



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 100 (ID 4'')**  
**Ordering No. 14040-PE24**

### Description

Flange	ISO-F 100
Actuator	Pneumatic, double acting – with position indicator
Feedthrough	Rotary feedthrough

### Technical data

Leak rate	– Valve body	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>
Pressure range		$1 \cdot 10^{-8}$ mbar to 2 bar (abs)
Differential pressure on the gate		$\leq 2$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		1 740 ls <sup>-1</sup>
Cycles until first service		200 000 Unheated and under clean conditions
Temperature	– Valve body	$\leq 150$ °C
(Maximum values: depending on operating conditions and sealing materials)	– Pneumatic actuator	$\leq 50$ °C
	– Position indicator	$\leq 80$ °C
Heating and cooling rate		50 °C h <sup>-1</sup>
Material (main components)	– Valve body	AISI 304 (1.4301)
	– Mechanism	AISI 304 (1.4301)
Seal	– Bonnet	FKM (Viton®), O-ring
	– Gate	FKM (Viton®), O-ring
	– Actuator	FKM (Viton®), NBR
Mounting position		Any
Volume of pneumatic actuator		0.13 l / 0.005 ft <sup>3</sup>
Compressed air		4 – 7 bar / 58 – 102 psi
min. – max. overpressure		
Compressed air connection		G $\frac{1}{8}$ " (½" NPT for USA)
Actuation time	– closing	1.5 s
	– opening	1.5 s
Weight		approx. 15 kg / 33 lbs

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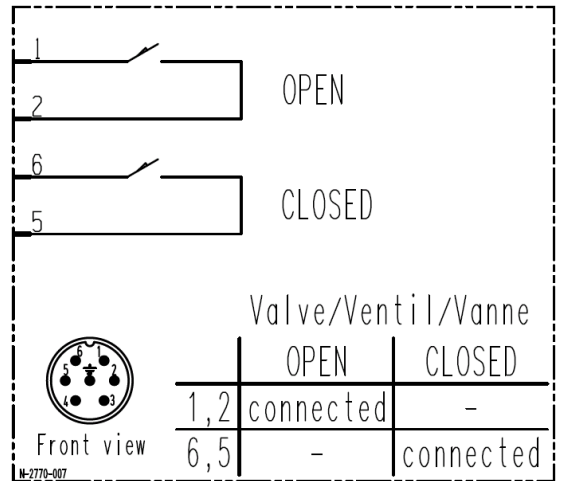
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Behavior in case of compressed air pressure drop	- Valve closed - Valve open	valve remains closed undefined
Behavior in case of power failure	- Valve closed - Valve open	valve remains closed valve closes

### Electrical connections

#### Position indicator

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



Wiring diagram

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