



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Vacuum gate valve, Series 121, DN 100 (ID 4'')**  
**Ordering No. 12140-PA14**

### Description

Flange	ISO-F 100
Actuator	Pneumatic, double acting
Feedthrough	Shaft 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		$1 \cdot 10^{-7}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		$\leq 1.6$ bar
Differential pressure at opening		$\leq 30$ mbar
Conductance (molecular flow)		2 000 ls <sup>-1</sup>
Cycles until first service		200 000 (unheated and under clean conditions)
Temperature	– Valve body	$\leq 120$ °C
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	$\leq 80$ °C
Heating and cooling rate		30 °C h <sup>-1</sup>
Material	– Valve body	EN AW-5083 (3.3547), -6061 (3.3211)
	– Mechanism	AISI 304 (1.4301)
Seal	– Bonnet	FKM (Viton®)
	– Gate	FKM (Viton®), O-ring
	– Actuator	FKM (Viton®), NBR (BUNA N)
Mounting position		any
Volume of pneumatic actuator		0.22 l / 0.008 ft <sup>3</sup>
Compressed air min. – max. overpressure		4–7 bar / 58–102 psi
Compressed air connection		M5 (10–32 UNF suitable)
Actuation time	– closing	2.0 s
	– opening	2.0 s
Weight		4.5 kg / 10.0 lbs
Behavior in case of compressed air pressure drop	– Valve closed	– valve remains closed
	– Valve open	– undefined
Behavior in case of power failure	– Valve closed	– depending on customer installation
	– Valve open	– depending on customer installation

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