



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

HV gate valve, Series 140, DN 400 (ID 16'')
Ordering No. 14052-PE44

Description

Flange	ISO-F 400
Actuator	Pneumatic, double acting – with solenoid valve – with position indicator
Feedthrough	Rotary feedthrough

Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-8}$ mbar to 1.2 bar (abs)
Differential pressure on the gate		≤ 1.2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		52 000 ls ⁻¹
Cycles until first service	– Unheated and under clean conditions	200 000 (valve in horizontal position) 50 000 (valve in vertical position)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Pneumatic actuator – Solenoid valve – Position indicator	≤ 150 °C ≤ 50 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		50 °C h ⁻¹
Material (main components)	– Valve body – Mechanism	AISI 304 (1.4301) AISI 304 (1.4301)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®), O-ring FKM (Viton®), O-ring FKM (Viton®), NBR
Mounting position		horizontal (vertical with restriction)
Volume of pneumatic actuator		0.75 l / 0.025 ft ³
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ '' (1/8'' NPT for USA)
Actuation time	– closing – opening	5.5 s 5.5 s
Weight		140 kg / 309 lbs

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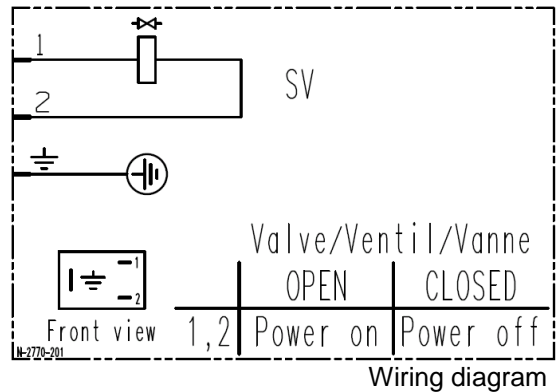
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Behavior in case of compressed air pressure drop	– Valve closed – Valve open	valve remains closed undefined
Behavior in case of power failure	– Valve closed – Valve open	valve remains closed valve closes

Electrical connections

Solenoid valve

Type	5/2 way
Voltage	Defined by order



Position indicator

Type	Micro switch
Voltage	≤ 250 V AC ≤ 50 V DC
Current max.	≤ 5 A ≤ 3 A

