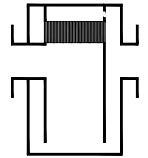


## Type sheet

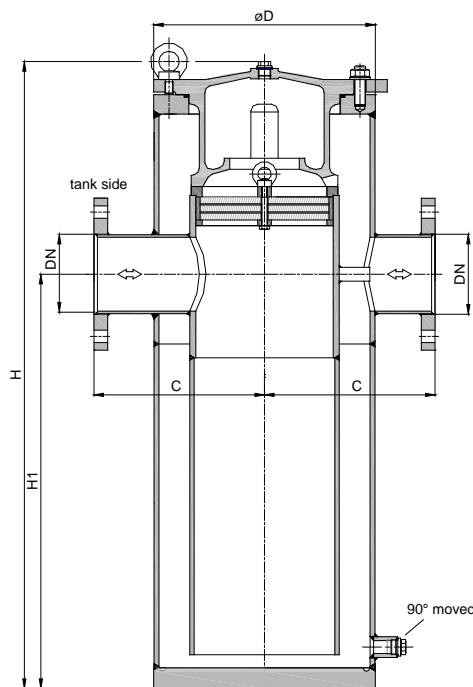
### Uni-directional in-line liquid detonation flame arrester KITO® FL/E-...-IIB3



#### Application

As inline armature, detonation-proof and flameproof, used for installation in **filling and suction pipes** outside from tanks in which inflammable liquids are stored. Tested and approved as detonation flame arrester **type 4**. Approved for all materials of the explosion group IIA1 to IIB3 with MESH  $\geq 0.65$  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. It is only allowed to install pipe of nominal widths  $\leq$  than the nominal widths of the flange. Mounting position is perpendicular. The body of the housing has to be permanently filled with the storage liquid up to the height of the connecting flanges. Suction rate  $V_{max}$  specified in above table may not be exceeded.

#### Dimensions (mm)



DIN	DN	ASME	D	C	H	H1	$V_{max}$ [m <sup>3</sup> /h]	kg
25 PN 40		1"	150	125	475	325	30	17
32 PN 40		1 1/4"	150	125	475	325	30	18
40 PN 40		1 1/2"	210	173	620	415	120	32
50 PN 16		2"	210	175	620	415	120	33
65 PN 16		2 1/2"	275	223	810	535	240	85
80 PN 16		3"	275	225	810	535	270	86
100 PN 16		4"	325	250	900	600	480	132
125 PN 16		5"	460	300	1320	915	720	315
150 PN 16		6"	460	300	1320	915	960	322
200 PN 10		8"	510	350	1495	1090	1020	413

Weight refers to the standard design

#### Example for order

**KITO® FL/E-100-IIB3**

(design with flange connection DN 100 PN 16)

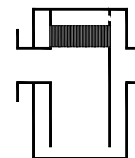
**Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU**

page 1 of 2

## Type sheet

Uni-directional in-line liquid detonation flame arrester

**KITO® FL/E-...-IIB3**



### Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
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. 1.4408 / 1.4310	stainless steel mat. no. 1.4408 / 1.4571
flange connection	EN 1092-1 Form A	ASME B16.5 Class 150 RF

### Performance curves

The volume flow  $V$  in  $\text{Nm}^3/\text{min}$  was determined with water according to DIN EN 60534 at a temperature  $T_n = 15^\circ\text{C}$  and an atmospheric pressure  $p_n = 1013 \text{ mbar}$ .

For media of different density the flow rate may be calculated with an appropriate accuracy with this formula :

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

