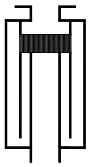
KITO Armaturen GmbH

Type sheet

Uni-directional end-of-line liquid detonation flame arrester

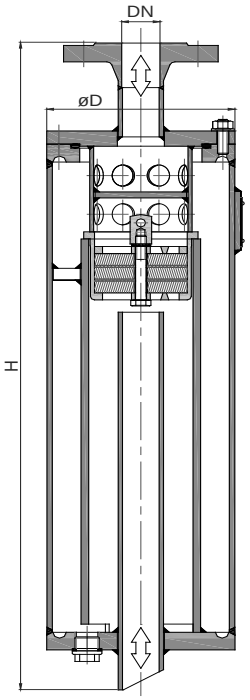
KITO® FL/IN-...-IIB3



Application

As end-of-line armature, detonation-proof and flameproof, used for mounting on the pipe end of filling and discharging pipes inside of tanks, in which inflammable liquids of the explosion groups IIA1 to IIB3 are stored, with a nominal gap width (MESG) of ≥ 0.65 mm and an maximum operating temperature of 60 °C. Equipped with a safety device against complete emptying which is constructed as flame arrester element in order to prevent the suction of sealing liquid. Tested and approved as detonation flame arrester **type 4.** Any direction of flow can be chosen. Particularly suitable for horizontal and underground vessels. Mounting position is perpendicular. It is only allowed to install pipes of nominal widths ≤ than the nominal widths of the flange. The body of the housing has to be permanently filled with storage liquid. Equipped with a hexagon head pipe plug for emptying the liquid. Suction rate *V* max specified in above table may not be exeeded.

Dimensions (mm)



DN DIN	DN ASME	D	H	*V* max [m³/h]	kg
25 PN 40	**1“**	140	552	30	15
32 PN 40	**1 ¼“**	140	552	30	16
40 PN 40	**1 ½“**	219	652	120	40
50 PN 16	**2“**	219	652	120	46
65 PN 16	**2 ½“**	273	854	240	79
80 PN 16	**3“**	273	875	270	81
100 PN 16	**4“**	354	1057	480	131
125 PN 16	**5“**	457	1254	720	287

Weight refers to the standard design

Example for order

KITO® FL/IN-100-IIB3
(design with flange connection DN 100 PN 16)

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

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G 14 N
Date: 05-2018
Created: Abt. Doku KITO
Design subject to change

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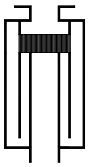


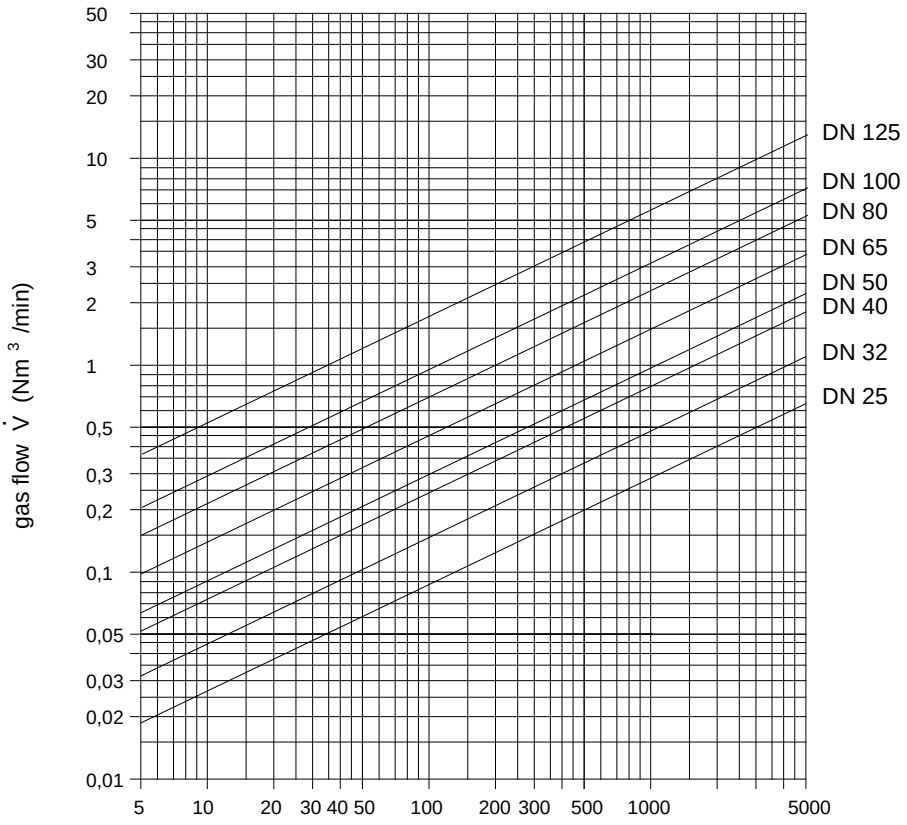
Design

	standard	optionally
housing / cover	steel	stainless steel mat. no. 1.4571
gasket (o-ring)	Viton	PTFE
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4408 / 1.4310	stainless steel mat. no. 1.4408 / 1.4571
outlet	beveled end	straight end
flange connection	EN 1092-1 Form A	ASME B16.5 Class 150 RF

Performance curves

The volume flow *V* in Nm^3/min was determined with water according to DIN EN 60534 at a temperature T_n = 15°C and an atmospheric pressure ρ_n = 1013 mbar.
For media of different density the flow rate may be calculated with an appropriate accuracy with this formula :

$$\dot{V}_{liquid} \cong \dot{V}_{water} \cdot \sqrt{\frac{\rho_{water}}{\rho_{liquid}}}$$



pressure drop △p (mbar)

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