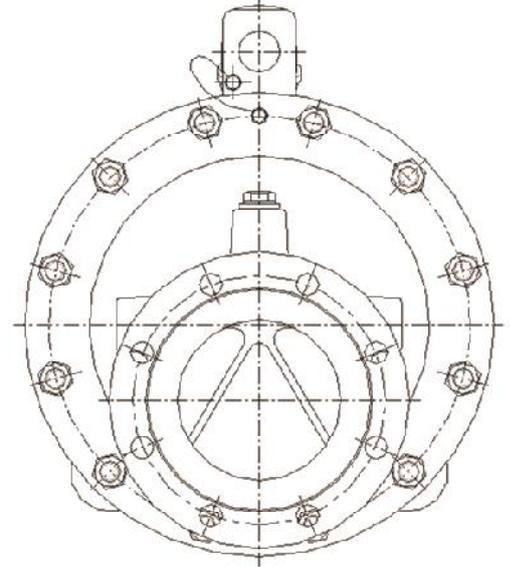
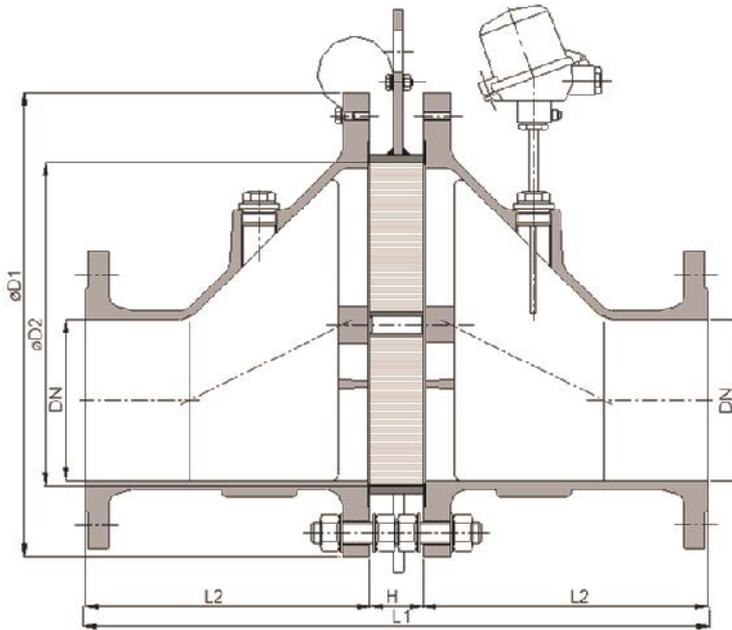
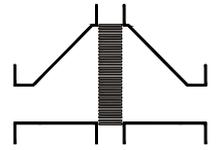


## Bi-directional in-line detonation flame arrester

EFA-Det4-IIA-.../...-1.2

EFA-Det4-IIA-.../...-1.2-T (-TT)



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

NG	DN	ANSI	D1	D2	L1	H	L2	kg*
65	25 PN 40	1"	155	70	290	50	120	11
	32 PN 40	1 1/4"						12
100	40 PN 40	1 1/2"	220	106	340	50	145	24
	50 PN 16	2"						25
150	50 PN 16	2"	285	159	400	50	175	40
	65 PN 16	2 1/2"						41
	80 PN 16	3"						43
200	80 PN 16	3"	340	206	464	64	200	62
	100 PN 16	4"						62
300	100 PN 16	4"	445	308	604	64	270	112
	125 PN 16	5"						115
	150 PN 16	6"						115
400	150 PN 16	6"	565	388	694	64	315	167
	200 PN 10	8"						186
500	200 PN 10	8"	670	485	824	64	380	259
	250 PN 10	10"						269
600	250 PN 10	10"	780	584	964	64	450	366
	300 PN 10	12"						382
800	350 PN 10	14"	1015	810	1350	110	620	
	400 PN 10	16"						

Dimensions in mm

\* weight refers to the standard design



Design subject to change

### Standard design

housing	: cast steel 1.0619, stainless cast steel 1.4408
gasket	: HD 3822, PTFE
flame arrester element	: completely interchangeable
casing	: steel (galvanized to NG 400), stainless steel mat. no. 1.4571, 1.4581
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

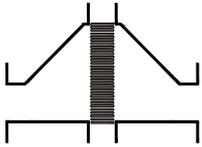
### Application

For installation into pipes to the protection of vessels and components against **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 IIA with a maximum experimental safe gap (MESG) > 0.9 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 installation of the detonation flame arrester into horizontal and vertical pipes is permissible. Provided with one or two temperature sensors (PT 100) the armature is certified against short time burning from one or both sides. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.

Example for orders :

**EFA-Det4-IIA-100/40-1.2-T**

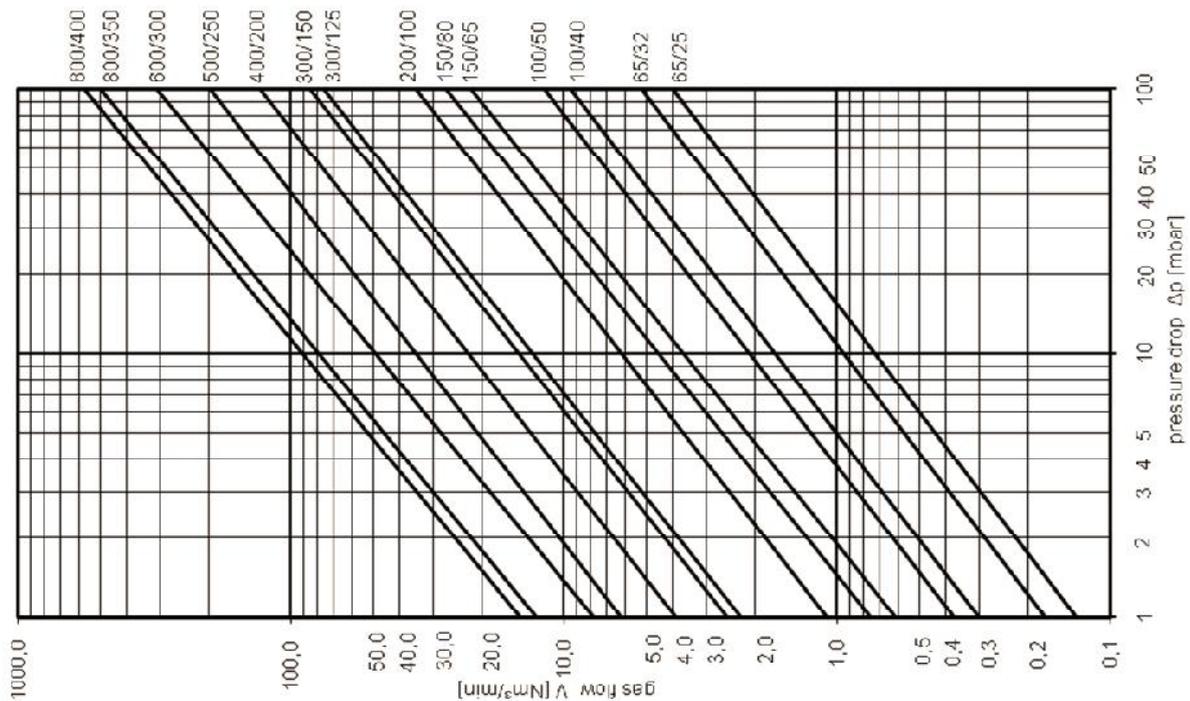
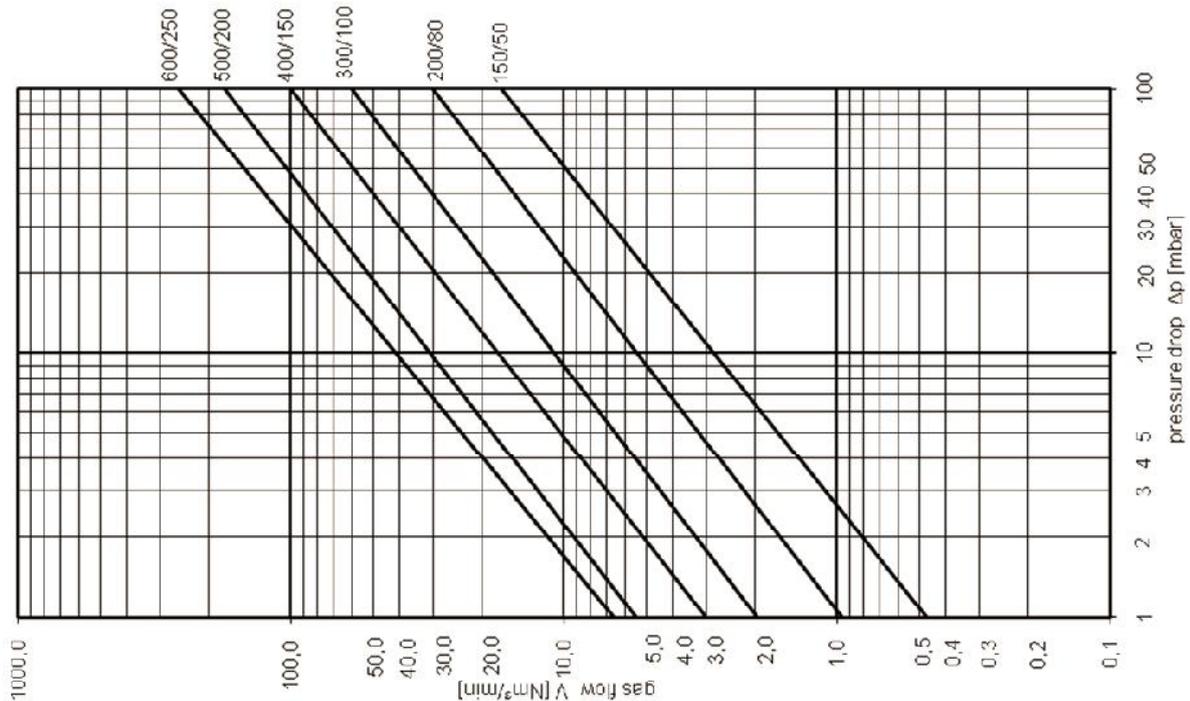
(design with thermo couple element)



**Bi-directional in-line detonation flame arrester**  
**EFA-Det4-IIA-.../...-1.2**  
**EFA-Det4-IIA-.../...-1.2-T (-TT)**  
**G 22 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:

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



Design subject to change