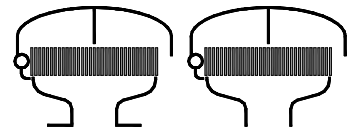


Type sheet

Deflagration and endurance burning proof ventilation hood

KITO® BEH-4-IIB1-...-K

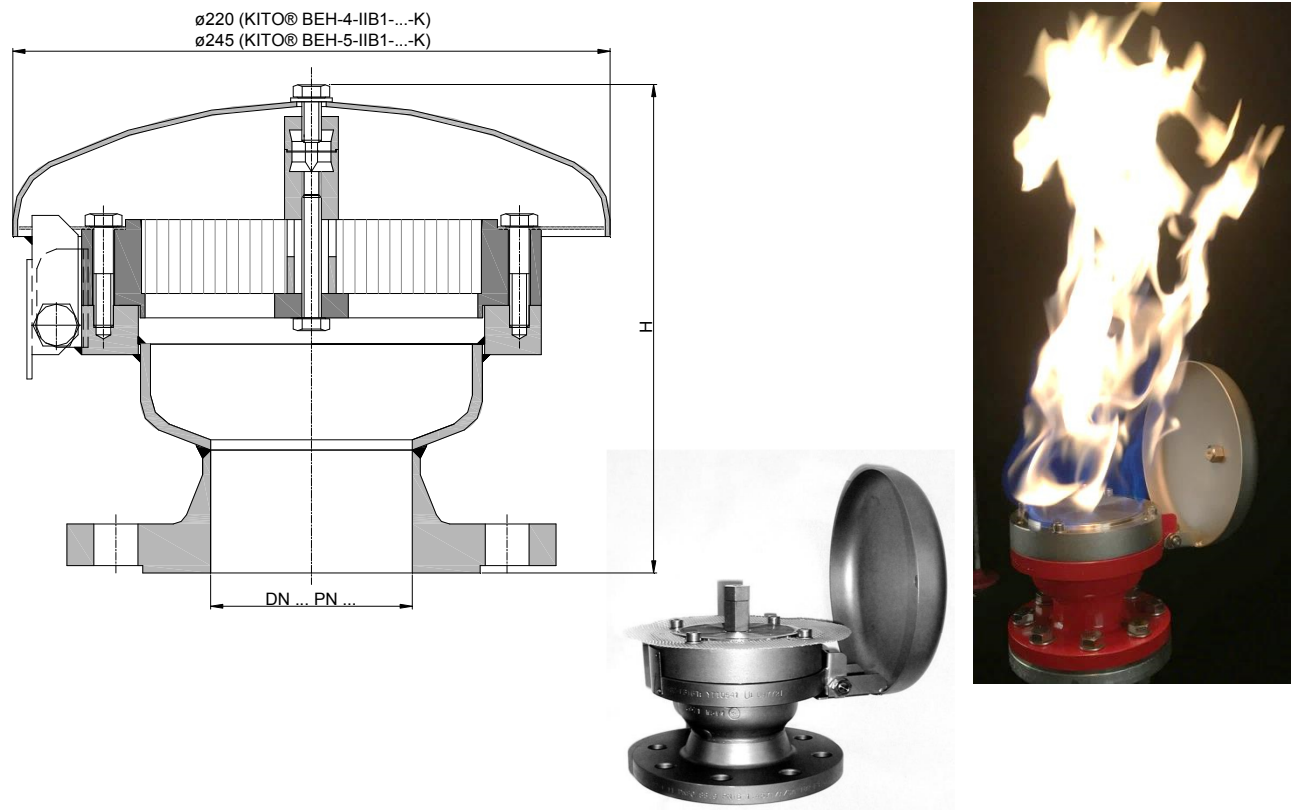
KITO® BEH-5-IIB1-...-K



Application

Deflagration and endurance-proof end of line for flammable media of explosion group IIA with a maximum experimental safe gap (MESG) > 0.9 mm for a maximum operating temperature of 60 °C. It can also be used as deflagration- and endurance-proof end of line device with specific operating conditions for methanol, ethanol (IIB1) and 2-propanol on underground and insulated tank systems. The minimum volume flows during outflow must be observed. Can also be used as a device against atmospheric deflagration of gas-air and vapor-air mixtures of explosion group IIB1 with a maximum experimental safe gap (MESG) ≥ 0.85 mm.

Dimensions (mm)



DIN	DN		BEH-4-...	H	BEH-5-...	weight (kg)	
	ASME	G				BEH-4-...	BEH-5-...
25 PN 40	1"	1"	184	197	8.5	10.5	
32 PN 40	1 ¼"	1 ¼"	184	197	9.0	11.0	
40 PN 40	1 ½"	1 ½"	196	199	9.5	11.5	
50 PN 16	2"	2"	189	199	10.0	12.0	
65 PN 16	2 ½"	2 ½"	189	200	10.0	14.0	
80 PN 16	3"	3"	189	200	11.0	15.0	
100 PN 16	4"	4"	-	200	-	15.5	

Weight refers to the standard design

Example to order

KITO® BEH-4-IIB1-25-K

(design with flange connection DN 25 PN 40)

Type examination certificate to EN ISO 16852 and CE-marking in accordance to ATEX-Directive 2014/34/EU

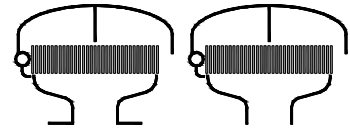
page 1 of 2

Type sheet

Deflagration and endurance burning proof ventilation hood

KITO® BEH-4-IIB1-...-K

KITO® BEH-5-IIB1-...-K



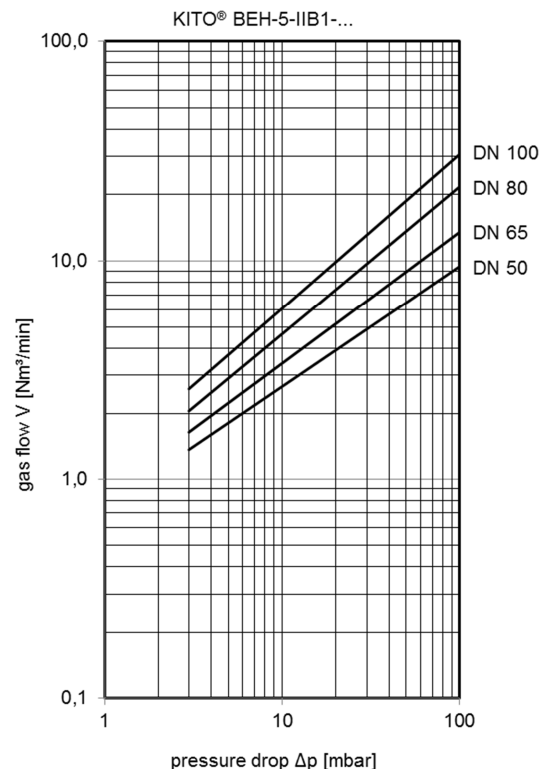
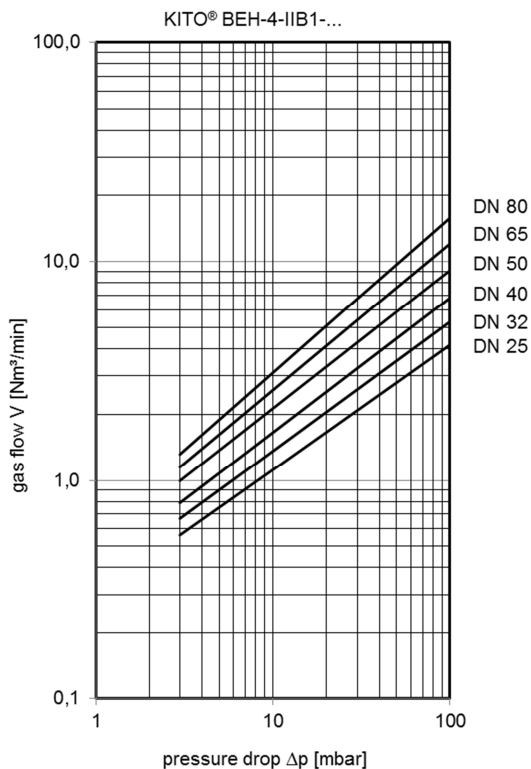
Design

	standard	optionally
housing	steel	stainless steel mat. no. 1.4571
KITO®-flame arrester element	completely interchangeable	
KITO®-casing / KITO®-grid	stainless steel mat. no. 1.4308 / 1.4310	stainless steel mat. no. 1.4408 / 1.4571
weather hood	stainless steel mat. no. 1.4571, hood can fold automatically as a result of folding mechanism and fusing element	
protective screen	PA6	
connection	flange EN 1092-1 type B1	flange ASME B16.5 Class 150 RF, threaded format

performance curves

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

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



minimum volume flows V_c during outflow (in m^3/h^{-1})

substance	KITO® BEH-4-IIB1-...	KITO® BEH-5-IIB1-...
Methanol	$5,0 V_c \triangleq 33,00 \text{ m}^3/\text{h}^{-1}$	$5,0 V_c \triangleq 47,40 \text{ m}^3/\text{h}^{-1}$
Ethanol	$4,0 V_c \triangleq 26,40 \text{ m}^3/\text{h}^{-1}$	$4,0 V_c \triangleq 37,92 \text{ m}^3/\text{h}^{-1}$
2-Propanol	$4,0 V_c \triangleq 26,40 \text{ m}^3/\text{h}^{-1}$	$4,0 V_c \triangleq 37,92 \text{ m}^3/\text{h}^{-1}$