



VAT Vakuumventile AG
CH-9469 Haag, Schweiz

Product data sheet

Vacuum gate valve, Series 121, DN 320 (ID 12'')
Ordering No. 12150-JA44

Description

Flange	JIS 320
Actuator	Pneumatic, double acting – with solenoid valve – 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 1.2 bar (abs)
Differential pressure on the gate		≤ 1.2 bar
Differential pressure at opening		≤ 30 mbar
Conductance (molecular flow)		33 000 ls ⁻¹
Cycles until first service		100 000 (unheated and under clean conditions)
Temperature	– Valve body	≤ 120 °C
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	≤ 80 °C
	– Solenoid valve	≤ 50 °C
	– Position indicator	≤ 80 °C
Heating and cooling rate		30 °C h ⁻¹
Material	– Valve body	EN AC-42100 (3.2371)
	– Mechanism	EN AW-6082 (3.2315)
Seal	– Bonnet	FKM (Viton®)
	– Gate	FKM (Viton®), O-ring
	– Actuator	FKM (Viton®), NBR (BUNA N®)
Mounting position		any
Volume of pneumatic actuator		2.8 l / 0.099 ft ³
Compressed air min. – max. overpressure		4–7 bar / 58–102 psi
Compressed air connection		G ¼" (¼" NPT for USA)
Actuation time	– closing	7.0 s
	– opening	7.0 s
Weight		40 kg / 88 lbs

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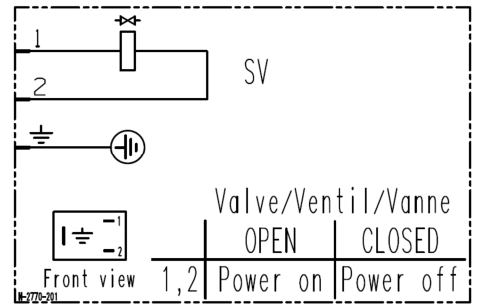
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Behavior in case of compressed air pressure drop	- Valve closed	- valve remains closed
	- Valve open	- undefined
Behavior in case of power failure	- Valve closed	- valve remains closed
	- Valve open	- valve closes

Electrical connections

Solenoid valve

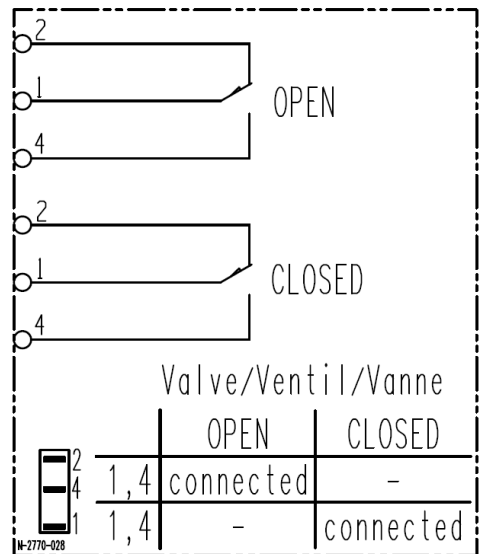
Type	5/2 way
Voltage	Defined by order



Wiring diagram

Position indicator

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



Wiring diagram