



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum gate valve, Series 121, DN 100 (ID 4'')
Ordering No. 12140-PA44

Description

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

Technical data

Leak rate	– Valve body – Valve seat	$< 1 \cdot 10^{-9}$ mbar ls ⁻¹ $< 1 \cdot 10^{-9}$ 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 (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	≤ 120 °C ≤ 80 °C ≤ 50 °C ≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
Material	– Valve body – Mechanism	EN AW-5083 (3.3547), -6061 (3.3211) AISI 304 (1.4301)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®) FKM (Viton®), O-ring FKM (Viton®), NBR (BUNA N®)
Mounting position		any
Volume of pneumatic actuator		0.22 l / 0.008 ft ³
Compressed air min. – max. overpressure		4–7 bar / 58–102 psi
Compressed air connection		G 1/8" (1/8" NPT for USA)
Actuation time	– closing – opening	2.0 s 2.0 s
Weight		4.5 kg / 10.0 lbs

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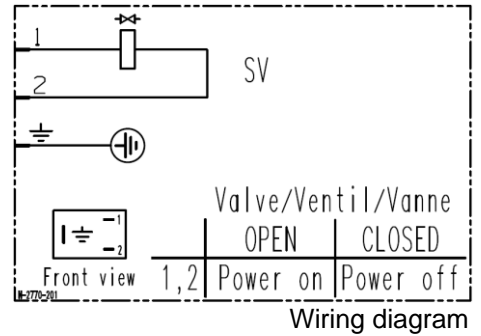
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Behavior in case of compressed air pressure drop	- Valve closed	- valve remains closed
	- Valve open	- undefined
Behavior in case of power failure	- Valve closed	- valve remains closed
	- Valve open	- valve closes

Electrical connections

Solenoid valve

Type	4/2 way
Voltage	Defined by order



Position indicator

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

