



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**Vacuum gate valve, Series 121, DN 160 (ID 6")**  
**Ordering No. 12144-PA24**

### Description

Flange	ISO-F 160
Actuator	Pneumatic, double acting – with position indicator
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)		6 000 ls <sup>-1</sup>
Cycles until first service		100 000 (unheated and under clean conditions)
Temperature	– Valve body	$\leq 120$ °C
(Maximum values: depending on operating conditions and sealing materials)	– Actuator	$\leq 80$ °C
	– Position indicator	$\leq 80$ °C
Heating and cooling rate		30 °C h <sup>-1</sup>
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		0.5 l / 0.018 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		9.0 kg / 20 lbs

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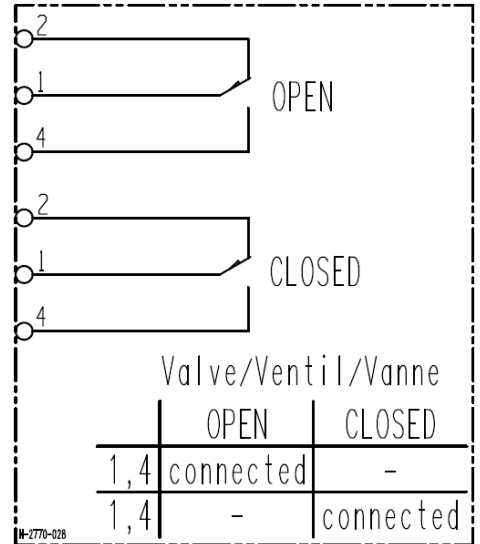
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- |  |                |                                      |
|--|----------------|--------------------------------------|
| Behavior in case of compressed air pressure drop | - Valve closed | - valve remains closed               |
|  | - Valve open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



Wiring diagram