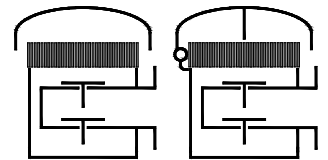


Combined Pressure / Vacuum Relief Valve

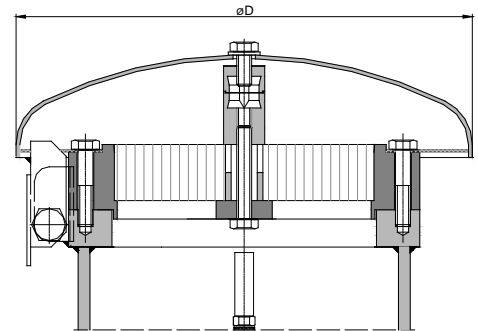
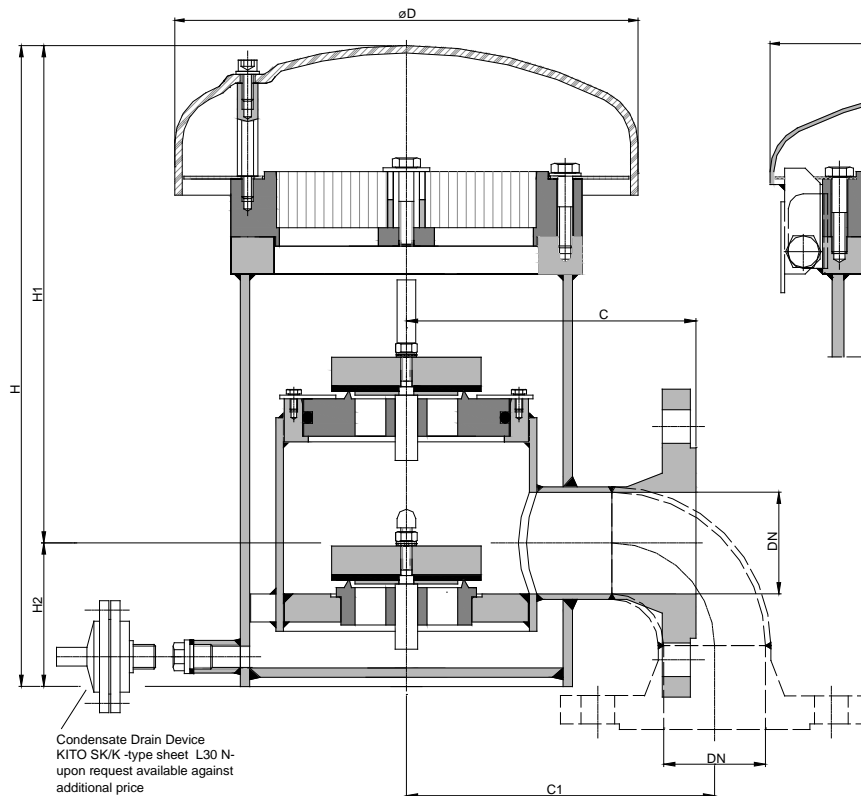
KITO® VD/KL-IIA-...-A

KITO® VD/KL-IIA-...-K



KITO VD/KL-IIA-...-A

KITO VD/KL-IIA-...-K



DN	ANSI	D	H	H1	H2	C	C1	kg*	vacuum		setting (mbar)		
									min.	max.	pressure	min.	max.
50	2"	248	345	268	77	155	186	22	2.0	55	DN 25	2.9	250
											DN 50	2.0	147
80	3"	248	400	295	105	180	252	30	1.7	60	DN 50	2.3	210
											DN 80	1.8	73
100	4"	248	478	354	124	190	310	47	1.6	65	DN 50	2.5	194
											DN 80	1.9	100
											DN 100	1.6	62

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-

Example to order :

KITO® VD/KL-IIA-50/25-A

(design with weather hood from PMMA and lateral flange connection DN 50 PN 16)

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

Design subject to change

performance curves: E 0.14 N

Standard design

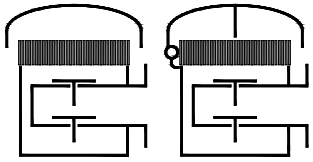
housing : steel, stainless steel mat. no. 1.4571
 valve seats / spindles : stainless steel mat. no. 1.4571
 valve seals : NBR, Viton, PTFE
 KITO® flame arrester element : completely interchangeable
 KITO® casing / grid : stainless steel mat. no. 1.4308 / 1.4310, 1.4408 / 1.4571

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

protective screen : PA6
 flange connection : DIN EN 1092-1 form B1 PN 16, ANSI 150 lbs. RF, (lateral or vertical)

Application

As end-of-line armature, for venting apertures on tank installations, valve is explosion-proof and endurance-burning proof for certain inflammable liquids. Used mainly as venting and breather device for fixed roof tanks to prevent inadmissible pressure and vacuum and to minimize unwelcome gas losses and inadmissible emissions. Approved for all materials of the explosion group IIA with a maximum experimental safe gap (MESG) > 0.9. The housing is mounted perpendicularly on a tank roof. If required by the customer, the valve is equipped with an explosion-proof condensate drain device and a lifting lever for the lower valve disk in order to test the function.



Combined Pressure / Vacuum Relief Valve

KITO® VD/KL-IIA-...-A

KITO® VD/KL-IIA-...-K

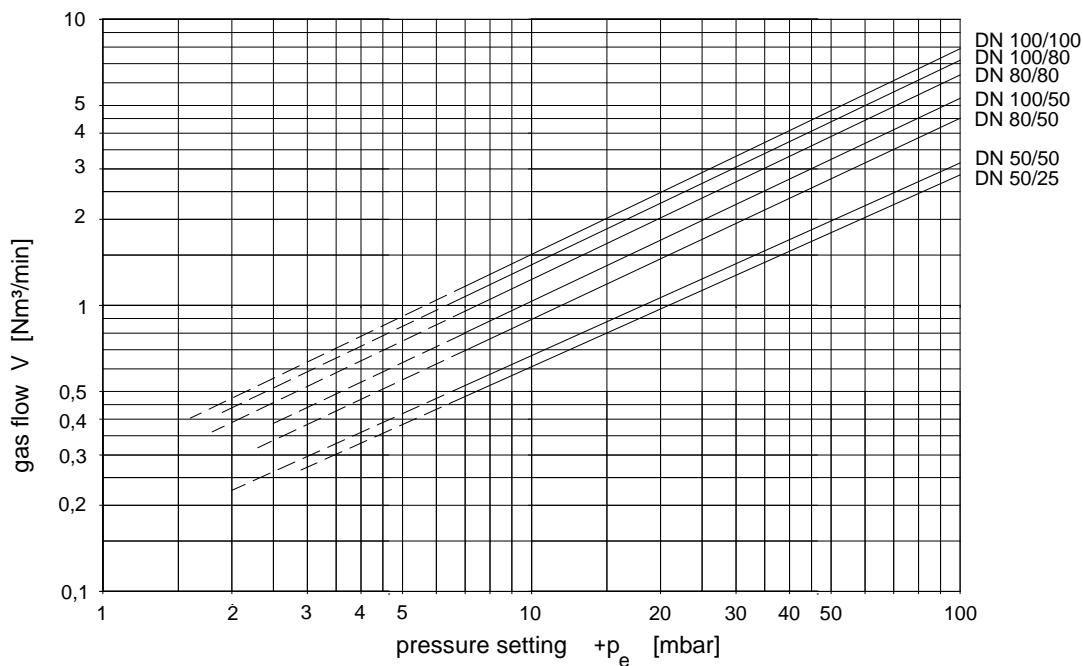
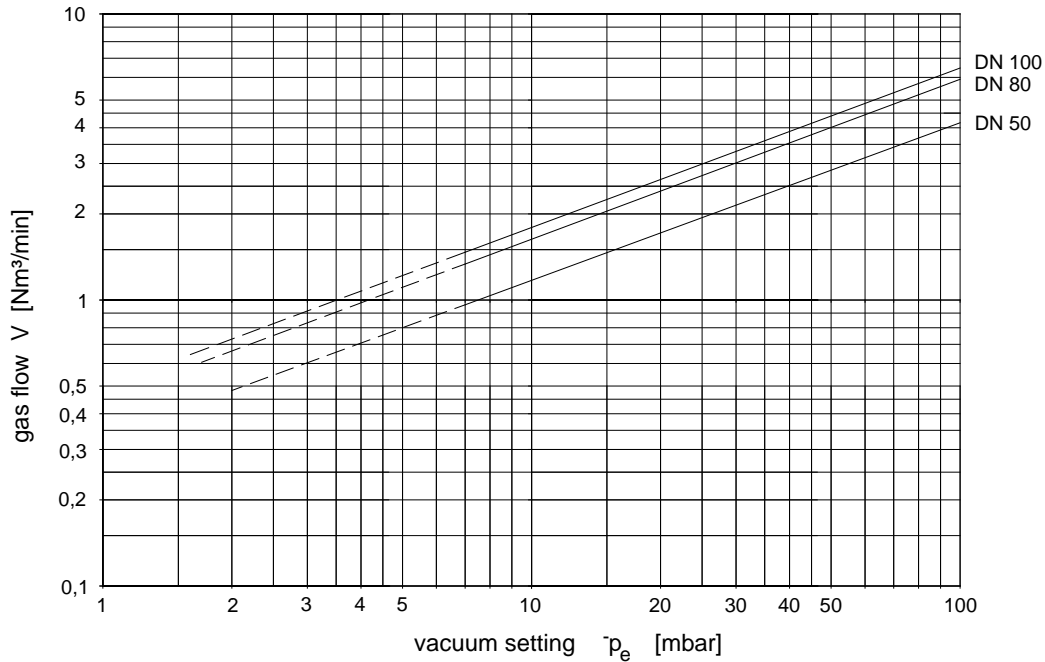
E 14 N

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.

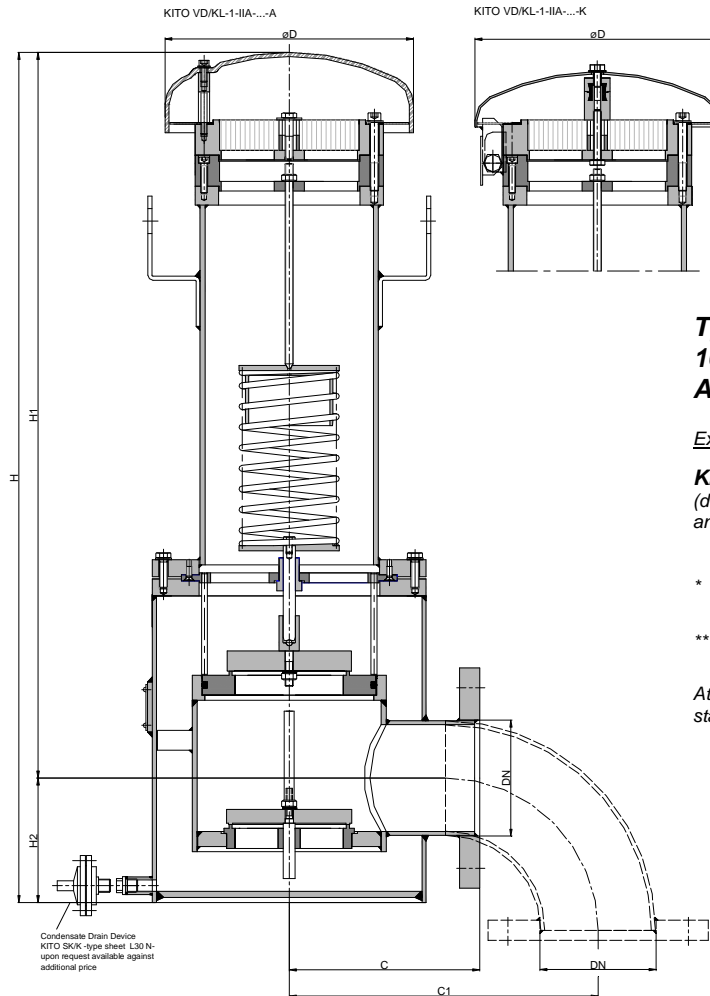
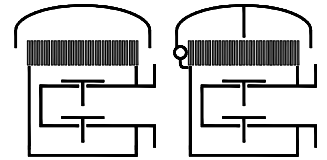


Design subject to change

Combined Pressure / Vacuum Relief Valve

KITO® VD/KL-1-IIA-...-A

KITO® VD/KL-1-IIA-...-K



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

Example to order :

KITO® VD/KL-1-IIA-50/25-A

(design with weather hood from PMMA, overpressure pallet DN 25 and vertical flange connection DN 50 PN 16)

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

** minor settings see type sheet E 14 N, higher settings on request

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

DN	ANSI	D	H	H1	H2	C	C1	kg	setting mbar				
									vacuum*		pressure**		
									min.	max.	sizes	min.	max.
50	2"	248			77	155	186		6	55	DN 25 u. 50	200	350
80	3"	248			105	180	252		7	60	DN 50 u. 80		
100	4"	248	850	726	124	190	310		7	65	DN 50, 80 u. 100		

Dimensions in mm

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

Design subject to change

performance curves: E 0.14.1 N

Standard design

housing : steel, stainless steel mat. no. 1.4571
 valve pallet (pressure) : spring loaded
 valve pallet (vacuum) : weight loaded
 valve seats / spindles : stainless steel mat. no. 1.4571
 valve seals : metal sealing
 spring loaded parts : stainless steel 1.4571
 compression spring : stainless steel
 KITO® flame arrester element : completely interchangeable
 KITO® casing / grid : stainless steel mat. no. 1.4308 / 1.4310, 1.4408 / 1.4571

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

protective screen : PA6
 flange connection : DIN EN 1092-1 form B1 PN 16, ANSI 150 lbs. RF, (lateral or vertical)

Application

As end-of-line armature, for venting apertures on tank installations, valve is explosion-proof and endurance-burning proof for certain inflammable liquids. Used mainly as venting and breather device for fixed roof tanks to prevent inadmissible pressure and vacuum and to minimize unwelcome gas losses and inadmissible emissions. Approved for all materials of the explosion group IIA with a maximum experimental safe gap (MESG) > 0.9. The housing is mounted perpendicularly on a tank roof. If required by the customer, the valve is equipped with an explosion-proof condensate drain device and a lifting lever for the lower valve disk in order to test the function.