



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum gate valve, Series 121, DN 100 (ID 4'')
Ordering No. 12140-PA24

Description

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

Technical data

Leak rate	– Valve body	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
	– Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹
Pressure range		$1 \cdot 10^{-7}$ mbar to 1.6 bar (abs)
Differential pressure on the gate		≤ 1.6 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		2 000 ls ⁻¹
Cycles until first service		200 000 (unheated and under clean conditions)
Temperature	– Valve body	≤ 120 °C
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	≤ 80 °C
	– Position indicator	≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
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 ³
Compressed air		4–7 bar / 58–102 psi
min. – max. overpressure		
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

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|--|----------------|--------------------------------------|
| 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 |

Position indicator

Type	Micro Switch	
Voltage	≤ 250 V AC	≤ 50 V DC
Current max.	≤ 2.0 A	≤ 1.2 A

