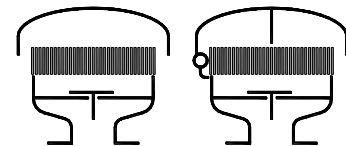
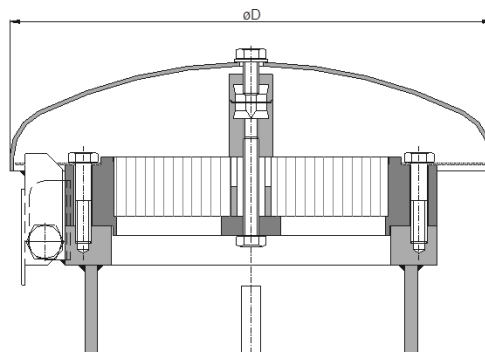
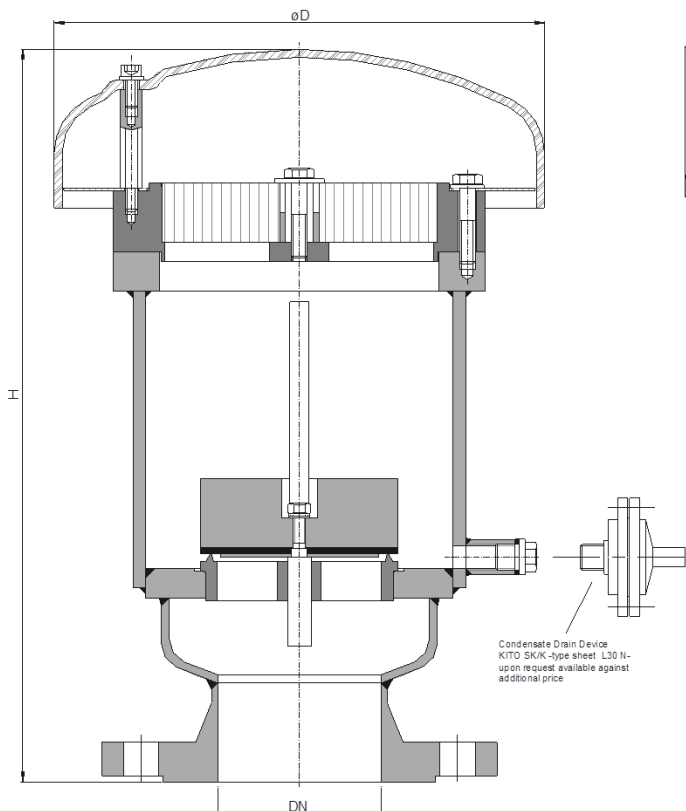


Pressure Relief Valve
KITO® DS/KS-IIA-...-A
KITO® DS/KS-IIA-...-K



KITO DS/KS-IIA-...-A

KITO DS/KS-IIA-...-K



Type examination certificate to DIN EN ISO 16852

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

Example to order:

KITO® DS/KS-IIA-25-A

(design with weather hood from PMMA and flange connection DN 25 PN 40)

DN	ANSI	~D	~H		~ kg*	setting (mbar)	
			DIN	ANSI		min.	max.
25 PN 40	1"	220	305	320	10	2.5	300
50 PN 16	2"		315	335	14	1.6	123
80 PN 16	3"	245	370	375	19	1.9	135
100 PN 16	4"				20	1.9	85

Dimensions in mm

* Indicated weights are understood without weight load and refer to the standard design

Attention !!! Dimension H for design with a weather hood from stainless steel 1.4571 ca. 10-15 mm lower.

Standard valve setting 7-30 mbar -different settings against additional price-

Design subject to change

performance curves: C 0.7 N

Standard design

housing : steel, stainless steel mat. no. 1.4571
 valve seat / spindle : stainless steel mat. no. 1.4571
 valve sealing : NBR, Viton, PTFE
 KITO® flame arrester element : completely interchangeable
 KITO® casing / grid : stainless steel mat. no. 1.4308 / 1.4310, 1.4408 / 1.4571

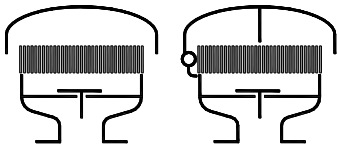
weather hood :
 KITO® DS/KS-IIA-...-K: stainless steel mat. no. 1.4571, hood can fold automatically as a result of folding mechanism and fusing element
 KITO® DS/KS-IIA-...-A: PMMA

protective screen : PA6
 flange connection : DIN EN 1092-1 form B1, ANSI 150 lbs. RF

Application

As venting device for installation on storage tanks incorporating an explosion and endurance burning flame arrester element and a PRV to allow for the passage of excess pressure but prevent or minimize the loss of gas/vapours depending on valve adjustment. Usually mounted on top of the tank in conjunction with a vacuum relief valve. Approved for all materials of the explosion group IIA with a maximum experimental safe gap (MESG) > 0.9.

An explosion proof condensate drain is also available for this model at extra cost.



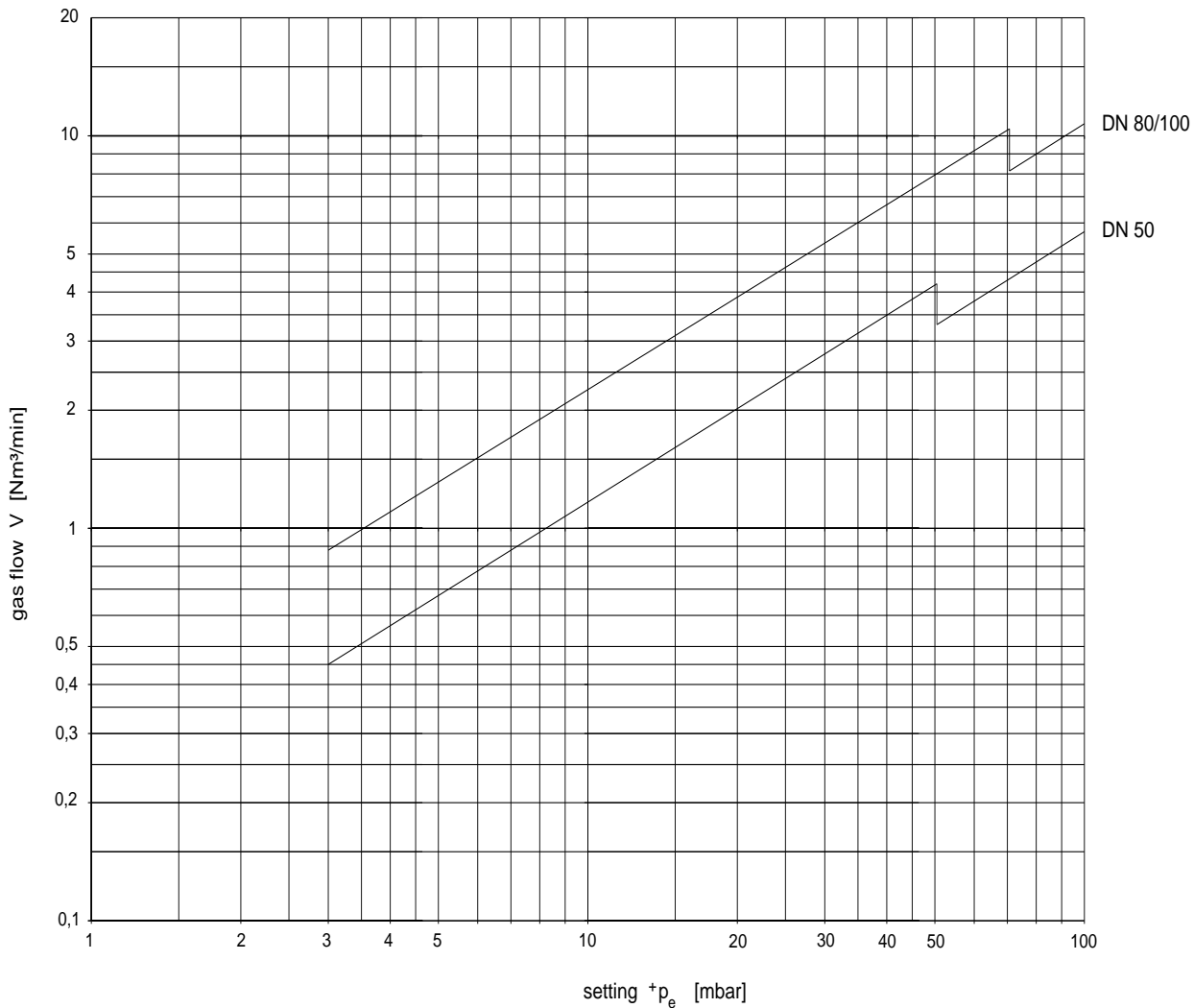
Pressure Relief Valve
KITO® DS/KS-IIA-...-A
KITO® DS/KS-IIA-...-K
C 7 N

The flow capacity V refers to a density of air with $\rho = 1.29 \text{ kg/m}^3$ at a temperature of 273 K and a pressure of 1.013 mbar.
 The indicated flow rates will be reached by an accumulation of 40% above valve's setting.

The flow capacity for gases with different densities can be calculated sufficiently accurate by the following approximation equation:

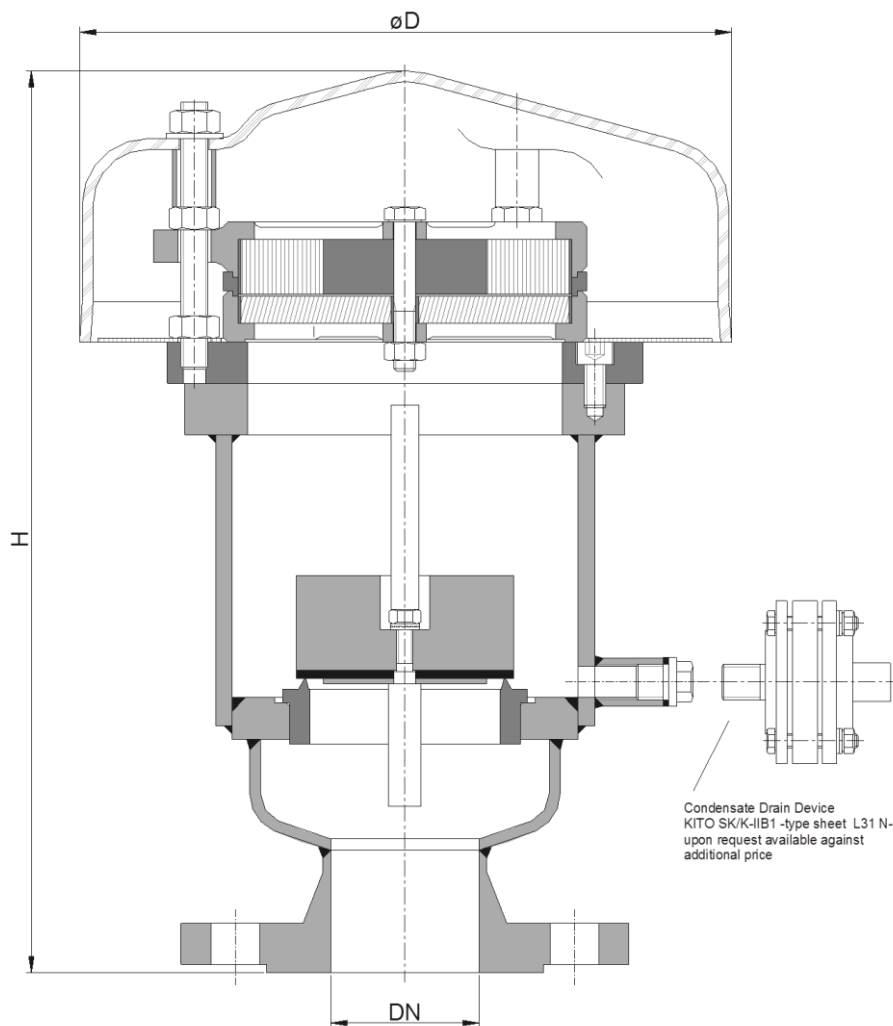
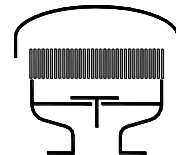
$$\dot{V}_{40\%} = \dot{V}_b \cdot \sqrt{\frac{\rho_b}{1.29}} \quad \text{or} \quad \dot{V}_b = \dot{V}_{40\%} \cdot \sqrt{\frac{1.29}{\rho_b}}$$

Indicated flow rates will be reached by an accumulation of 40% above valve's setting.



Design subject to change

Pressure Relief Valve
KITO® DS/KS-IIB1-...



With additional examination and approval, applicable also for alcohols (ethanol, methanol...)

Example to order :

KITO® DS/KS-IIB1-50
 (design with flange connection DN 50 PN 16)

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

DIN	DN	ANSI	D	DIN	ANSI	kg*	setting (mbar)	
							min.	max.
50 PN 16		2"	220	332	352		1.6	123

Dimensions in mm

* Indicated weights are understood without weight load and refer to the standard design.

standard valve setting 7-30 mbar -different settings against additional price-

Design subject to change

performance curves: C 0.7.1 N

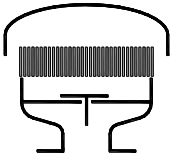
Standard design

- housing : steel, stainless steel mat. no. 1.4571
- valve seat / spindle : stainless steel mat. no. 1.4571
- valve sealing : NBR, Viton, PTFE
- KITO® flame arrester element : completely interchangeable
- KITO® casing : mat. no. 1.4408
- KITO® grid : mat. no. 1.4310 / 1.4571
- weather hood : PMMA
- protective screen : PA6
- flange connection : DIN EN 1092-1 form B1, ANSI 150 lbs. RF

Application

As an end-of-line flame arrester, explosion and endurance burning proof for all inflammable liquids and vapors of explosion group IIB1 and also for alcohols with a maximum experimental safe gap (MESG) ≥ 0.85 mm. Safety valve for out breathing pipes of storage tanks as a protection against overpressure. By appropriate pressure adjustment the gasification losses of the storage product are prevented or strongly limited. Usually mounted on the top of the tank in conjunction with a vacuum relief valve (see KITO® VS/KS-IIB3).

An explosion proof condensate drain is also available for this model at extra cost.



Pressure Relief Valve
KITO® DS/KS-IIB1-...
C 7.1 N

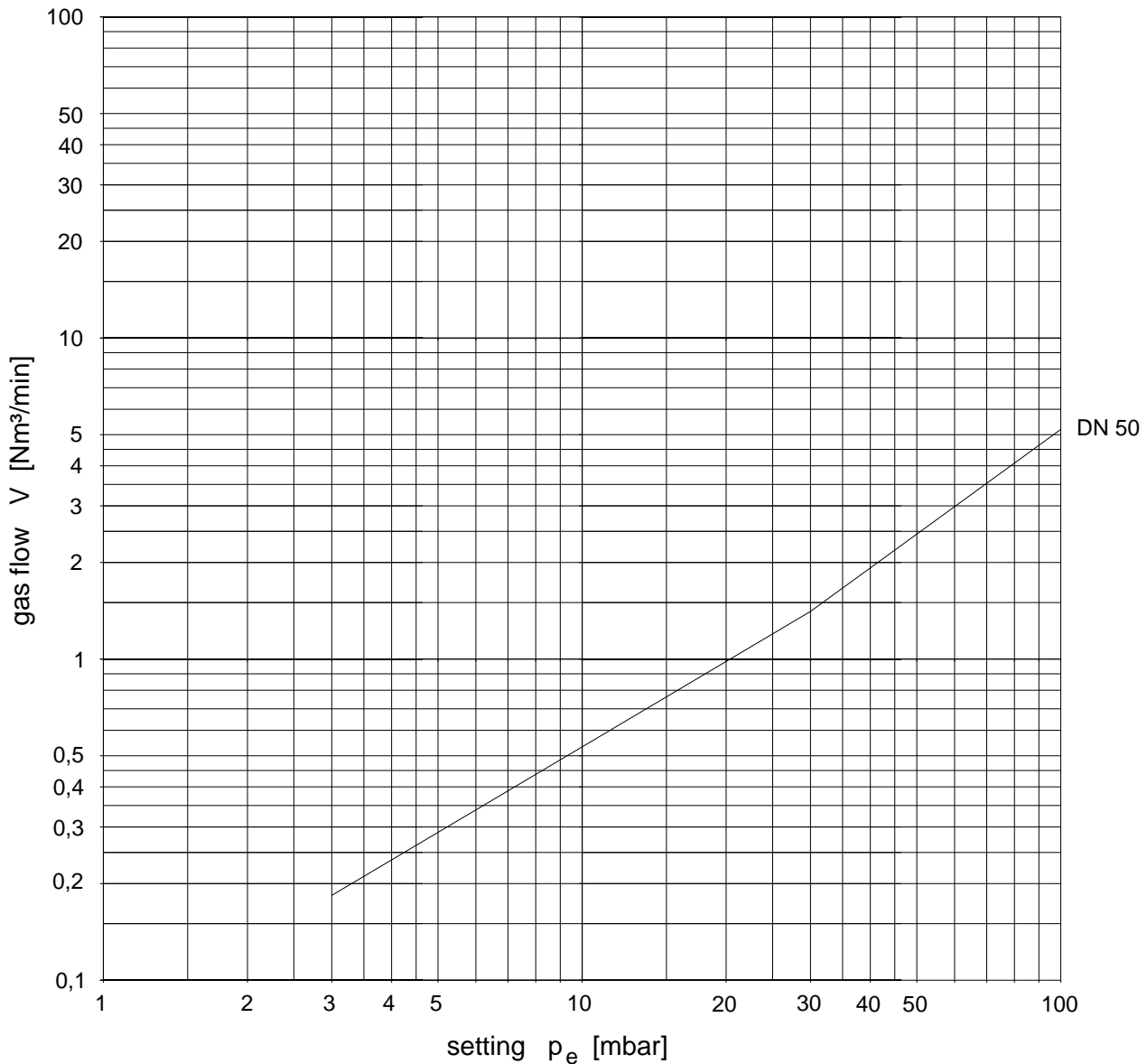
The flow capacity V refers to a density of air with $\rho = 1.29 \text{ kg/m}^3$.

The flow capacity for gases with different densities can be calculated sufficiently accurate by the following approximation equation:

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

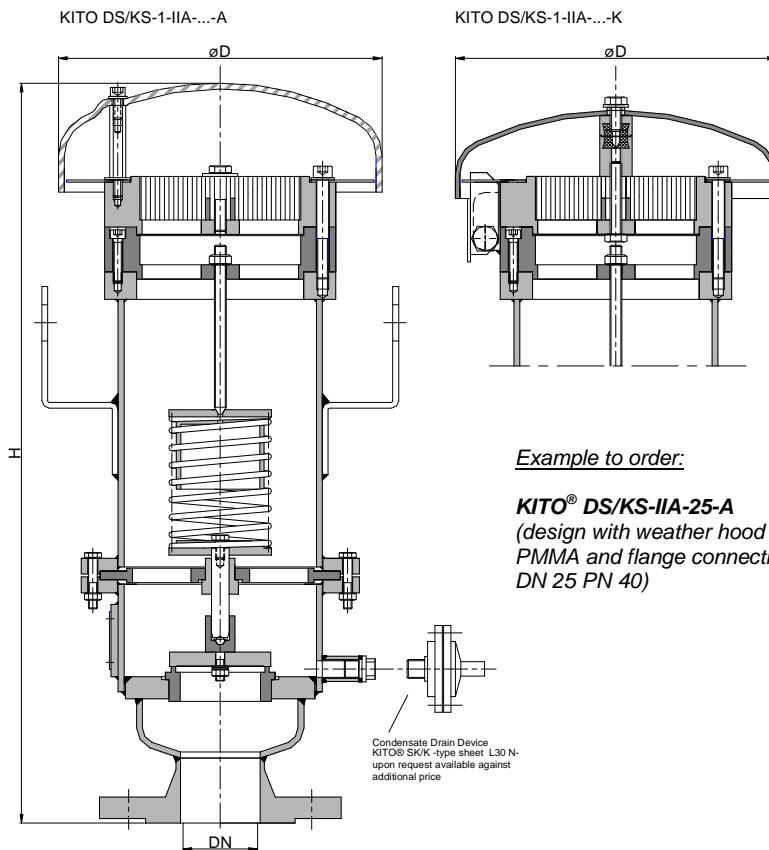
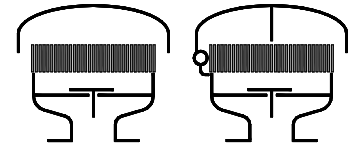
Indicated flow rates will be reached by an accumulation of 40% above valve's setting (see DIN 4119).

If different accumulations are required see sheet A 31N sheet 1.



Design subject to change

Pressure Relief Valve
KITO® DS/KS-1-IIA-...-A
KITO® DS/KS-1-IIA-...-K



Example to order:

KITO® DS/KS-IIA-25-A
 (design with weather hood from PMMA and flange connection DN 25 PN 40)



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

DN	ANSI	~D	DIN	~H ANSI	~ kg	setting* (mbar)	
						min.	max.
25 PN 40	1"	220	512	532		200	350
50 PN 16	2"						
80 PN 16	3"	245				150	
100 PN 16	4"						

Dimensions in mm

Attention !!! Dimension H for design with a weather hood from stainless steel 1.4571 ca. 10-15 mm lower.

* minor settings see type sheet C 7 N, higher settings on request.

Design subject to change

performance curves: C 0.7.3 N

Standard design

housing : steel, stainless steel mat. no. 1.4571
 valve pallet : spring loaded
 valve seat and spindle : stainless steel 1.4571
 valve seals : metal sealing
 spring loaded parts : stainless steel 1.4571
 compression spring : stainless steel 1.4301
 KITO® flame arrester element : completely interchangeable
 KITO® casing / grid : stainless steel mat. no. 1.4308 / 1.4310, 1.4408 / 1.4571

weather hood :
 KITO® DS/KS-1-IIA-...-K : stainless steel mat. no. 1.4571, hood can fold automatically as a result of folding mechanism and fusing element
 KITO® DS/KS-1-IIA-...-A : PMMA

protective screen : PA6
 flange connection : DIN EN 1092-1 form B1, ANSI 150 lbs. RF

Application

As venting device for installation on storage tanks incorporating an explosion and endurance burning flame arrester element and a PRV to allow for the passage of excess pressure but prevent or minimize the loss of gas/vapours depending on valve adjustment. Usually mounted on top of the tank in conjunction with a vacuum relief valve.
 Approved for all materials of the explosion group IIA with a maximum experimental safe gap (MESG) > 0.9.

An explosion proof condensate drain is also available for this model at extra cost.