



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	$< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$ $< 1 \cdot 10^{-9} \text{ mbar ls}^{-1}$
Pressure range		$1 \cdot 10^{-8} \text{ mbar}$ to 1.2 bar (abs)
Differential pressure on the gate		$\leq 1.2 \text{ bar}$
Differential pressure at opening		$\leq 30 \text{ mbar}$
Conductance (molecular flow)		$52\,000 \text{ ls}^{-1}$
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	$\leq 150 \text{ }^{\circ}\text{C}$ $\leq 50 \text{ }^{\circ}\text{C}$ $\leq 50 \text{ }^{\circ}\text{C}$ $\leq 80 \text{ }^{\circ}\text{C}$
Heating and cooling rate		$50 \text{ }^{\circ}\text{C h}^{-1}$
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		$0.75 \text{ l} / 0.025 \text{ ft}^3$
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " ($\frac{1}{8}$ " NPT for USA)
Actuation time	– closing – opening	5.5 s 5.5 s
Weight		140 kg / 309 lbs

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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

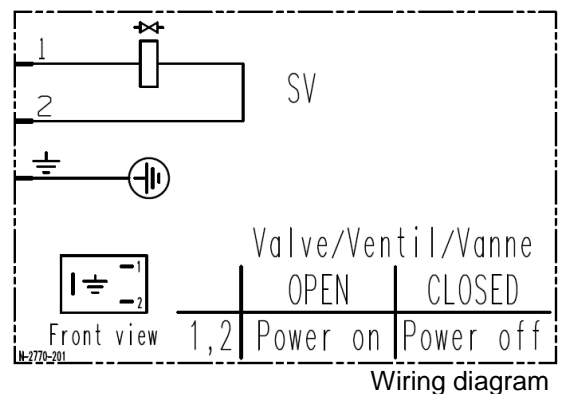
Solenoid valve

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

