



KITO

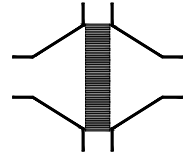
Armaturen GmbH

Type sheet

Bi-directional in-line deflagration flame arrester, endurance burning proof

KITO® RG-Def-I-...-1.3

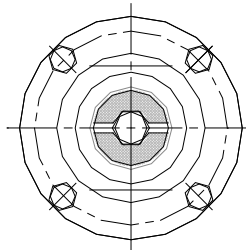
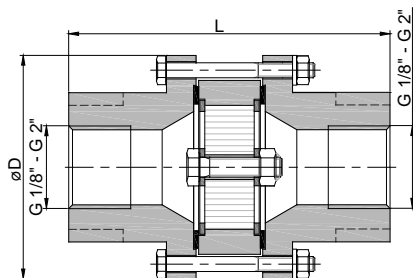
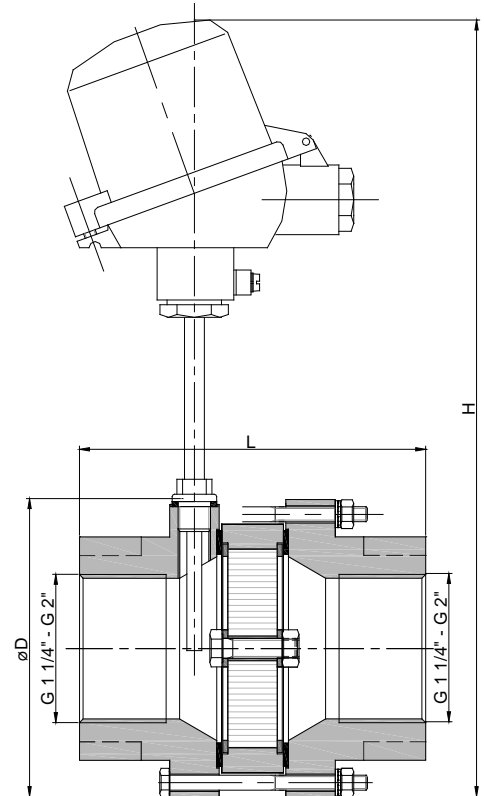
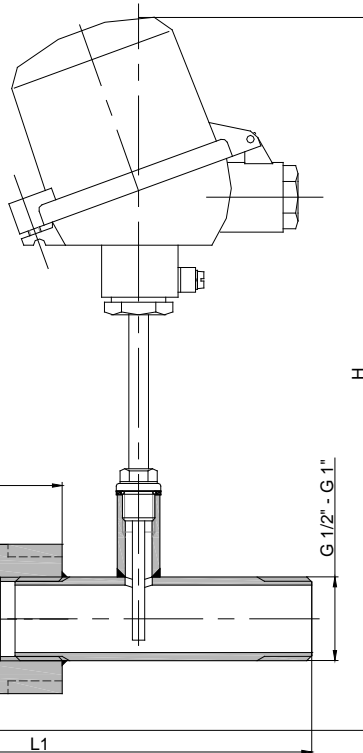
KITO® RG-Def-I-...-1.3-T (-TT)



Application

For installation into pipes to the protection of vessels and components against deflagration of flammable liquids and gases. Approved for all substances of explosion group IIA1 (old: I) with a maximum experimental safe gap (MESG) ≥ 1.14 mm. Bi-directionally working in pipes, whereby an operating pressure of 1.3 bar abs. and an operating temperature of 60 °C must not be exceeded. The distance between a potential ignition source and the flame arrester must not exceed 50 times the inner pipe diameter. All sizes are tested against "stabilized burning" and withstand this for indefinite time (endurance burn). To detect a "stabilized burning" a thermocouple can 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	130	-	-	3,0
1/2", 3/4", 1"			235	290	
1 1/4", 1 1/2", 2"	120	140	-	315	4,8

Weight refers to the standard design

Example for order

KITO® RG-Def-I-1 1/4"-1.3-T

(design with threaded connection G 1 1/4" 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



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Date: 05-2018

Created: Abt. Doku KITO

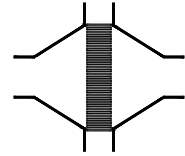
Design subject to change

Type sheet

Bi-directional in-line deflagration flame arrester, endurance burning proof

KITO® RG-Def-I-...-1.3

KITO® RG-Def-I-...-1.3-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

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

