



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**HV gate valve, Series 140, DN 100 (4")**  
**Ordering No. 14040-PE14**

### Description

Flange	ISO-F 100
Actuator	Pneumatic, double acting
Feedthrough	Rotary feedthrough

### Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup> $< 1 \cdot 10^{-9}$ 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 (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Pneumatic actuator – Position indicator	$\leq 150$ °C $\leq 50$ °C $\leq 80$ °C
Heating and cooling rate		50 °C h <sup>-1</sup>
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		Any
Volume of pneumatic actuator		0.15 l / 0.005 ft <sup>3</sup>
Compressed air min. – max. overpressure		4 – 7 bar / 58 – 102 psi
Compressed air connection		G $\frac{1}{8}$ " (½" NPT for USA)
Actuation time	– closing – opening	1.5 s 1.5 s
Weight		approx. 15 kg / 34 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	depends on customer installation depends on customer installation

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