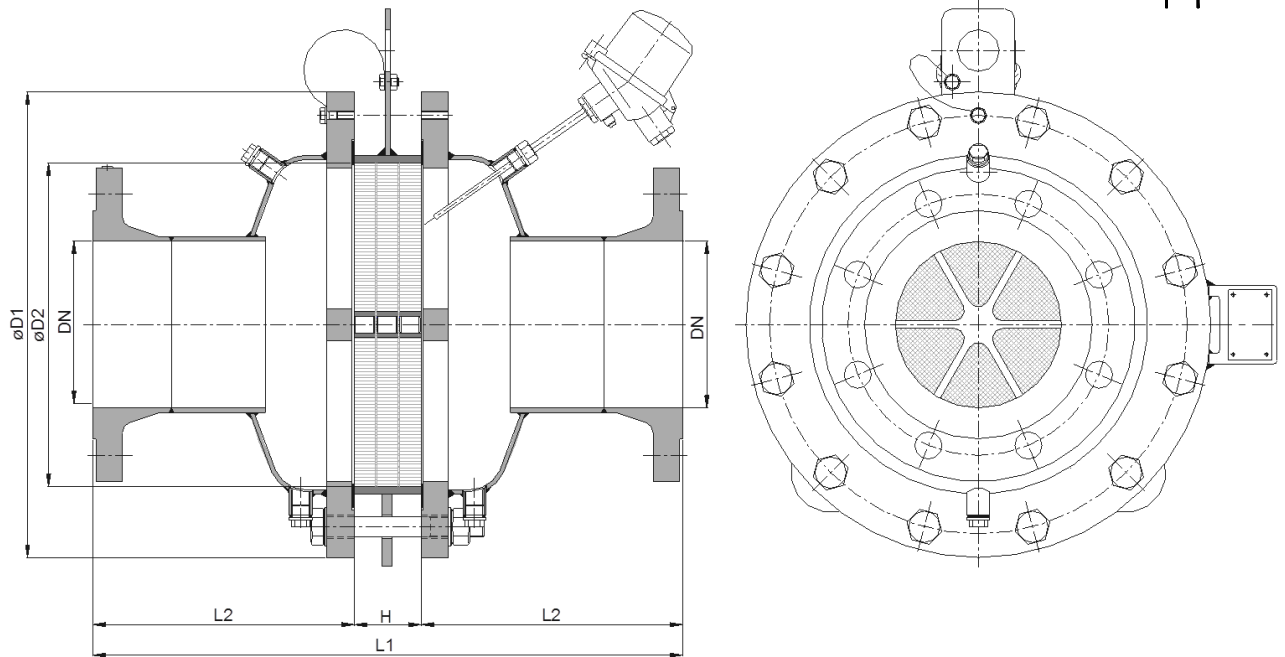
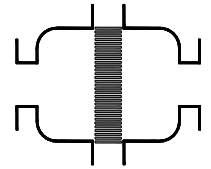


Bi-directional in-line detonation flame arrester

KITO® CFA-Det4-IIA-.../...-1.2

KITO® CFA-Det4-IIA-.../...-1.2-T (-TT)



Type examination certificate to DIN EN ISO 16852 and CE -designation in accordance to ATEX-Guideline 94/9/EC

NG	DN	ANSI	D1	D2	L1**	H	L2	kg*
150	50 PN 16	2"	285	159	310	50	130	33
	65 PN 16	2 1/2"						33
	80 PN 16	3"						35
200	80 PN 16	3"	340	206	374	64	155	50
	100 PN 16	4"						52
300	100 PN 16	4"	445	308	564	64	250	87
	125 PN 16	5"						95
	150 PN 16	6"						98
400	150 PN 16	6"	565	388	664	64	300	141
	200 PN 10	8"						149
500	200 PN 10	8"	670	485	824	64	380	204
	250 PN 10	10"						212
600	250 PN 10	10"	780	584	964	64	450	298
	300 PN 10	12"						303
800	350 PN 10	14"	1015	815	1010	110	450	
	400 PN 10	16"						

Dimensions in mm

* weight refers to the standard design

** L1 maximum length, shorter dimension on request



Design subject to change

performance curves: G 0.22.1 N

Standard design

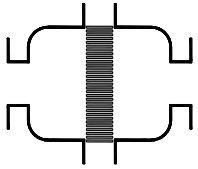
housing : steel, stainless steel mat. no. 1.4571
 gasket : HD 3822, PTFE
 KITO® flame arrester element : completely interchangeable
 KITO® casing : galvanized steel, stainless steel mat. no. 1.4571, 1.4581
 KITO® grid : stainless steel mat. no. 1.4310, 1.4571,
 bolts/nuts : galvanized steel, SS
 temperature 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 **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. Equipped with two head pipes plugs for draining condensate.

Example for orders :

KITO® CFA-Det4-IIA-150/50-1.2-T
 (design with thermo couple element)



Bi-directional in-line detonation flame arrester

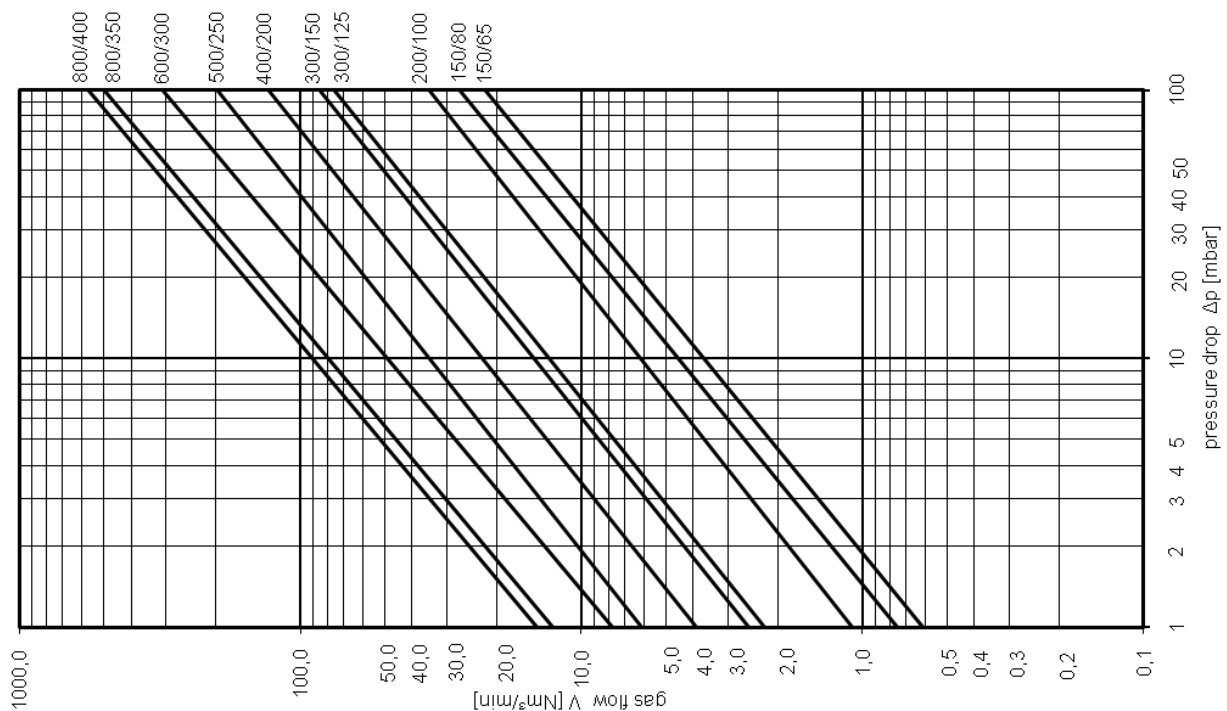
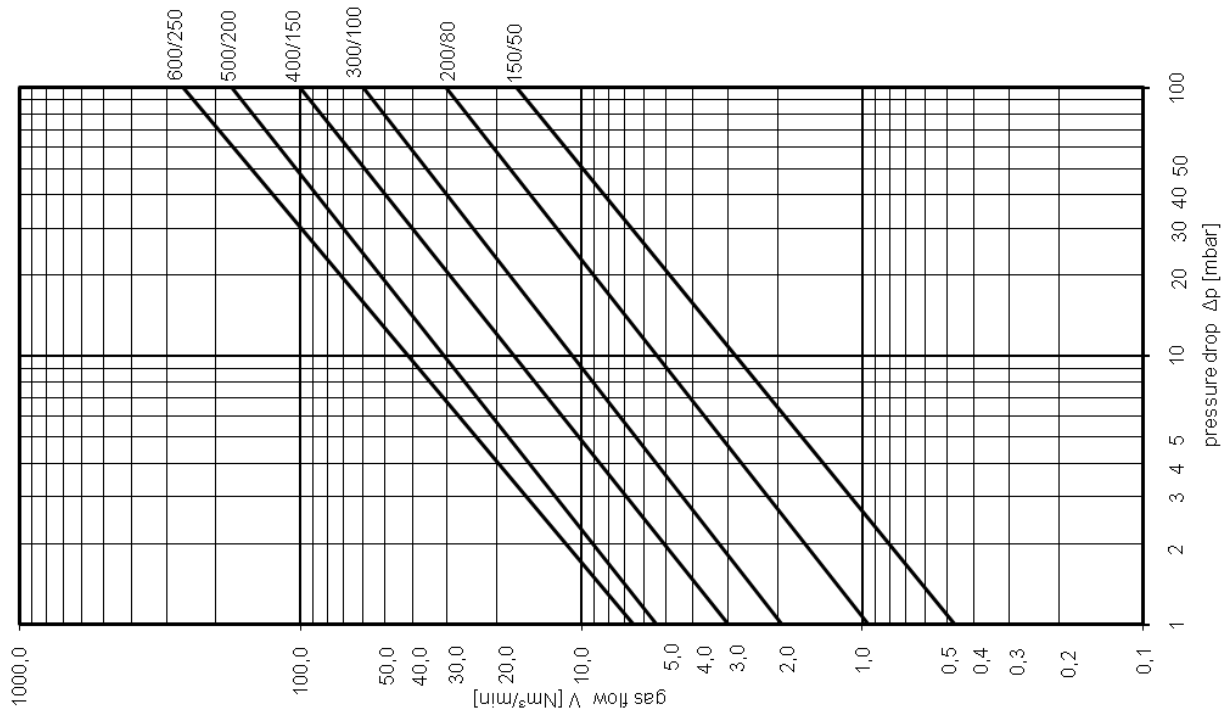
KITO® CFA-Det4-IIA-.../...-1.2

KITO® CFA-Det4-IIA-.../...-1.2-T (-TT)

G 22.1 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:

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

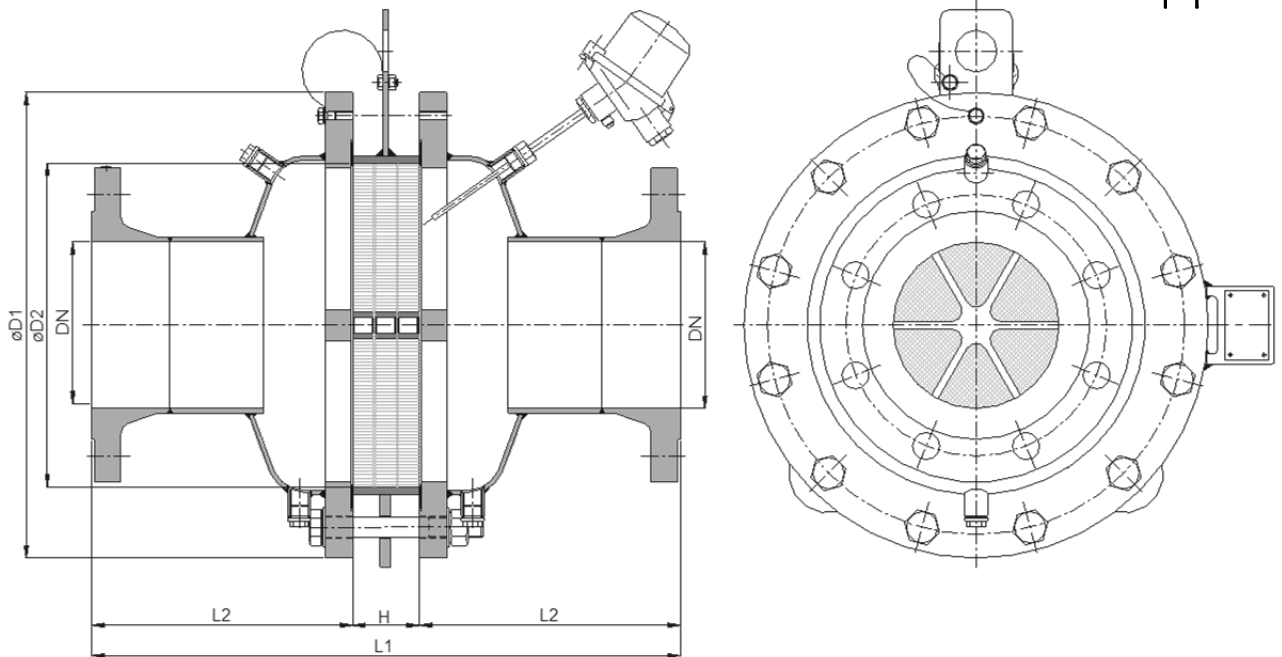
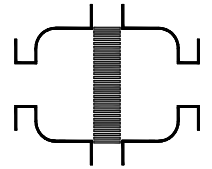


Design subject to change

Bi-directional in-line detonation flame arrester

KITO® CFA-Det4-IIA-.../...-...

KITO® CFA-Det4-IIA-.../...-...-T (-TT)



Type examination certificate to DIN EN ISO 16852 and C_E -designation in accordance to ATEX-Guideline 94/9/EC

NG	DN	ANSI	D1	D2	L1**	H	L2	p _{max} ***	kg*
150	50 PN 16	2"	285	159	324	64	130	2.5	35
	65 PN 16	2 ½"							36
	80 PN 16	3"							38
200	80 PN 16	3"	340	206	374	64	155	2.5	53
	100 PN 16	4"							54
300	100 PN 16	4"	445	308	586	86	250	2.5	94
	125 PN 16	5"							102
	150 PN 16	6"							105
400	150 PN 16	6"	565	388	686	86	300	2.0	161
	200 PN 10	8"							168
500	200 PN 10	8"	670	485	846	86	380	2.0	237
	250 PN 10	10"							245
600	250 PN 10	10"	780	584	986	86	450	2.0	361
	300 PN 10	12"							366
800	350 PN 10	14"	1015	815	1010	110	450	2.0	
	400 PN 10	16"							

Dimensions in mm

* weight refers to the standard design

** L1 maximum length, shorter dimension on request

*** bar abs.



Design subject to change

performance curves: G 0.23.1 N

Standard design

housing : steel, stainless steel mat. no. 1.4571
 gasket : HD 3822, PTFE
 KITO® flame arrester element : completely interchangeable
 KITO® casing : steel (galvanized to NG 400), stainless steel mat. no. 1.4310, 1.4571
 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

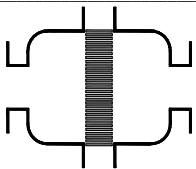
Application

For installation into pipes to the protection of vessels and components against **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 2.5 bar abs. up to NG 300, p_{max} = 2.0 bar abs. from NG 400 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. Equipped with two head pipes plugs for draining condensate.

Example to order :

KITO® EFA-Det4-IIA-100/40-2.5-T

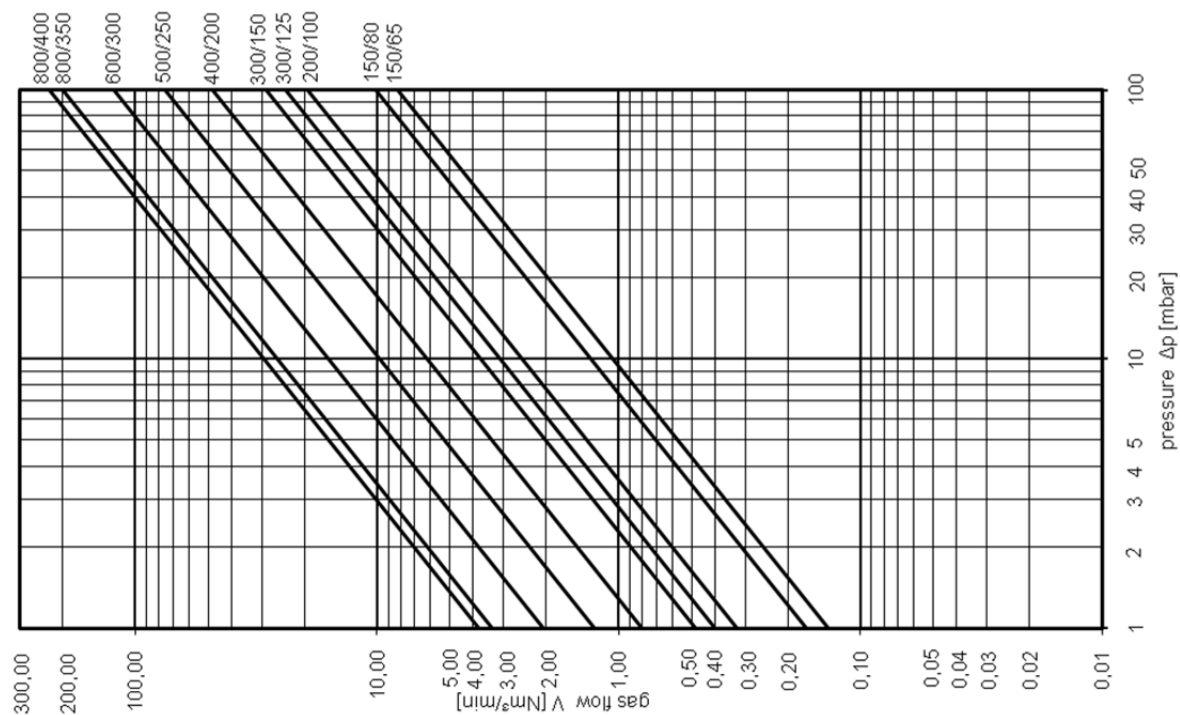
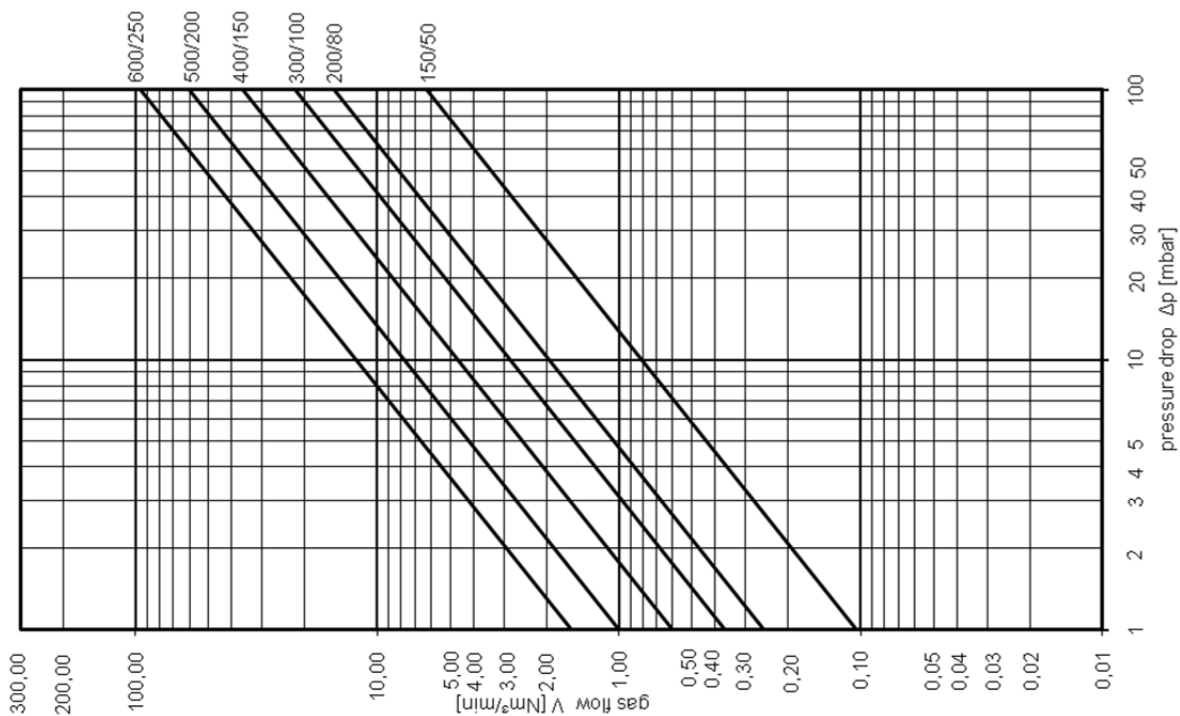
(design p = 2.5 bar, with thermo couple element)



Bi-directional in-line detonation flame arrester
KITO® CFA-Det4-IIA-.../...-...
KITO® CFA-Det4-IIA-.../...-...-T (-TT)
G 23.1 N

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:

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



Design subject to change