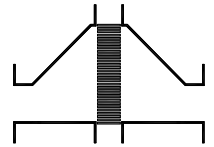# KITO Armaturen GmbH

Type sheet
Bi-directional in-line detonation flame arrester, short-time burning proof
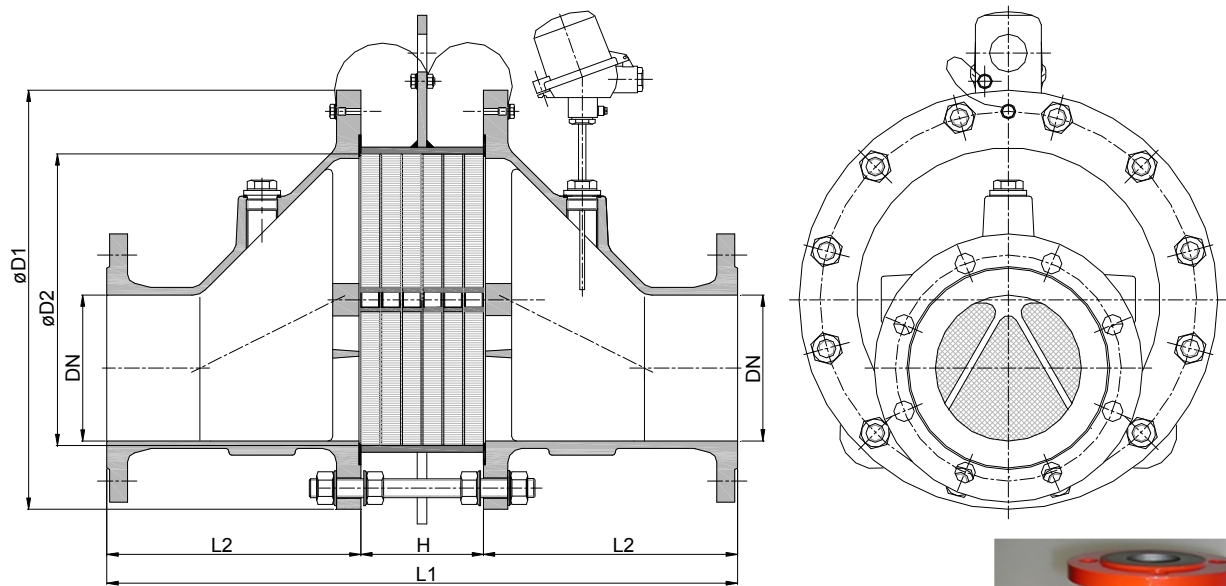## KITO® EFA-Det4-IIC-…/…-X25
KITO® EFA-Det4-IIC-…/…-X25-T (-TT)

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 IIC with a maximum experimental safe gap (MESG) < 0.5 mm. Bi-directionally working in pipes, whereby an operating pressure of 1.1 bar abs. and an operating temperature of 250 °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**						
100	**40 PN 40**	**1 ½"**	220	106	355	65	145	
	50 PN 16	**2"**						

Weight refers to the standard design

Example for order

KITO® EFA-Det4-IIC-100/40-X25-T
(design NG 100 with flange connection DN 40 PN 40 and a temperature sensor)

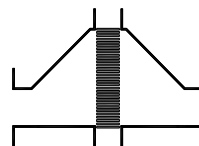***Type examination certificate to EN ISO 16852 and C€-marking in accordance to ATEX-Directive 2014/34/EU***

KITO Armaturen GmbH

Type sheet
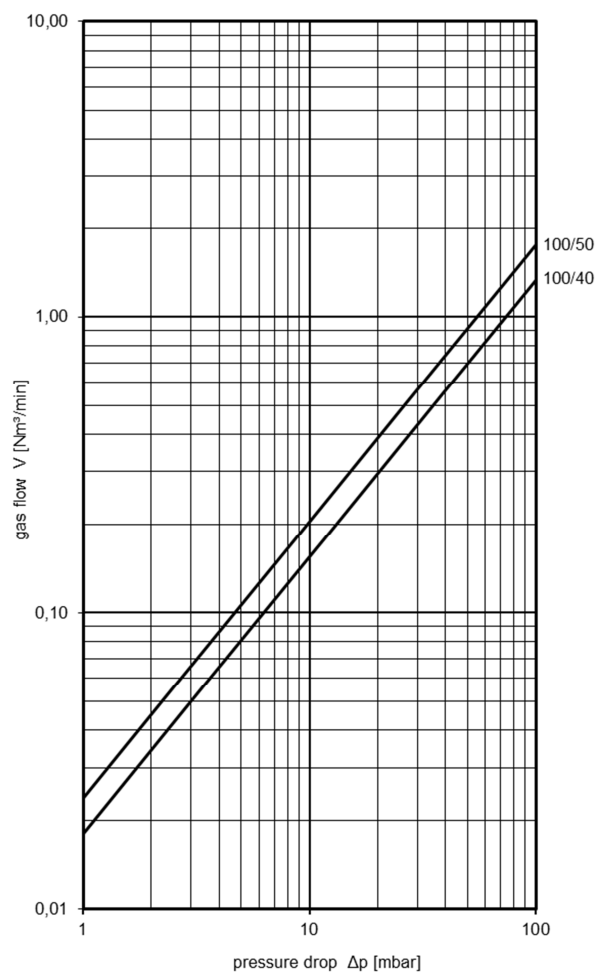**Bi-directional in-line detonation flame arrester, short-time burning proof**
KITO® EFA-Det4-IIC-…/…-X25
KITO® EFA-Det4-IIC-…/…-X25-T (-TT)

Design

	standard	optionally
housing	cast steel 1.0619	stainless cast steel 1.4408
gasket	graphite	
KITO®-flame arrester element	completely interchangeable	
KITO®-casing	stainless steel mat. no. 1.4571	
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 ρ = 1.29 kg/m³ at T = 273 K and atmospheric pressure p = 1.013 mbar. For other gases the flow can be approximately calculated by

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