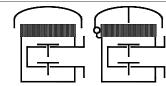
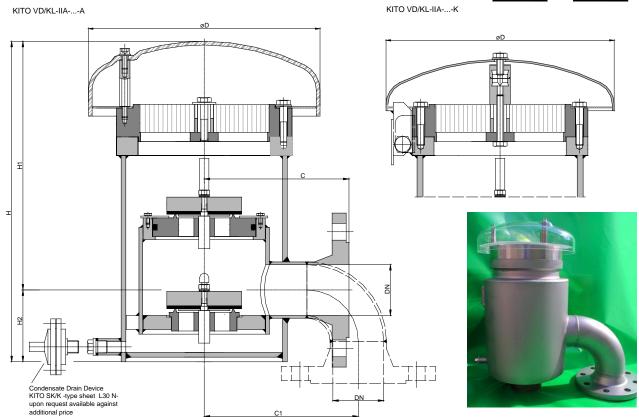
## **Combined Pressure / Vacuum Relief Valve** KITO® VD/KL-IIA-...-A KITO® VD/KL-IIA-...-K





	ANSI	D	н	H1	H2	С	C1	kg*	setting (mbar)				
DN									vacuum		pressure		
									min.	max.	sizes	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.

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

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

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 C € -designation in accordance to ATEX-Guideline 94/9/EC

Design subject to change performance curves: E 0.14 N

Standard design

: steel, stainless steel mat. no. 1.4571 housing valve seats / spindles : stainless steel mat. no. 1.4571

: NBR, Viton, PTFE

valve seals KITO® flame arrester

: completely interchangeable element 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: PMMĀ protective screen

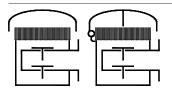
flange connection

: 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 kg/m³ 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.

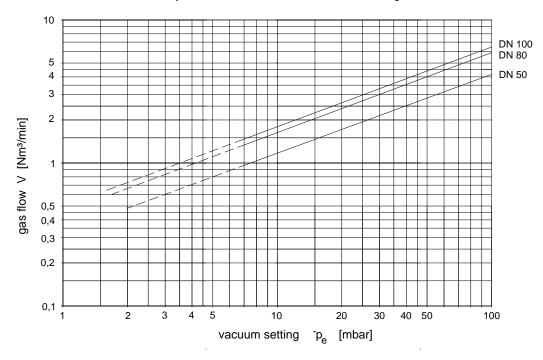
The flow capacity for gases with different densities can be calculated sufficiently accurate by the following approximation equation:

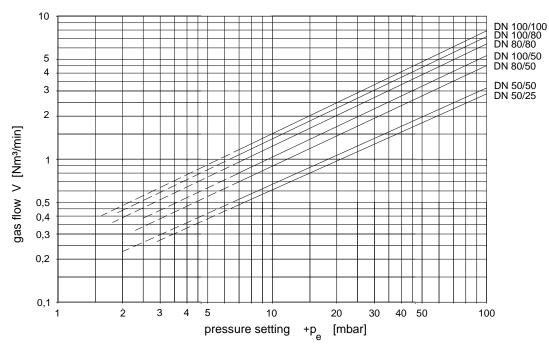
$$\stackrel{\cdot}{V}_{40\%}=\stackrel{\cdot}{V}_{b}\!\cdot\!\sqrt{\frac{\rho_{b}}{1.29}}\,\square$$

or

$$\overset{\cdot}{\mathrm{V}}_{\mathrm{b}}=\overset{\cdot}{\mathrm{V}}_{40\%}\cdot\sqrt{\frac{1.29}{
ho_{\mathrm{b}}}}$$
 [

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





Design subject to change