VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 100 (ID 4'')
Ordering No. 10840-UE44

Description

Flange	CF-F 100 UNF
Actuator	pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Bellows

Technical data

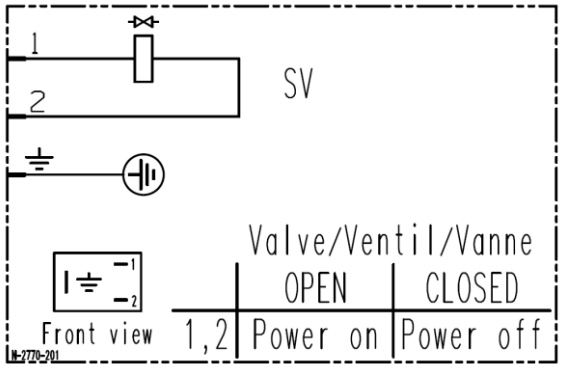
Leak rate	– Valve body – Valve seat	$< 5 \cdot 10^{-10}$ mbar ls^{-1} $< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-10}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		1740 ls^{-1}
Cycles until first service		50 000 (unheated and under clean conditions)
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 (main components)	– Valve Body – Mechanism – Bellows	AISI 304 (1.4301) AISI 316L (1.4404), AISI 304 (1.4301) AISI 316L (1.4404, 1.4435)
Seal	– Bonnet – Gate – Actuator	metal FKM (Viton®), vulcanized FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.11 l / 0.0038 ft^3
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G⅛'' (⅛'' NPT for USA)

Actuation time	– closing – opening	1.2 s 1.2 s
Weight		11.4 kg / 25.1 lbs
Behavior in case of compressed air pressure drop	– Valve closed – Valve open	valve remains closed undefined
Behavior in case of power failure	– Valve closed – Valve open	valve remains closed valve closes

Electrical connections

Solenoid valve

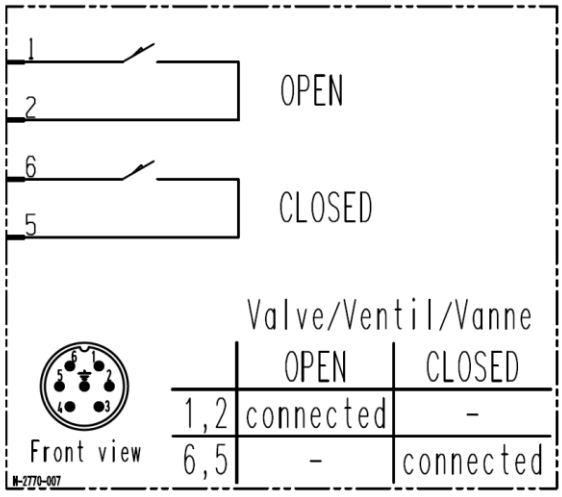
Type	4/2 way
Voltage	Defined by order



Wiring diagram

Position indicator

Type	Micro switch
Voltage	≤ 50 V AC / DC
Current max.	≤ 1.2 A



Wiring diagram