

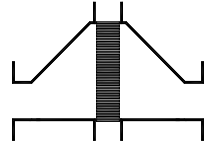


## Type sheet

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

**KITO® EFA-Det4-IIA-.../...-3.0-X12**

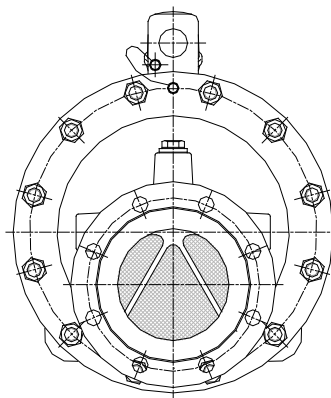
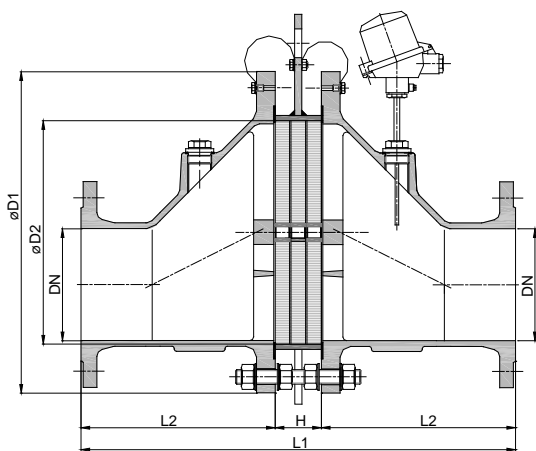
**KITO® EFA-Det4-IIA-.../...-3.0-X12-T (-TT)**



### 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 3.0 bar abs. and an operating temperature of 120 °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						
150	50 PN 16	2"	285	159	414	64	175	43
	65 PN 16	2 1/2"						44
	80 PN 16	3"						46
200	80 PN 16	3"	340	206	486	86	200	64
	100 PN 16	4"						65
	100 PN 16	4"						119
300	125 PN 16	5"	445	308	626	86	270	122
	150 PN 16	6"						122
	150 PN 16	6"						
400	200 PN 10	8"	565	388	738	108	315	
	200 PN 10	8"						
	200 PN 10	8"						
500	250 PN 10	10"	670	485	868	108	380	
	250 PN 10	10"						

Weight refers to the standard design

### Example for order

**KITO® EFA-Det4-IIA-300/150-3.0-X12-T**

(design NG 300 with flange connection DN 150 PN 16 and a temperature sensor)

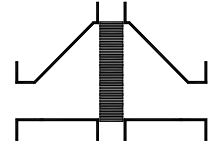
**Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU**

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

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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	stainless steel mat. no. 1.4571 or 1.4581	
KITO®-grid	stainless steel mat. no. 1.4571	
bolts / nuts	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

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

