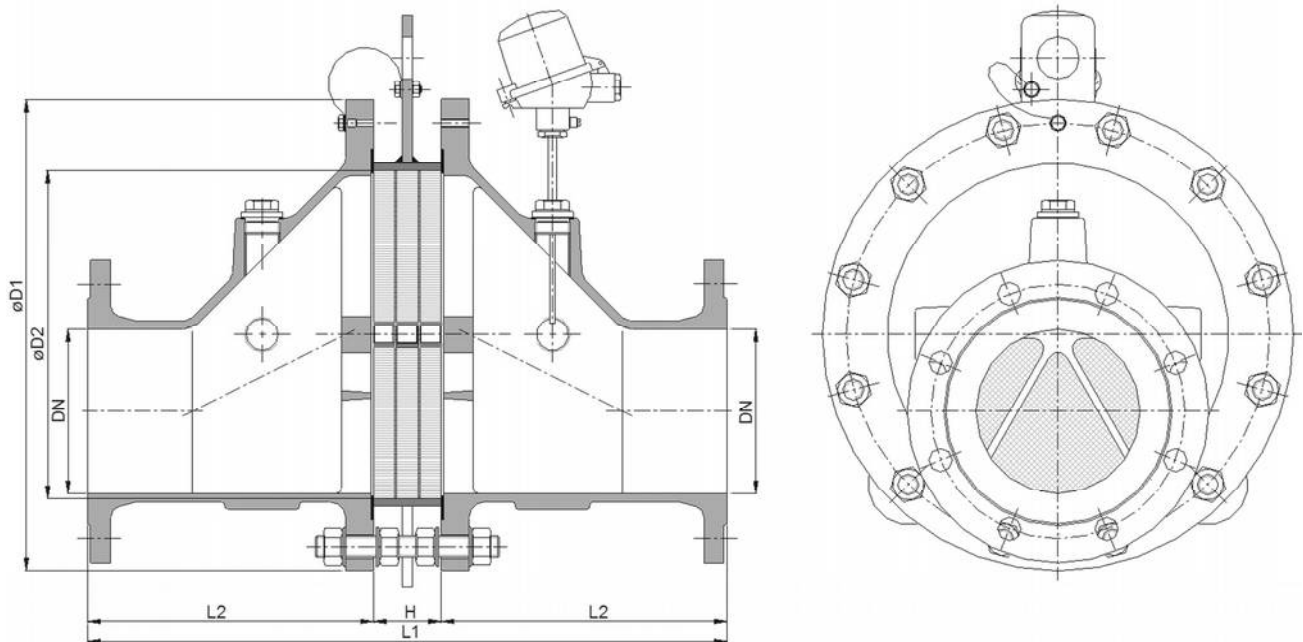
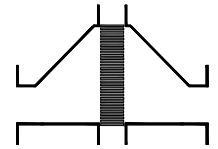


# Bi-directional in-line detonation flame arrester

EFA-Det4-IIC-.../...-1.2

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



Type examination certificate to DIN EN ISO 16852 and  $\text{C}\text{E}$  -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	304	64	120	12
	32 PN 40	1 ¼"						
100	40 PN 40	1 ½"	220	106	354	64	145	26
	50 PN 16	2"						26
150	50 PN 16	2"	285	159	414	64	175	43
	65 PN 16	2 ½"						44
	80 PN 16	3"						46
200	80 PN 16	3"	340	206	486	86	200	64
	100 PN 16	4"						65
300	100 PN 16	4"	445	308	626	86	270	119
	125 PN 16	5"						122
	150 PN 16	6"						122

Dimensions in mm

\* weight refers to the standard design



Design subject to change

performance curves: G 0.25 N

### Standard design

housing : cast steel 1.0619, stainless cast steel 1.4408  
 gasket : HD 3822, PTFE  
 flame arrester element : completely interchangeable  
 Casing : galvanized steel, 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

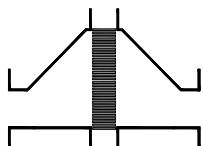
### Application

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 IIC with a maximum experimental safe gap (MESG) < 0.5 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 to order:

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

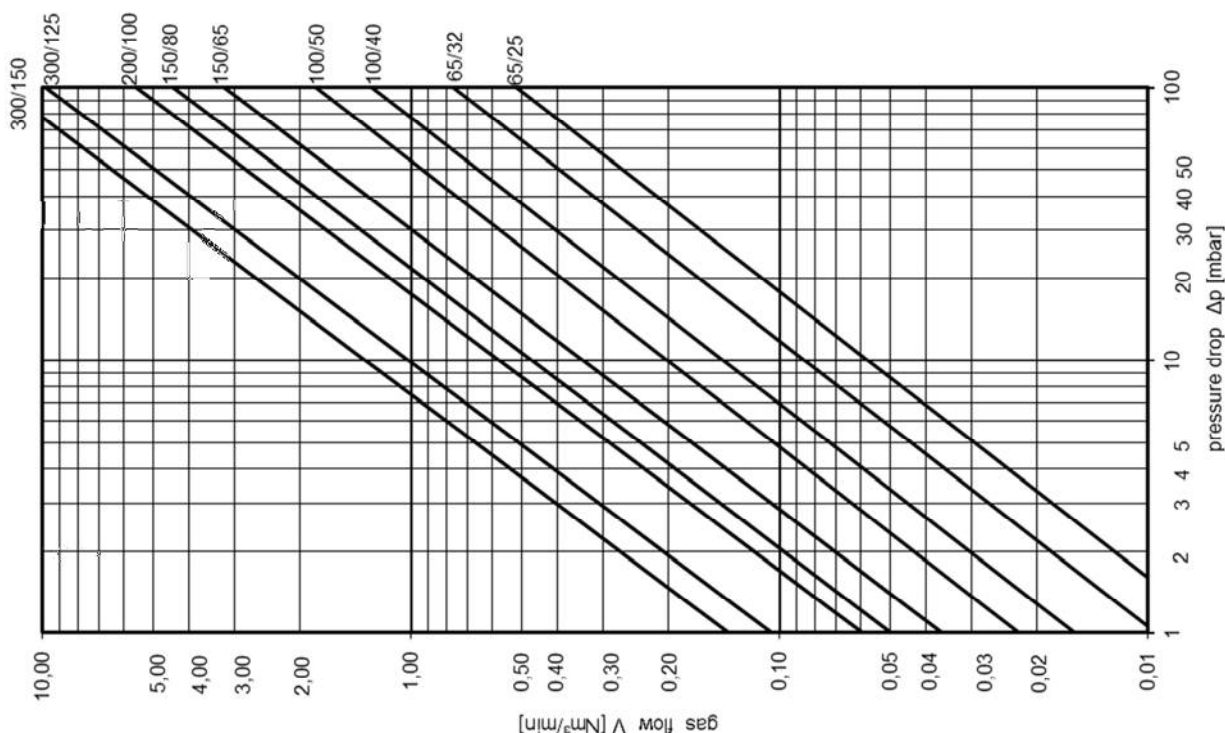
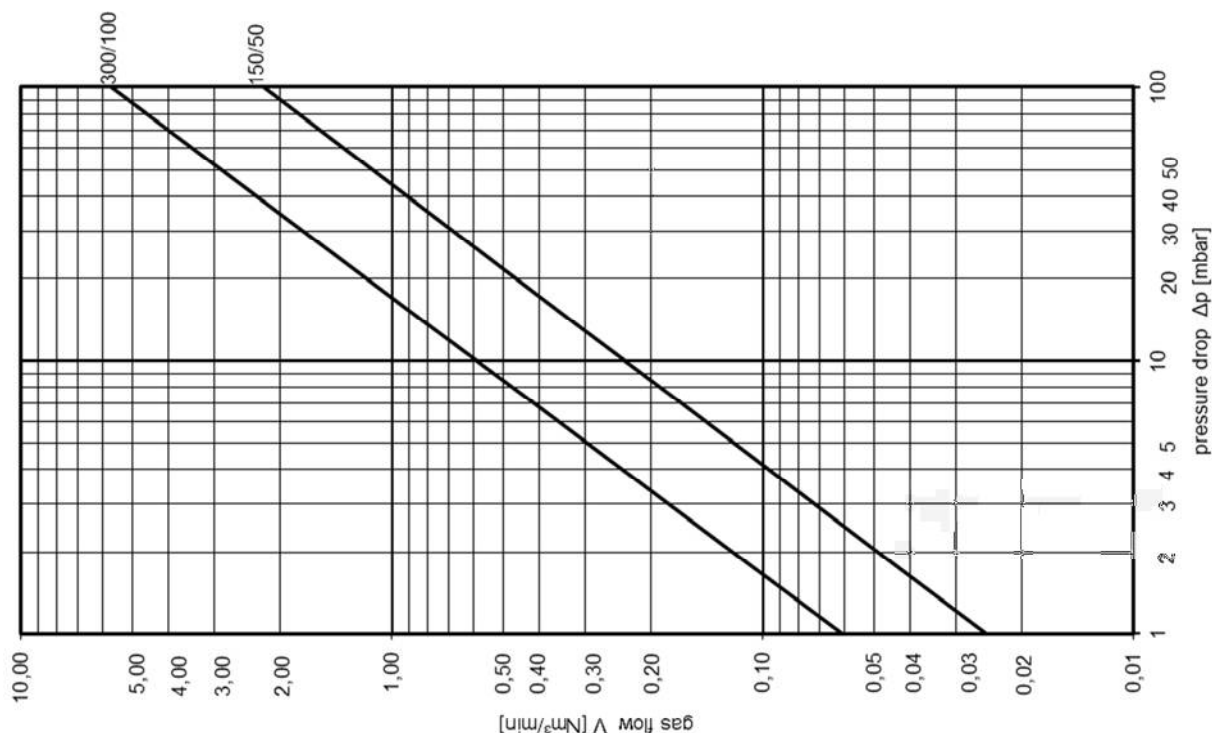
(design with thermo couple element)



**Bi-directional in-line detonation flame arrester**  
**EFA-Det4-IIC-.../...-1.2**  
**EFA-Det4-IIC-.../...-1.2-T (-TT)**

The flow capacity  $\dot{V}$  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:

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



Design subject to change