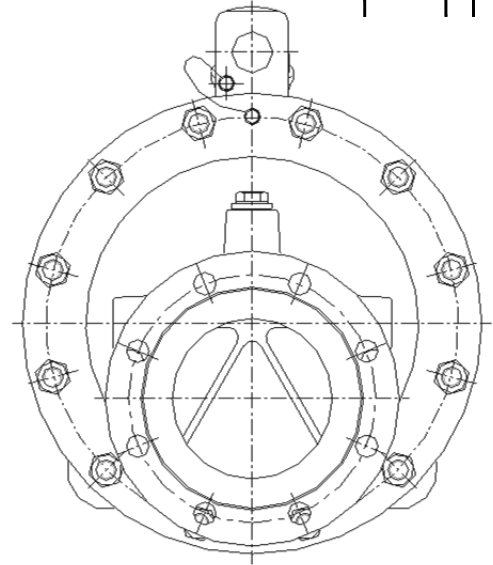
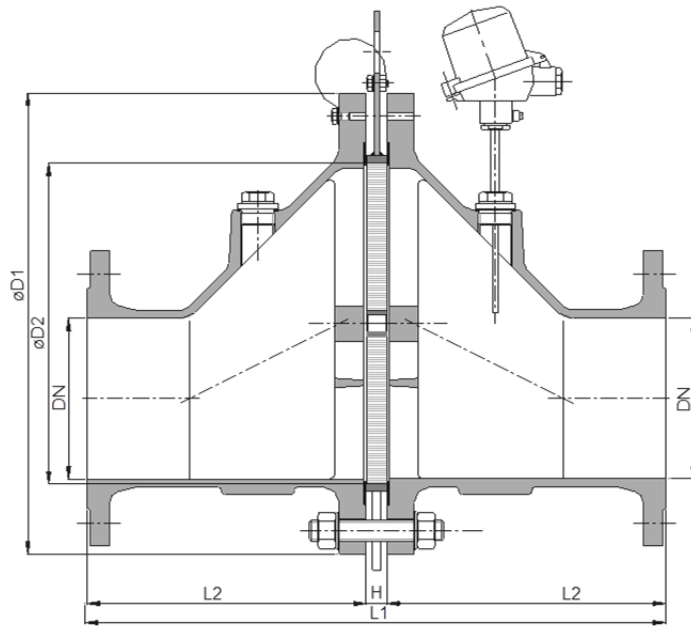
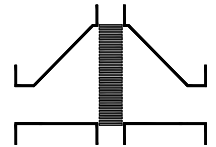


# Bi-directional deflagration flame arrester

KITO® EFA-Def0-I-.../...-1.2

KITO® EFA-Def0-I-.../...-1.2-T (-TT)



Type examination certificate to EN ISO 16852 and  $\text{C}\epsilon$  -designation in accordance to ATEX-Guideline 94/9/EC

NG	DN	ANSI	D1	D2	L1	H	L2	kg*
65	25 PN 40	1"	155	70	260	20	120	10
	32 PN 40	1 1/4"						12
100	40 PN 40	1 1/2"	220	106	310	20	145	22
	50 PN 16	2"						24
150	50 PN 16	2"	285	159	370	20	175	37
	65 PN 16	2 1/2"						38
	80 PN 16	3"						40
200	80 PN 16	3"	340	206	420	20	200	55
	100 PN 16	4"						55
300	100 PN 16	4"	445	308	560	20	270	90
	125 PN 16	5"						93
	150 PN 16	6"						99
400	150 PN 16	6"	565	388	650	20	315	142
	200 PN 10	8"						161
500	200 PN 10	8"	670	485	780	20	380	223
	250 PN 10	10"						233
600	250 PN 10	10"	780	584	920	20	450	313
	300 PN 10	12"						329
800	350 PN 10	14"	1015	810	1287	47	620	
	400 PN 10	16"						

Dimensions in mm

\* weight refers to the standard design



Design subject to change

performance curves: H 0.33 N

### Standard design

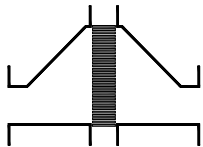
- housing : cast steel 1.0619, stainless cast steel 1.4408
- gasket : HD 3822, PTFE
- KITO® flame arrester element : completely interchangeable
- KITO® casing : steel (galvanized to NG 400), stainless steel mat. no. 1.4571, 1.4581
- KITO® grid : stainless steel mat. no. 1.4310, 1.4571,
- bolts/nuts : galvanized steel, SS
- temperature sensor : PT 100 (option); connection 3/8"
- flange connection : DIN EN 1092-1 form B1, ANSI 150 lbs. RF

### 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)  $\geq 1.14$  mm. Bi-directionally working in pipes, whereby an operating pressure of 1.2 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. The installation of the deflagration flame arrester into horizontal and vertical pipes is permissible. When equipped with one or two temperature sensors, the devices are protected under atmospheric conditions against a short time burning by a burning time  $t_{BT} = 1,0$  min. If only one temperature sensor, then it is to be placed on the device side where a burning could be expected.

Example to order :

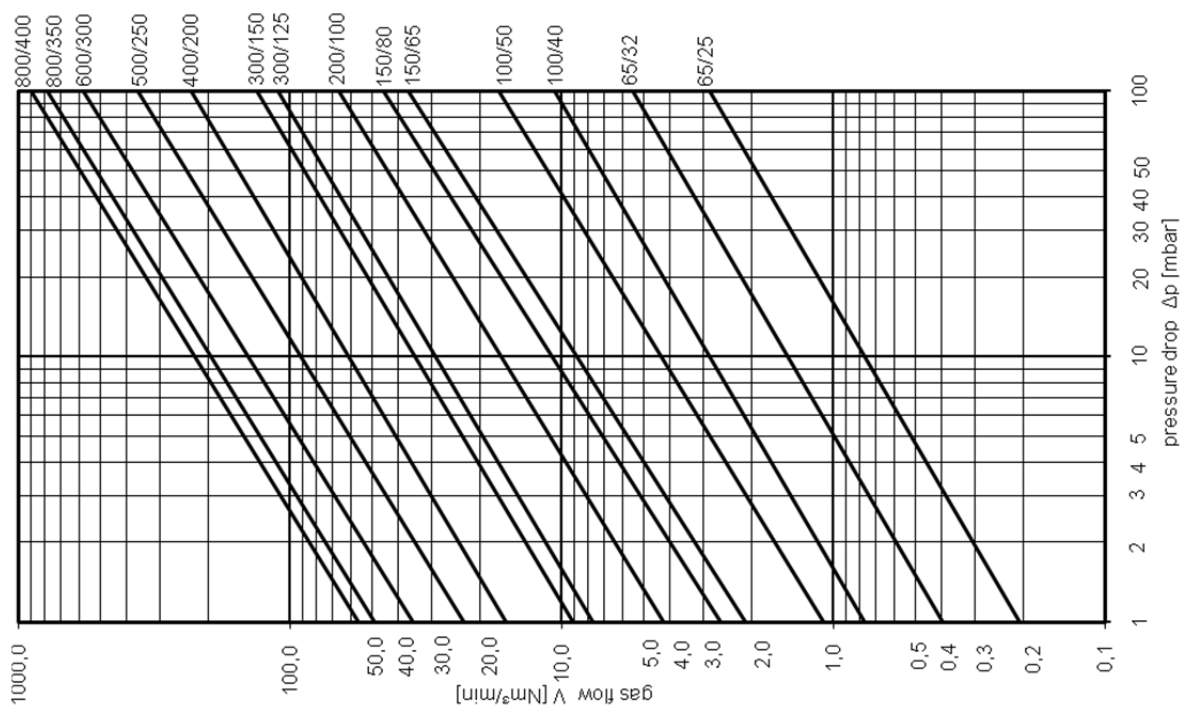
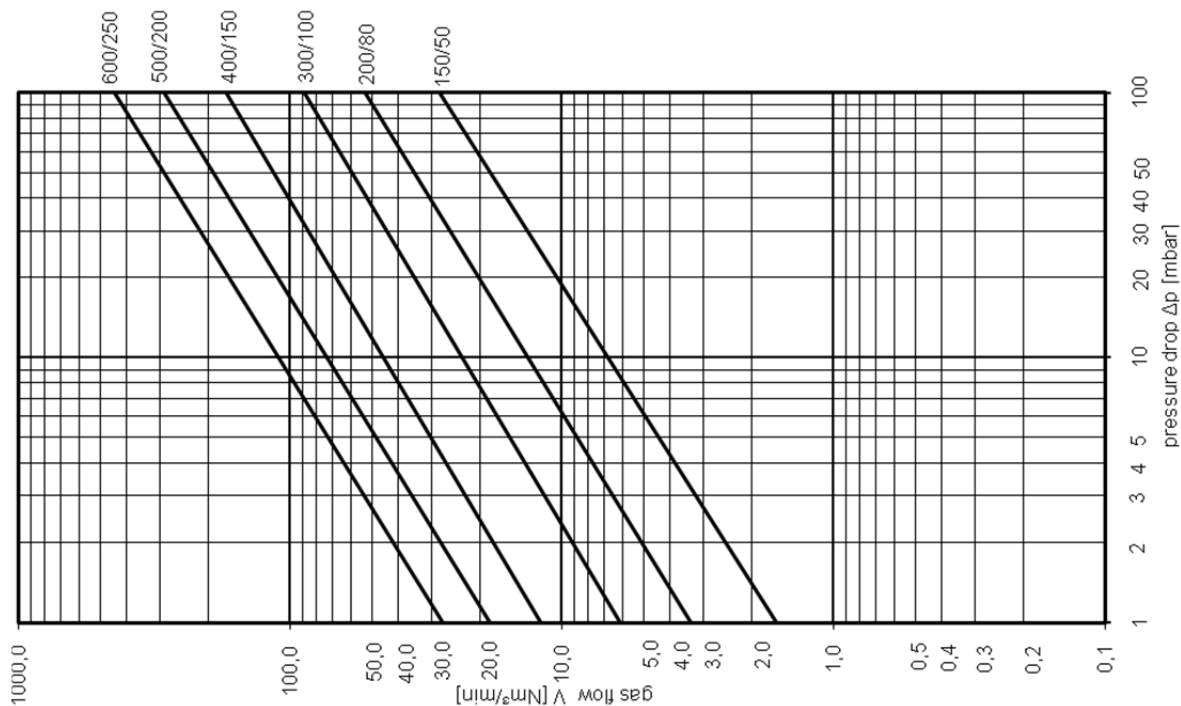
**KITO® EFA-Def0-I-100/40-1.2-T**  
(design with thermo couple element)



**Bi-directional deflagration flame arrester**  
**KITO® EFA-Def0-I-.../...-1.2**  
**KITO® EFA-Def0-I-.../...-1.2-T (-TT)**  
**H 33 N**

The flow capacity  $V$  refers to a density of air with  $\rho = 1.29 \text{ kg/m}^3$  at  $T = 273 \text{ K}$  and a pressure of  $p = 1.013 \text{ mbar}$ .  
 The flow capacity for gases with different densities can be calculated sufficiently accurate by the following approximation equation:

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



Design subject to change