



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Mini UHV gate valve, Series 010, DN 25 (ID 1")**  
**Ordering No. 01028-KE42**

### Description

Flange	ISO-KF 25
Actuator	pneumatic, single acting with opening spring – with solenoid valve – with position indicator
Feedthrough	Bellows

### Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10} \text{ mbar ls}^{-1}$ $< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		$1 \cdot 10^{-10} \text{ mbar}$ to 2 bar (abs)
Differential pressure on the gate		$\leq 2 \text{ bar}$
Differential pressure at opening		$\leq 30 \text{ mbar}$
Conductance (molecular flow)		$38 \text{ ls}^{-1}$
Cycles until first service		50 000
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve Body – Actuator – Solenoid valve – Position indicator	$\leq 250 \text{ }^{\circ}\text{C}$ open / $\leq 200 \text{ }^{\circ}\text{C}$ closed (bake-out max. 24h) $\leq 200 \text{ }^{\circ}\text{C}$ $\leq 50 \text{ }^{\circ}\text{C}$ $\leq 80 \text{ }^{\circ}\text{C}$
Heating and cooling rate		$\leq 50 \text{ }^{\circ}\text{C h}^{-1}$
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 <sup>®</sup> ), vulcanized FKM (Viton <sup>®</sup> )
Mounting position		any
Volume of pneumatic actuator		0.06 l / 0.002 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		2.2 kg / 4.85 lbs

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Behavior in case of compressed  
air pressure drop

- Valve closed
- Valve open

Valve opens  
Valve remains open

Behavior in case of power failure

- Valve closed
- Valve open

Valve opens  
Valve remains open

## Electrical connections

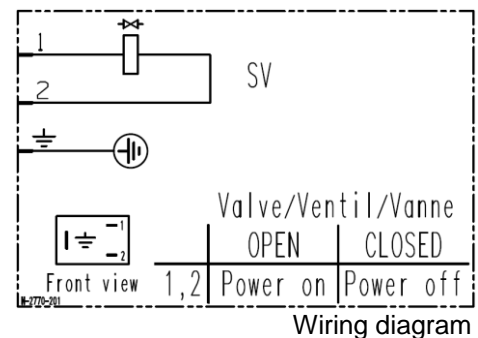
### Solenoid valve

Type

3/2-way

Voltage

Defined by order



### Position indicator

Type

Micro switch

Voltage

≤ 250 V AC    ≤ 50 V DC

Current max.

5.0 A    3 A

