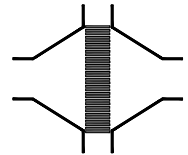


Type sheet

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

KITO® RG-Det4-IIA-...-4.5

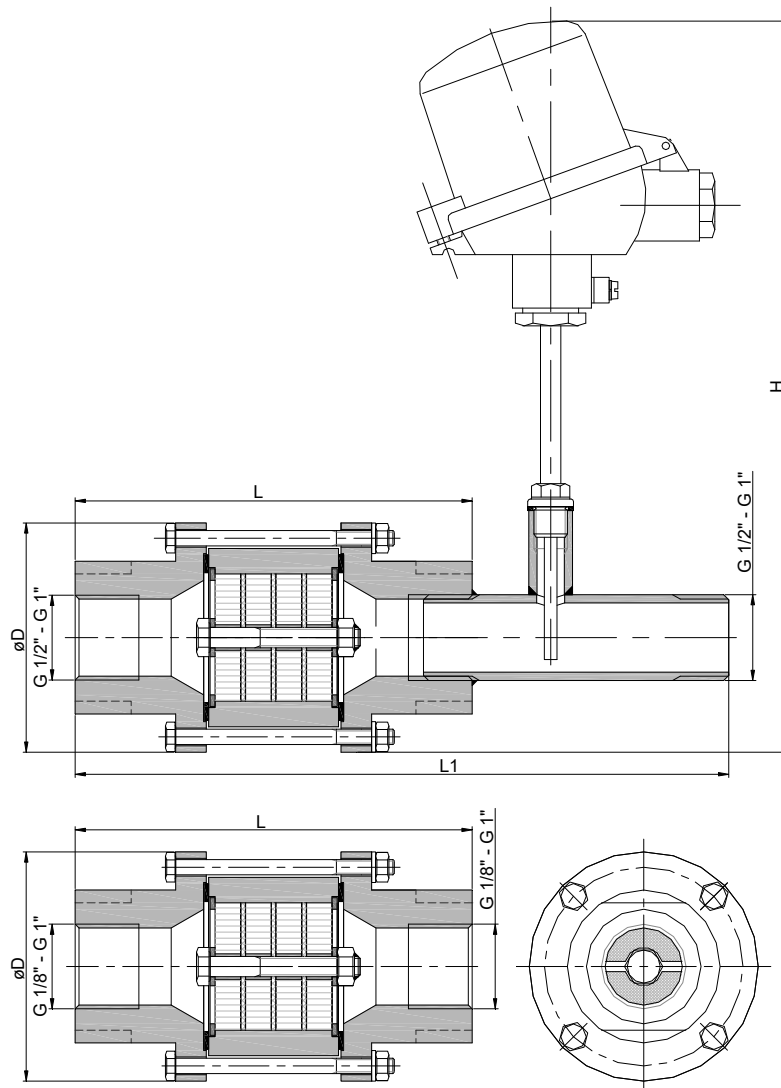
KITO® RG-Det4-IIA-...-4.5-T (-TT)



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 4.5 bar abs. and an operating temperature of 60 °C must not be exceeded. All sizes are tested against "stabilized burning" and withstand this up to a max. burn time BT ≤ 1.0 min. To detect a "stabilized burning" a temperature sensor must be installed at each endangered side. Mounting is acceptable in any position, in horizontal as well as in vertical pipes.

Dimension (mm)



G	D	L	L1	H	kg
1/8", 1/4", 3/8"	90	156	-	-	4.0
1/2", 3/4", 1"			261	290	

Weight refers to the standard design

Example for order

KITO® RG-Det4-IIA-1"-4.5-T

(design with threaded connection G 1" and a temperature sensor)

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

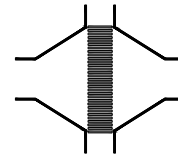
page 1 of 2

Type sheet

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

KITO® RG-Det4-IIA-...-4.5

KITO® RG-Det4-IIA-...-4.5-T (-TT)



Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
gasket	HD 3822	PTFE
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4301 / 1.4310	stainless steel mat. no. 1.4571 / 1.4571
bolts / nuts	A2	A4
temperature sensor		PT 100, connection 1/4", 1.4571
-not for connection G 1/8"- 3/8"-		
connection	thread connection	

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

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

