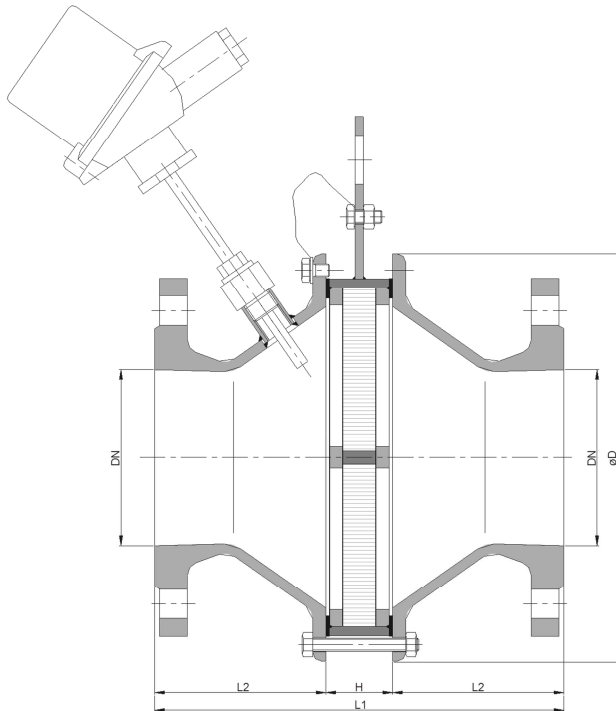
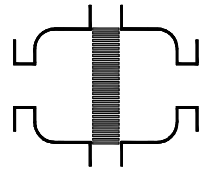


# Bi-directional deflagration flame arrester

KITO® INE-I-.../...-1.2

KITO® INE-I-.../...-1.2-T (-TT)



NG	DN	ANSI	D	L1	H	L2	kg*
100	50 PN 16	2"	165	213	33	90	11
150	65 PN 16	2 1/2"	210	239	39	100	18
	80 PN 16	3"					
200	100 PN 16	4"	268	249	39	105	26
250	125 PN 16	5"	322	279	39	120	35
300	150 PN 16	6"	370	305	45	130	50
	200 PN 10	8"					58
400	250 PN 10	10"	480	345	45	150	79
	300 PN 10	12"					139

\* weight refers to the variant I

Type examination certificate to  
DIN EN ISO 16852

CE -designation in accordance  
to ATEX-Guideline 94/9/EC

Example for orders :

**KITO® INE-I-150/80-1.2-T**  
(design with thermo couple element)

Dimensions in mm

Design subject to change

performance curves: H 0.31 N

## Standard design

### variant I :

housing : cast steel 1.0619  
gasket : HD 3822  
KITO® casing : steel  
KITO® grid : stainless steel mat. no. 1.4310  
bolts/nuts : galvanized steel

### variant II :

housing : cast steel 1.0619  
gasket : PTFE  
KITO® casing : stainless steel mat. no. 1.4571, 1.4581  
KITO® grid : stainless steel mat. no. 1.4571  
bolts/nuts : galvanized steel

### variant III :

housing : stainless cast steel 1.4408  
gasket : PTFE  
KITO® casing : stainless steel mat. no. 1.4571, 1.4581  
KITO® grid : stainless steel mat. no. 1.4571  
bolts/nuts : ss

### KITO® flame arrester

element : completely interchangeable  
temperature sensor : PT 100 (option), connection 3/8"  
flange connection : DIN EN 1092-1 Form B1  
ANSI 150 lbs. RF

## Application

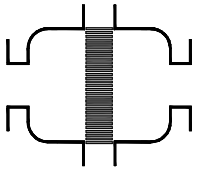
For installation into pipes to the protection of vessels and components against deflagration of flammable liquids and gases. Approved for all substances of explosion group IIA1 ( old : I) with a maximum experimental safe gap (MESG) ≥ 1.14 mm.

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.

An installation into horizontal and vertical pipes is permissible. To detect a thermal load on the KITO® flame arrester element in operation, a thermocouple can be implemented as an option into the flame arrester body.

Proof against "stabilized burning" and withstand this up to a max. burn time BT = 1.0 min.

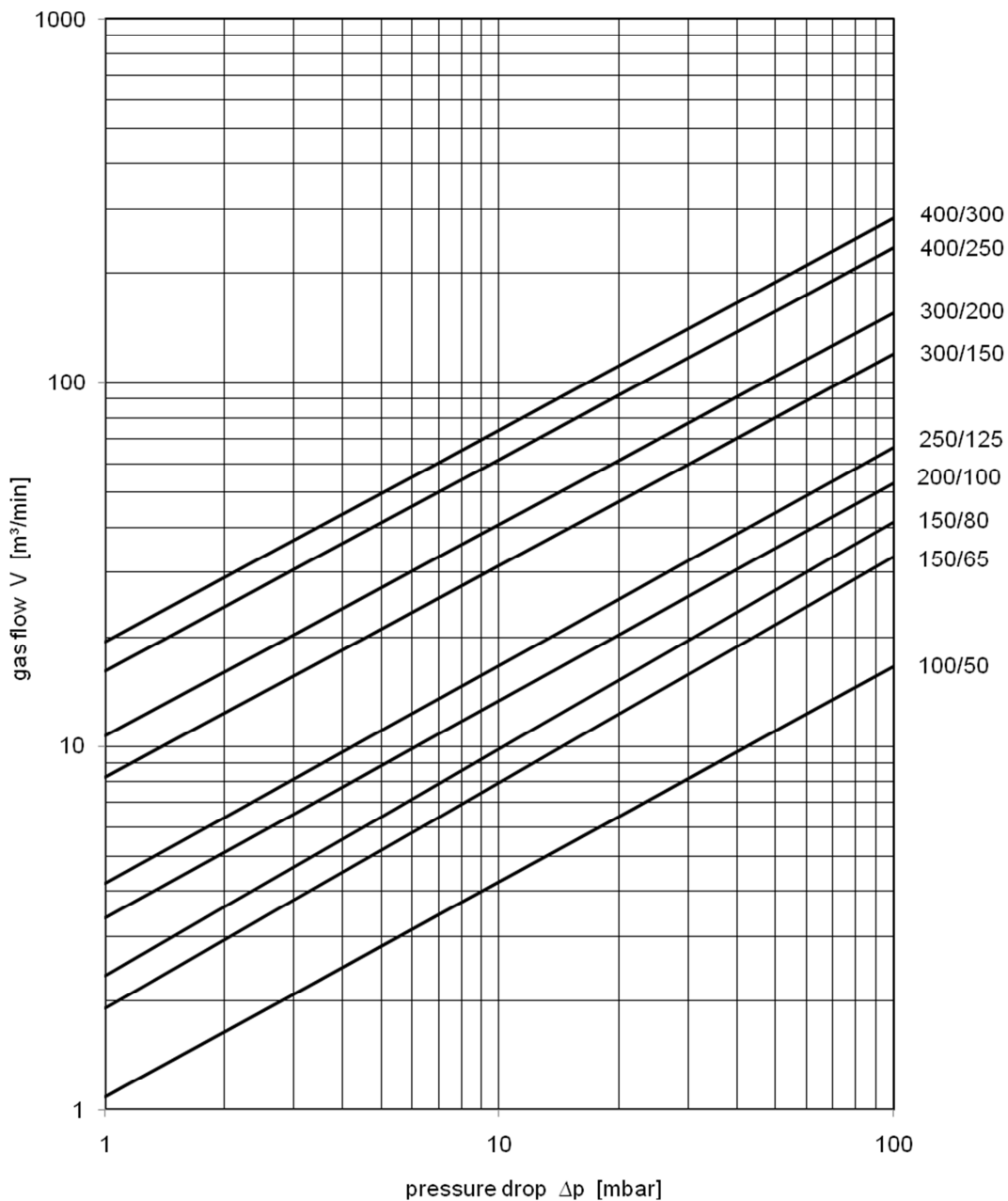


**Bi-directional deflagration flame arrester**  
**KITO® INE-I-.../...-1.2**  
**KITO® INE-I-.../...-1.2-T (-TT)**  
**H 31 N**

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