

Type sheet Detonation proof foot valve **KITO[®] NRV-...-IIB3**



Application

For end of line service, detonation proof, valve with superposed valve pallets, for installation into suction pipes of underground tanks in which inflammable liquids of explosion group IIA1 to IIB3 with a maximum experimental safety gap (MESG) ≥ 0.65 mm and an maximum operating temperature of 60 °C are stored. Tested and approved as detonation flame arrester type 4. A draining of the liquid column will be prevented reliably. Installation of the foot valve has to be exact vertically at the end of the suction pipe. It is not allowed to connect it to pipelines with a larger diameter than the connecting size of valve itself.

Dimensions (mm)





DN		D	н	ka
DIN	ASME	D	п	kg
25 PN 40	1"	144	125	7.1
32 PN 40	1 ¼"	144	125	7.0
40 PN 40	1 1⁄2"	169	135	9.6
50 PN 16	2"	169	135	11.4
65 PN 16	2 ¹ / ₂ "	189	150	14.3
80 PN 16	3"	204	165	14.3
100 PN 16	4"	239	200	21.0
125 PN 16	5"	300	235	37.2
150 PN 16	6"	350	260	49.5

Weight refers to the standard design

Example for order

KITO® NRV-100-IIB3

(design with flange connection DN 100 PN 16)

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

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Design

	standard	optionally
housing / suction cup	GS-C25 (1.0619) / mat. no. 1.4301	stainless steel mat. no. 1.4408 / 1.4571
valve seat, valve spindle	stainless steel mat. no. 1.4571	
valve sealing	PTFE	
valve cone	stainless steel mat. no. 1.4571	
connection	drilled according to EN 1092-1 type A (with suitable studs for easy connection)	drilled according to ASME B16.5 Class 150 RF (with suitable studs for easy con- nection), socket thread

Performance curves

The volume flow V in Nm³/min was determined with water according to DIN EN 60534 at a temperature $T_n = 15^{\circ}C$ and an atmospheric pressure $\rho_n = 1013$ mbar.

For media of different density the flow rate may be calculated with an appropriate accuracy with this formula :

$$\dot{\mathbf{V}}_{\mathrm{liquid}} \cong \dot{\mathbf{V}}_{\mathrm{water}} \cdot \sqrt{rac{
ho_{\mathrm{water}}}{
ho_{\mathrm{liquid}}}}$$



pressure drop \triangle p (mbar)

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