VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Mini UHV gate valve, Series 010, DN 40 (ID 1½'')
Ordering No. 01032-KE41

Description

Flange	ISO-KF 40
Actuator	pneumatic, single acting with closing spring – with solenoid valve – with position indicator
Feedthrough	Bellows

Technical data

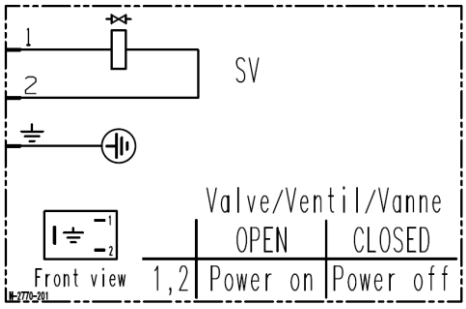
Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10}$ mbar ls^{-1} $< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-10}$ mbar to 2 bar (abs)
Differential pressure on the gate		≤ 2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		160 ls^{-1}
Cycles until first 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		0.12 l / 0.004 ft^3
Compressed air min. – max. overpressure		5 – 7 bar / 73 – 102 psi
Compressed air connection		G ⅛" (⅛" NPT for USA)
Actuation time	– closing – opening	0.7 s 0.7 s
Weight		4.2 kg / 9.26 lbs

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	valve remains closed valve closes

Electrical connections

Solenoid valve

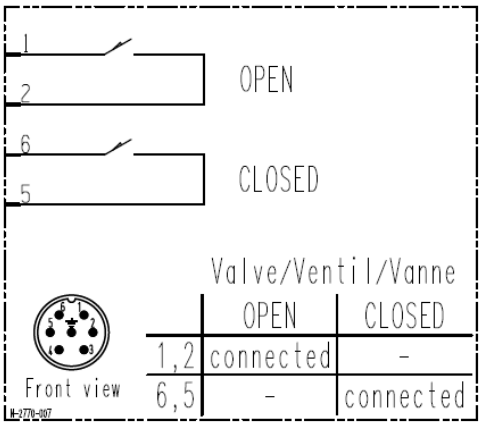
Type	3/2-way
Voltage	Defined by order



Wiring diagram

Position indicator

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



Wiring diagram