



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Mini UHV gate valve, Series 010, DN 50 (ID 2")**  
**Ordering No. 01034-KE21**

### Description

Flange	ISO-KF 50
Actuator	pneumatic, single acting with closing spring – with position indicator
Feedthrough	Bellows

### Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-10}$ mbar to 2 bar (abs)
Differential pressure on the gate		$\leq 2$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		160 ls <sup>-1</sup>
Cycles until first service		50 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Position indicator	$\leq 250$ °C open / $\leq 200$ °C closed (bake-out max. 24h) $\leq 200$ °C $\leq 80$ °C
Heating and cooling rate		$\leq 50$ °C h <sup>-1</sup>
Material	– Valve Body – Gate – Bellows	AISI 304 (1.4301), AISI 316L (1.4435) AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal FKM (Viton®), vulcanized FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		0.12 l / 0.004 ft <sup>3</sup>
Compressed air min. – max. overpressure		5 – 7 bar / 73 – 102 psi
Compressed air connection		G 1/8" (1/8" NPT for USA)
Actuation time	– closing – opening	0.7 s 0.7 s
Weight		4.2 kg / 9.26 lbs

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Behavior in case of compressed air pressure drop – Valve closed  
– Valve open

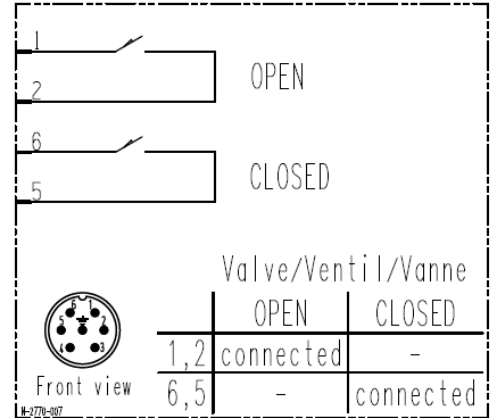
valve remains closed  
valve closes

Behavior in case of power failure – Valve closed  
– Valve open

depending on customer installation  
depending on customer installation

### Position indicator

Type Micro switch  
Voltage  $\leq 250$  V AC  $\leq 50$  V DC  
Current max. 5.0 A 3 A



Wiring diagram

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