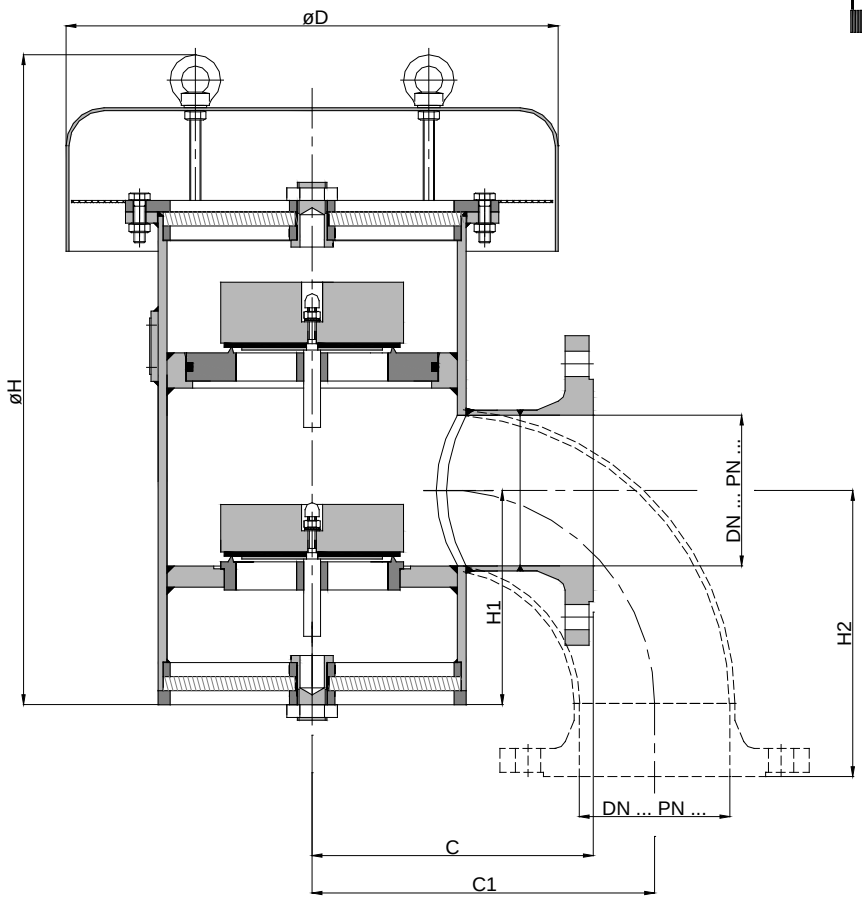
Combined Vacuum / Pressure Relief Valve
KITO® VD/AE-…-IIB3





DN	PN	ANSI	D	H	H1	H2	C	C1	kg*	setting (mbar) vacuum min.	vacuum max.	pressure min.	pressure max.
50	16	2“	240	376	108	121	155	185		2.0	35	2.0	50
80	16	3“	295	465	131	165	180	245		1.7	35	1.8	50
100	16	4“	406	554	152	204	200	245		1.6	35	1.6	50
150	16	6“	450	560	200	285	245	340		1.8	35	2.0	50
200	10	8“	550	716	367	275	275	518		2.1	35	2.1	50

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-

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

Design subject to change

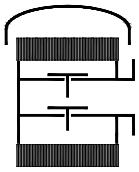
performance curves : E 0.20 N

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 elements	: completely interchangeable
KITO® casing	: stainless steel mat. no 1.4301, 1.4571
KITO® grid	: stainless steel mat. no 1.4301, 1.4571
weather hood	: stainless steel mat. no 1.4301, 1.4571
protective screen	: stainless steel mat. no 1.4301, 1.4571
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 and breathing of tanks.
Tested and approved against atmospheric deflagrations for all materials of the explosion group IIB3 with a maximum experimental safe gap (MESG) ≥ 0.65 mm.
Vertical mounting (for tanks roofs) with an integrated elbow as an option.



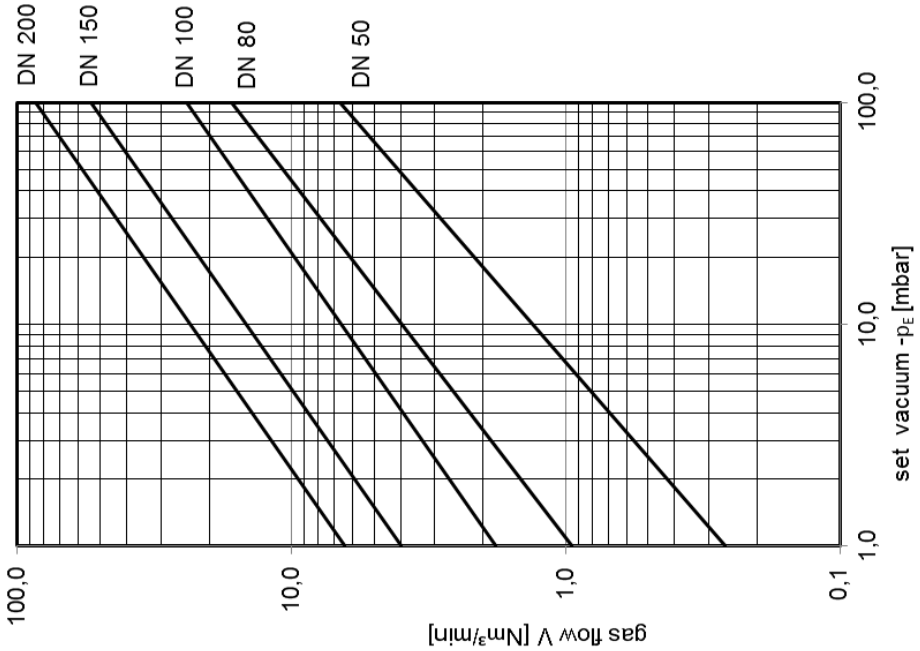
Combined Vacuum / Pressure Relief Valve
KITO® VD/AE-…-IIB3
E 20 N

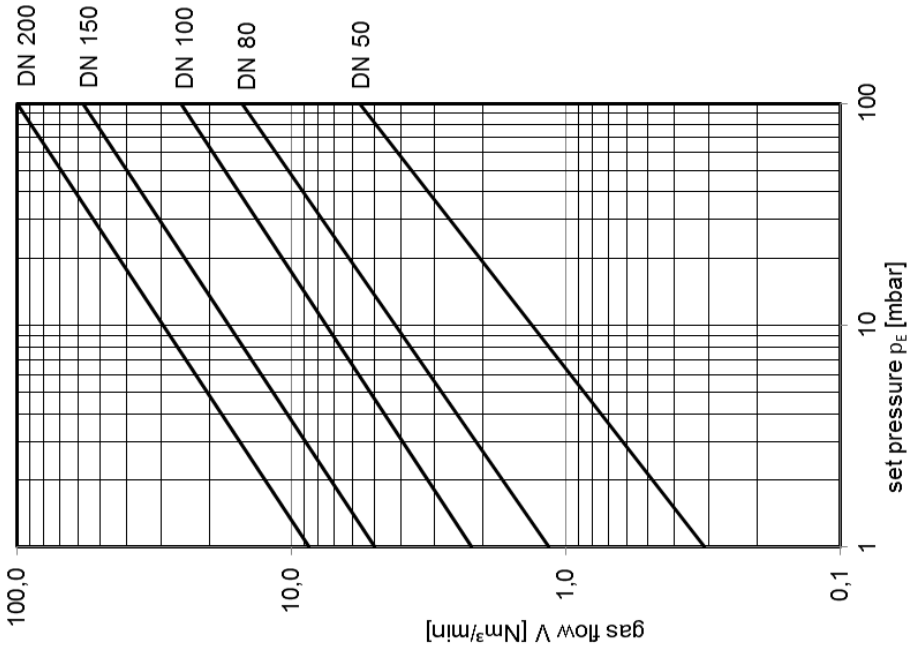
The flow capacity V refers to a density of air with ρ = 1.29 kg/m³ at a temperature of 273 K and a pressure of 1.013 mbar.
The indicated flow rates will be reached by an accumulation of 40% above valve's setting.

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

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

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





Design subject to change