VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

UHV gate valve, Series 108, DN 160 (ID 6'')
Ordering No. 10844-TE44

Description

Flange	ASA-LP 160
Actuator	pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Bellows

Technical data

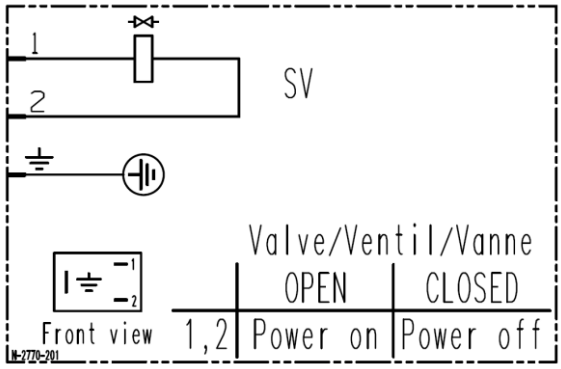
Leak rate	– Valve body	$< 5 \cdot 10^{-10}$ mbar ls^{-1}
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls^{-1}
Pressure range		$1 \cdot 10^{-10}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		5880 ls^{-1}
Cycles until first service		50 000 (unheated and under clean conditions)
Temperature	– Valve Body	≤ 250 °C open / ≤ 200 °C closed (bake-out max. 24h)
(Maximum values: depending	– Actuator	≤ 200 °C
on operating conditions and	– Solenoid valve	≤ 50 °C
sealing materials)	– Position indicator	≤ 80 °C
Heating and cooling rate		50 °C h^{-1}
Material (main components)	– Valve Body	AISI 304 (1.4301)
	– Mechanism	AISI 316L (1.4404), AISI 304 (1.4301)
	– Bellows	AISI 316L (1.4404, 1.4435)
Seal	– Bonnet	metal
	– Gate	FKM (Viton®), vulcanized
	– Actuator	FKM (Viton®), NBR
Mounting position		any
Volume of pneumatic actuator		0.14 l / 0.0049 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	1.5 s 1.5 s
Weight		18 kg / 40 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

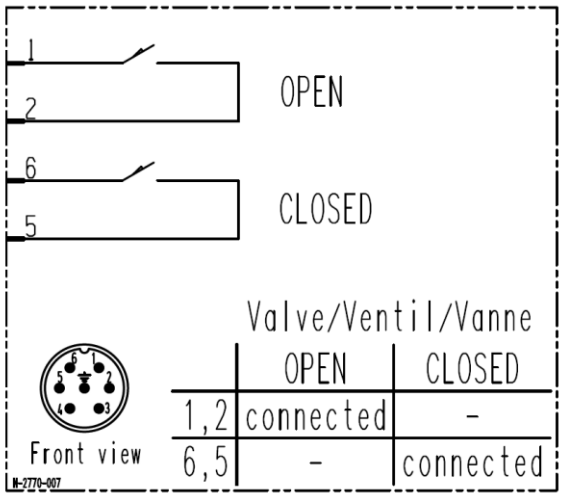
Type	4/2 way
Voltage	Defined by order



Wiring diagram

Position indicator

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



Wiring diagram