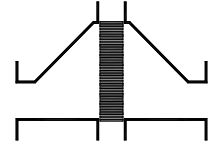
Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

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

KITO® EFA-Det4-IIA-.../...-1.2

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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

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

