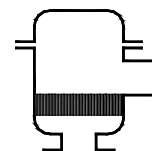


Type sheet

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

KITO® FDN-Det4-IIB3-...-1.2

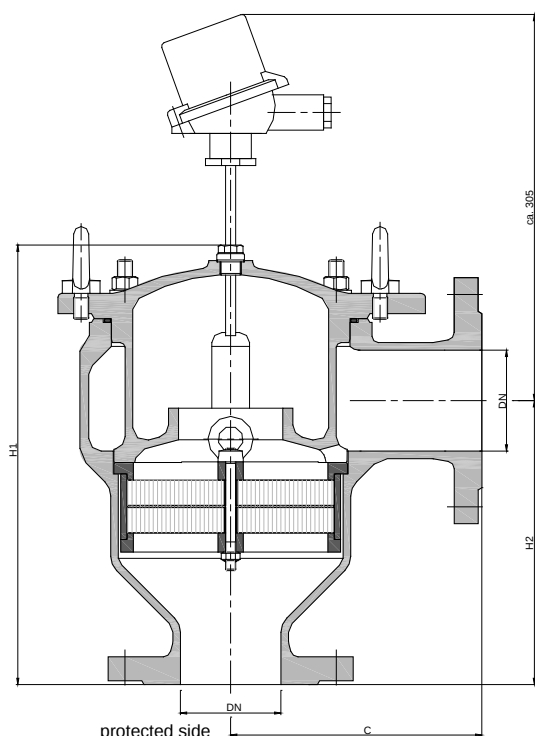
KITO® FDN-Det4-IIB3-...-1.2-T



Application

For installation into pipes to protect containers 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 IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm. Working unidirectional in pipes, whereby an operating pressure of 1.2 bar abs. and an maximum operating temperature of 60 °C must not be exceeded. Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.

Dimensions (mm)



DIN	DN	ASME	C	H1	H2	kg
25 PN 40		1"	125	206	140	
32 PN 40		1 ¼"	125	206	140	
40 PN 40		1 ½"	153	284	183	
50 PN 16		2"	155	286	185	
65 PN 16		2 ½"	198	346	223	
80 PN 16		3"	200	348	225	
100 PN 16		4"	250	415	290	

Weight refers to the standard design

Example for order

KITO® FDN-Det4-IIB3-50-1.2-T

(design with flange connection DN 50 PN 16 and a temperature sensor)

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

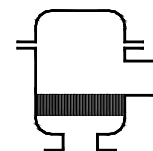
page 1 of 2

Type sheet

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

KITO® FDN-Det4-IIB3-...-1.2

KITO® FDN-Det4-IIB3-...-1.2-T



Design

	standard	optionally
housing / cover	cast steel 1.0619	cast steel 1.4408
gasket (o-ring)	Viton	PTFE
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4571 / 1.4571	
temperature sensor		PT 100, connection 3/8", 1.4571
flange connection	EN 1092-1 Form 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

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

