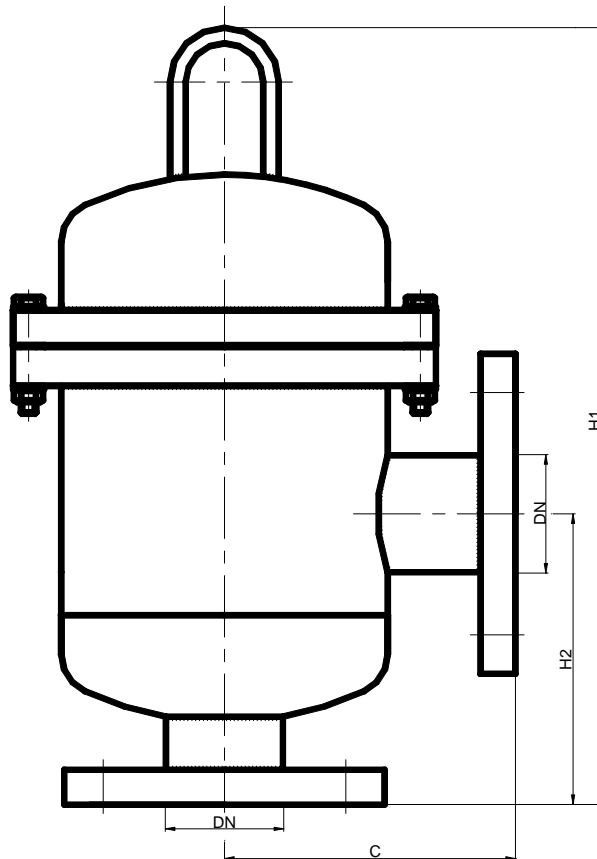
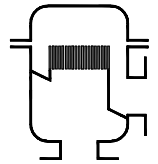


**Detonation flame arrester**  
**KITO® FD4-Det4-IIB1-...-1.2**  
**KITO® FD4-Det4-IIB1-...-1.2-T**



protected side



Example to order :  
**KITO® FD4-Det4-IIB1-50-1.2**  
 (Design DN 50 PN 16)

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

DN	ANSI	C	H1	H2	kg*
25 PN 40	1"	150	400	150	18,5
32 PN 40	1 ¼"				19
40 PN 40	1 ½"				20
50 PN 16	2"				21

Dimensions in mm

\* weight refers to the standard design

**Size DN 50 / 2": the dimensions C und H2 can be adopted to older devices (e.g. KITO® xRd/T) in case of replacement.**

Design subject to change

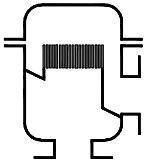
performance curves: G 0.19.3 N

Standard design

housing / cover : steel, stainless steel mat. no. 1.4571  
 gasket : HD 3822, PTFE  
 KITO® flame arrester element : completely interchangeable  
 KITO® casing / grid : stainless steel mat. no. 1.4571  
 temperature sensor : PT 100 (option); connection 3/8"  
 flange connections : DIN EN 1092-1 Form A,  
 ANSI 150 lbs

Application

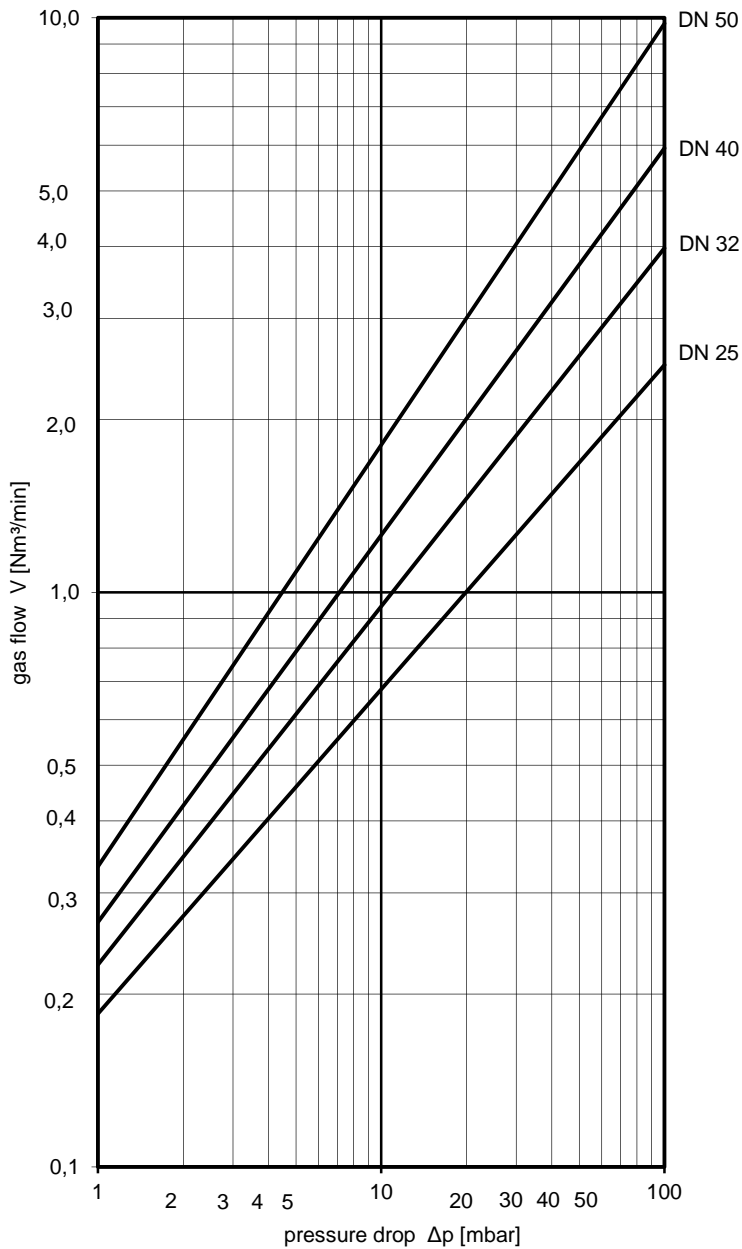
For installation into pipes to protect containers and components against **stable** detonation of flammable liquids and gases.  
 Tested and approved as detonation flame arrester **type 4**.  
 Approved for all substances of explosion groups IIA1 to IIB1 with a maximum experimental safe gap (MESG) ≥ 0.85 mm.  
 Working unidirectional in pipes, whereby an operating pressure of 1.2 bar abs. and an operating temperature of 60°C must not be exceeded.  
 Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.  
 The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.



**Detonation flame arrester**  
**KITO® FD4-Det4-IIB1-...-1.2**  
**KITO® FD4-Det4-IIB1-...-1.2-T**  
**G 19.3 N**

Flow capacity V based on air of a density  $\rho = 1.29 \text{ kg/m}^3$  at  $T = 273 \text{ K}$  and atmospheric pressure  $p = 1.013 \text{ mbar}$ .  
 For other gases the flow can be approximately calculated by

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

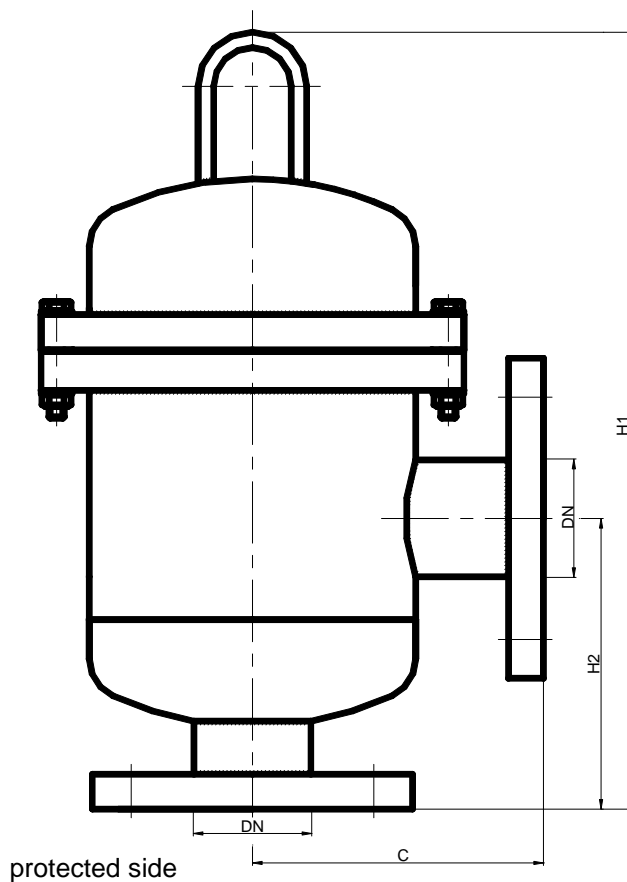
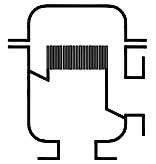


Design subject to change.

## Detonation flame arrester

KITO® FD4-Det4-IIB-...

KITO® FD4-Det4-IIB-...-T



Example to order :  
**KITO® FD4-Det4-IIB-50**  
(Design DN 50 PN 16)

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

DN	ANSI	C	H1	H2	kg*
25 PN 40	1"	150	400	150	18,5
32 PN 40	1 ¼"				19
40 PN 40	1 ½"				20
50 PN 16	2"				21

Dimensions in mm

\* weight refers to the standard design

Design subject to change

performance curves: G 0.19.4 N

### Standard design

housing / cover : steel, stainless steel mat. no. 1.4571  
 gasket : HD 3822, PTFE  
 KITO® flame arrester element : completely interchangeable  
 KITO® casing / grid : stainless steel mat. no. 1.4571  
 temperature sensor : PT 100 (option); connection 3/8"  
 flange connections : DIN EN 1092-1 Form A, ANSI 150 lbs

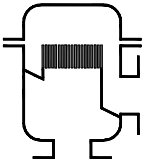
### Application

For installation into pipes to protect containers 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 IIB with a maximum experimental safe gap (MESG) ≥ 0.5 mm.  
 Working unidirectional in pipes, whereby an operating pressure of 1.1 bar abs. and an operating temperature of 60°C must not be exceeded.

Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.

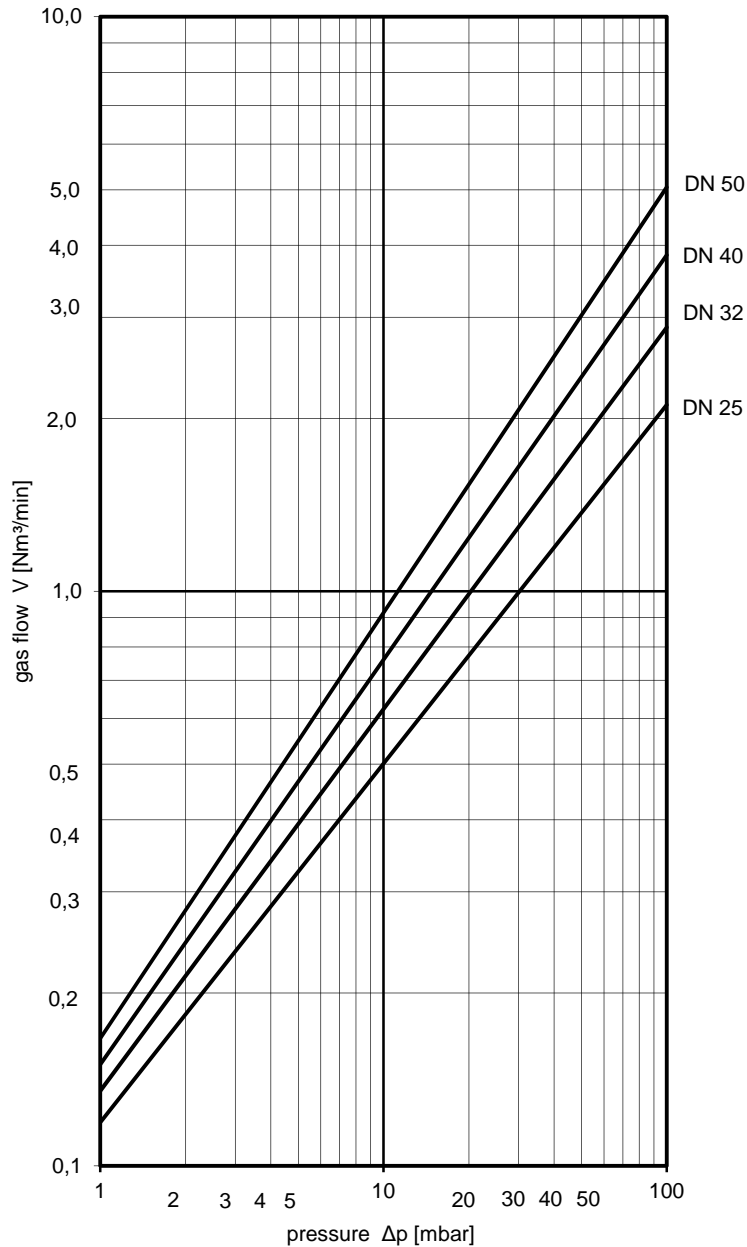
The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.



**Detonation flame arrester**  
**KITO® FD4-Det4-IIB-...**  
**KITO® FD4-Det4-IIB-...-T**  
**G 19.4 N**

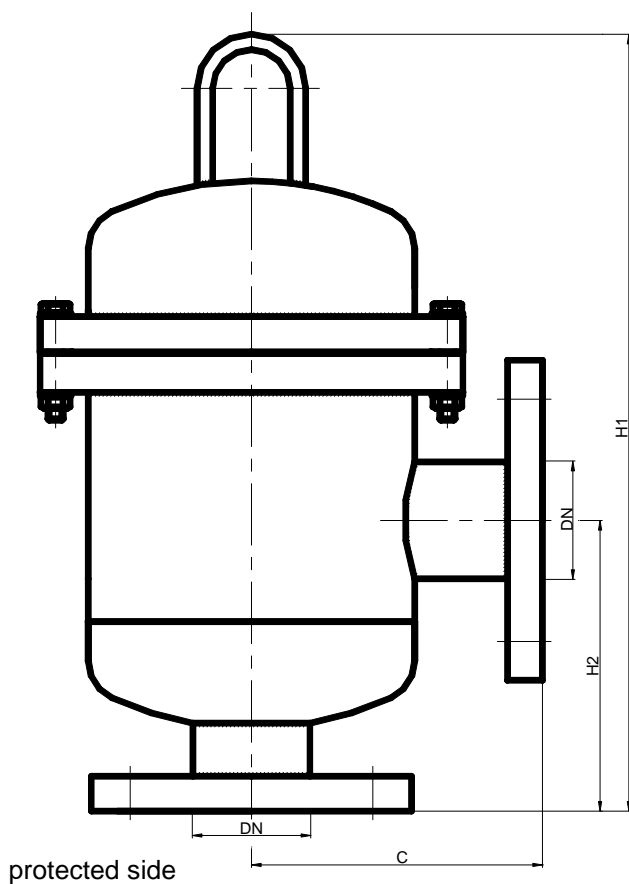
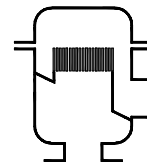
Flow capacity V based on air of a density  $\rho = 1.29 \text{ kg/m}^3$  at  $T = 273 \text{ K}$  and atmospheric pressure  $p = 1.013 \text{ mbar}$ .  
 For other gases the flow can be approximately calculated by

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



Design subject to change.

**Detonation flame arrester**  
**KITO® FD4-Det4-IIB3-...-1.2**  
**KITO® FD4-Det4-IIB3-...-1.2-T**



Example to order :  
**KITO® FD4-Det4-IIB3-50-1.2**  
 (Design DN 50 PN 16)

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

DN	ANSI	C	H1	H2	kg*
25 PN 40	1"	150	400	150	18,5
32 PN 40	1 ¼"				19
40 PN 40	1 ½"				20
50 PN 16	2"				21

Dimensions in mm

\* weight refers to the standard design

Design subject to change

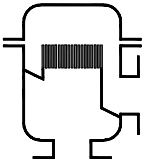
performance curves: G 0.19.5 N

Standard design

housing / cover : steel, stainless steel mat. no. 1.4571  
 gasket : HD 3822, PTFE  
 KITO® flame arrester element : completely interchangeable  
 KITO® casing / grid : stainless steel mat. no. 1.4571  
 temperature sensor : PT 100 (option); connection 3/8"  
 flange connections : DIN EN 1092-1 Form A, ANSI 150 lbs

Application

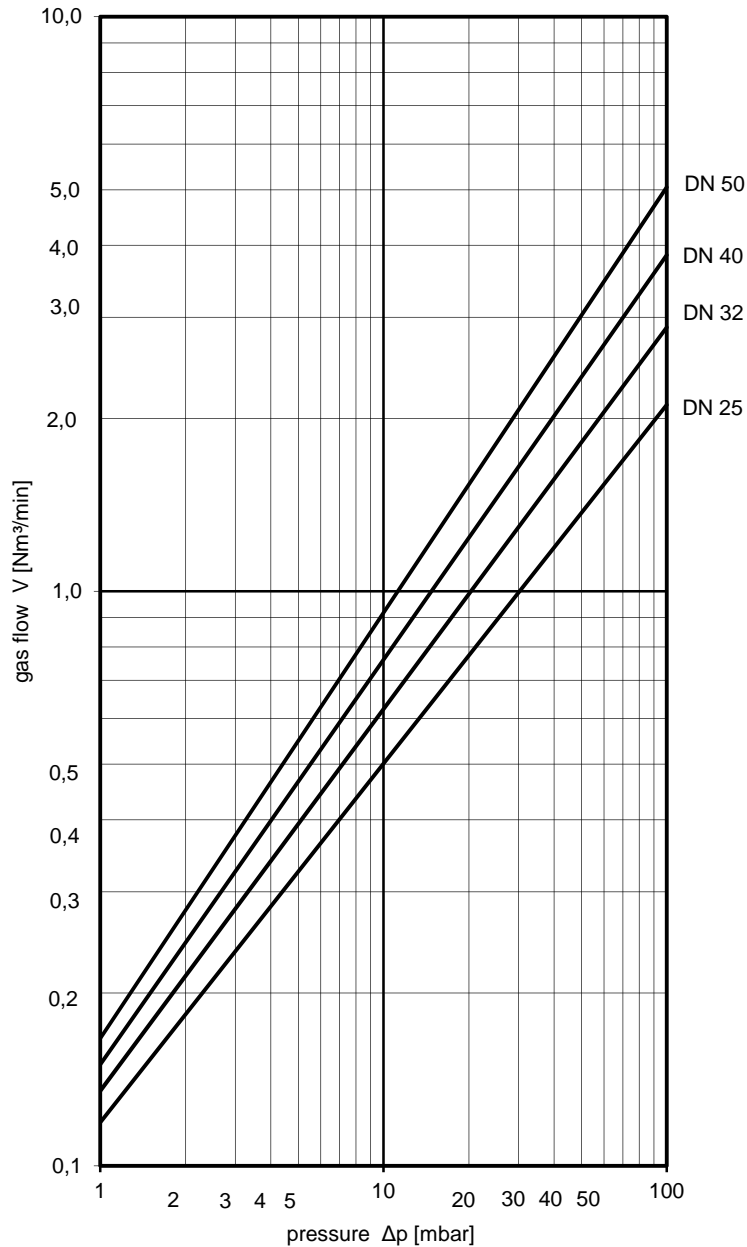
For installation into pipes to protect containers and components against **stable** detonation of flammable liquids and gases.  
 Tested and approved as detonation flame arrester **type 4**.  
 Approved for all substances of explosion groups IIA1 to IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm.  
 Working unidirectional in pipes, whereby an operating pressure of 1.2 bar abs. and an operating temperature of 60°C must not be exceeded.  
 Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.  
 The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.



**Detonation flame arrester**  
**KITO® FD4-Det4-IIB3-...-1.2**  
**KITO® FD4-Det4-IIB3-...-1.2-T**  
**G 19.5 N**

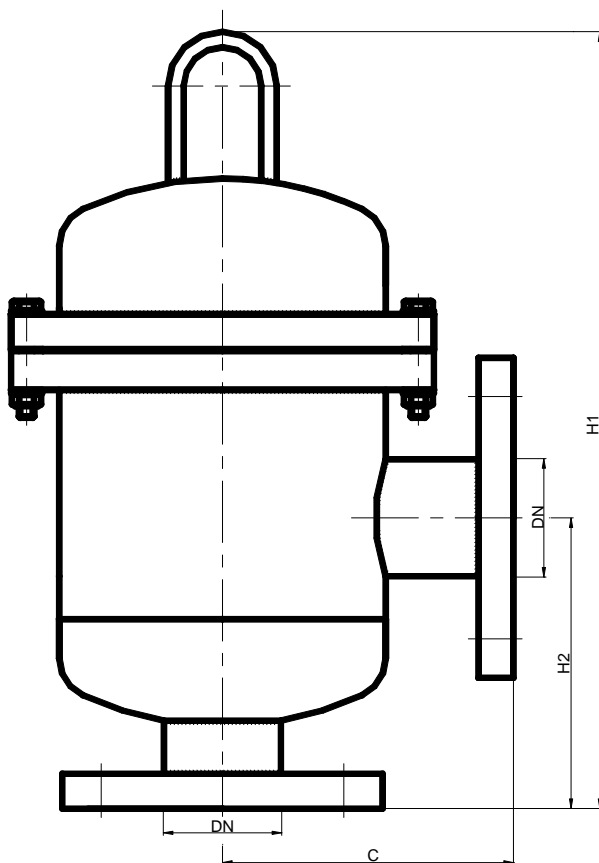
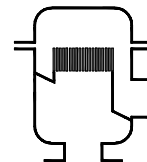
Flow capacity V based on air of a density  $\rho = 1.29 \text{ kg/m}^3$  at  $T = 273 \text{ K}$  and atmospheric pressure  $p = 1.013 \text{ mbar}$ .  
 For other gases the flow can be approximately calculated by

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



Design subject to change.

**Detonation flame arrester**  
**KITO® FD6-Det4-IIB1-...-1.2**  
**KITO® FD6-Det4-IIB1-...-1.2-T**



protected side



Example to order :  
**KITO® FD6-Det4-IIB1-50-1.2**  
 (Design DN 50 PN 16)

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

DN	ANSI	C	H1	H2	kg*
50 PN 16	2"	215	585	215	54
65 PN 16	2 1/2"				56
80 PN 16	3"				57

Dimensions in mm

\* weight refers to the standard design

**Size DN 100 / 4": the dimensions C und H2 can be adopted to older devices (e.g. KITO® xRd/T) in case of replacement.**

Design subject to change

performance curves: G 0.20.3 N

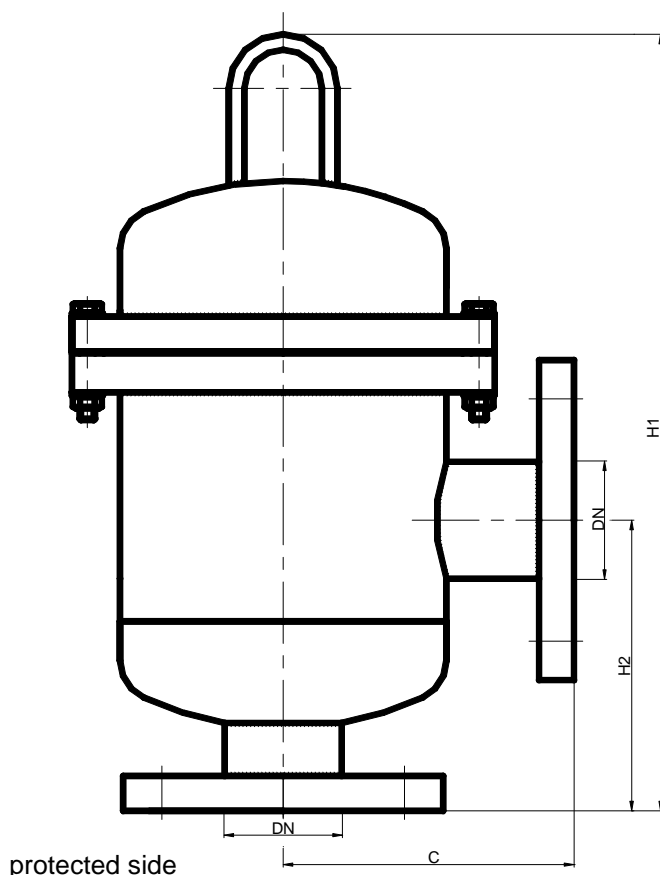
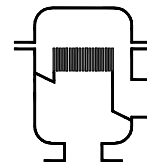
Standard design

- housing / cover : steel, stainless steel mat. no. 1.4571
- gasket : HD 3822, PTFE
- KITO® flame arrester element : completely interchangeable
- KITO® casing / grid : stainless steel mat. no. 1.4571
- temperature sensor : PT 100 (option); connection 3/8"
- flange connections : DIN EN 1092-1 Form A, ANSI 150 lbs

Application

For installation into pipes to protect containers 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 IIB1 with a maximum experimental safe gap (MESG) ≥ 0.85 mm.  
 Working unidirectional in pipes, whereby an operating pressure of 1.2 bar abs. and an operating temperature of 60°C must not be exceeded.  
 Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. If only one thermal sensor is attached, it must be installed into that part of the body from which a fire is expected.  
 The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.

**Detonation flame arrester**  
**KITO® FD6-Det4-IIB3-...-1.2**  
**KITO® FD6-Det4-IIB3-...-1.2-T**



Example to order :  
**KITO® FD6-Det4-IIB3-50-1.2**  
 (Design DN 50 PN 16)

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

DN	ANSI	C	H1	H2	kg*
50 PN 16	2"	215	585	215	54
65 PN 16	2 1/2"				56
80 PN 16	3"				57
100 PN 16	4"				63,5

Dimensions in mm

\* weight refers to the standard design

**In the case for exchange the model KITO® xRd/T DN 100 can the dimensions C and H2 be adjusted of version DN 100 PN 16 of the fitting.**

Design subject to change

performance curves: G 0.20.5 N

Standard design

housing / cover : steel, stainless steel mat. no. 1.4571  
 gasket : HD 3822, PTFE  
 KITO® flame arrester element : completely interchangeable  
 KITO® casing / grid : stainless steel mat. no. 1.4571  
 temperature sensor : PT 100 (option); connection 3/8"  
 flange connections : DIN EN 1092-1 Form A, ANSI 150 lbs

Application

For installation into pipes to protect containers 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 IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm.  
 Working unidirectional in pipes, whereby an operating pressure of 1.2 bar abs. and an operating temperature of 60°C must not be exceeded.  
 Provided with one temperature sensor (PT 100) the armature is certified against short time burning from one side. The installation is not dependent on the position and both directions of flow are possible. During installation, please observe the direction of detonation and the indication „protected side“.