



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Vacuum gate valve, Series 121, DN 160 (ID 6'')**  
**Ordering No. 12144-PA44**

### Description

Flange	ISO-F 160
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 <sup>-1</sup> $< 1 \cdot 10^{-9}$ 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)		6 000 ls <sup>-1</sup>
Cycles until first service		100 000 (unheated and under clean conditions)
Temperature (Maximum values: depending on operating conditions and sealing materials)	– Valve body – Actuator – Solenoid valve – Position indicator	$\leq 120$ °C $\leq 80$ °C $\leq 50$ °C $\leq 80$ °C
Heating and cooling rate		30 °C h <sup>-1</sup>
Material	– Valve body – Mechanism	EN AC-42100 (3.2371) EN AW-6082 (3.2315)
Seal	– Bonnet – Gate – Actuator	FKM (Viton®) FKM (Viton®), O-ring FKM (Viton®), NBR (BUNA N®)
Mounting position		any
Volume of pneumatic actuator		0.5 l / 0.018 ft <sup>3</sup>
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		8.6 kg / 29 lbs

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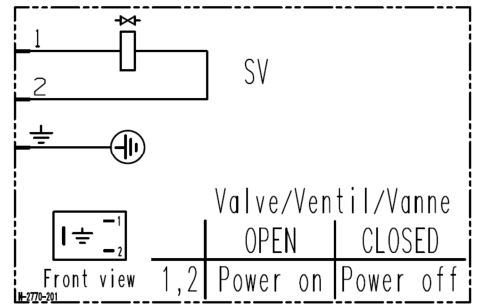
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Behavior in case of compressed air pressure drop	- Valve closed	- valve remains closed
	- Valve open	- undefined
Behavior in case of power failure	- Valve closed	- valve remains closed
	- Valve open	- valve closes

### Electrical connections

#### Solenoid valve

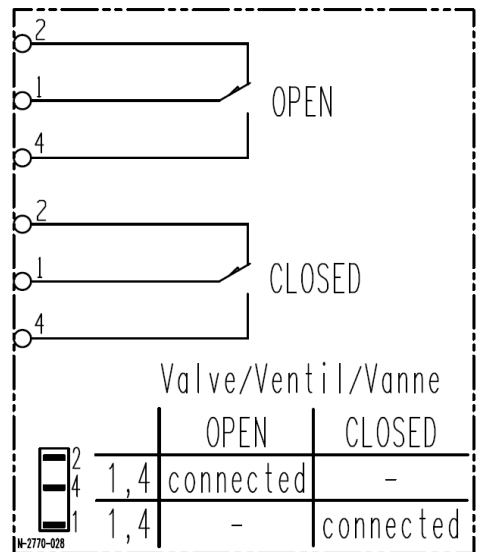
Type	4/2 way
Voltage	Defined by order



Wiring diagram

#### Position indicator

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



Wiring diagram