



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Mini UHV gate valve, Series 010, DN 50 (ID 2")
Ordering No. 01034-KE42

Description

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

Technical data

Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-10}$ mbar to 2 bar (abs)
Differential pressure on the gate		≤ 2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		160 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	≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h) ≤ 200 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		≤ 50 °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®), vulcanized FKM (Viton®)
Mounting position		any
Volume of pneumatic actuator		0.06 l / 0.002 ft ³
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

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

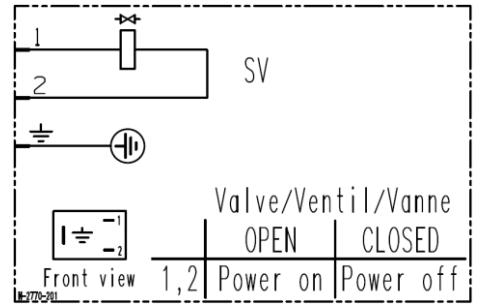
Valve opens
Valve remains open

Valve opens
Valve remains open

Electrical connections

Solenoid valve

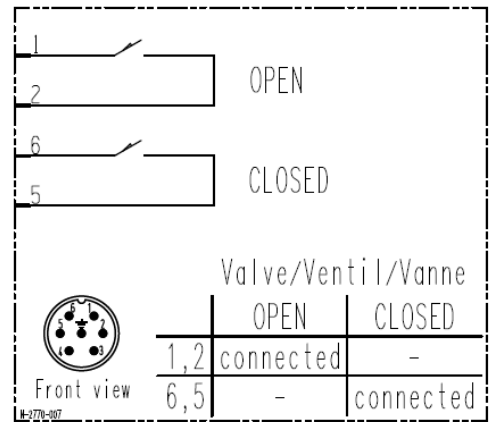
Type 3/2-way
Voltage Defined by order



Wiring diagram

Position indicator

Type Micro switch
Voltage ≤ 250 V AC ≤ 50 V DC
Current max. 5.0 A 3 A



Wiring diagram