



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

Vacuum gate valve, Series 121, DN 250 (ID 10'')

Ordering No. 12148-PA44

### Description

|             |  |
|-------------|--|
| Flange      | ISO-F 250  |
| Actuator    | Pneumatic, double acting<br>– with solenoid valve<br>– with position indicator |
| Feedthrough | Shaft feedthrough  |

### Technical data

|  |  |  |
|--|--|--|
| Leak rate  | – Valve body<br>– Valve seat   | $< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup><br>$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup> |
| Pressure range   |  | $1 \cdot 10^{-7}$ mbar to 1.2 bar (abs)  |
| Differential pressure on the gate  |  | $\leq 1.2$ bar   |
| Differential pressure at opening   |  | $\leq 30$ mbar   |
| Conductance (molecular flow)   |  | 22 000 ls <sup>-1</sup>  |
| Cycles until first service   |  | 100 000 (unheated and under clean conditions)  |
| Temperature<br>(Maximum values: depending on operating conditions and sealing materials) | – Valve body<br>– Actuator<br>– Solenoid valve<br>– Position indicator | $\leq 120$ °C<br>$\leq 80$ °C<br>$\leq 50$ °C<br>$\leq 80$ °C                          |
| Heating and cooling rate   |  | 30 °C h <sup>-1</sup>  |
| Material (main components)   | – Valve body<br>– Mechanism  | EN AC-42100 (3.2371)<br>EN AW-6082 (3.2315)  |
| Seal   | – Bonnet<br>– Gate<br>– Actuator                                       | FKM (Viton®)<br>FKM (Viton®), O-ring<br>FKM (Viton®), NBR (BUNA N®)                    |
| Mounting position  |  | any  |
| Volume of pneumatic actuator   |  | 1.5 l / 0.053 ft <sup>3</sup>  |
| Compressed air<br>min. – max. overpressure   |  | 4–7 bar / 58–102 psi   |
| Compressed air connection  |  | G 1/8" (1/8" NPT for USA)  |
| Actuation time   | – closing<br>– opening   | 5.0 s<br>5.0 s   |
| Weight   |  | 25.0 kg / 55.1 lbs   |

|                 |                          |                 |
|-----------------|--------------------------|-----------------|
| Created by: JOM | Release date: 11.08.2014 | 1/2             |
| Modified by:    | Release date:            | <b>763849EA</b> |



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

Vacuum gate valve, Series 121, DN 250 (ID 10")

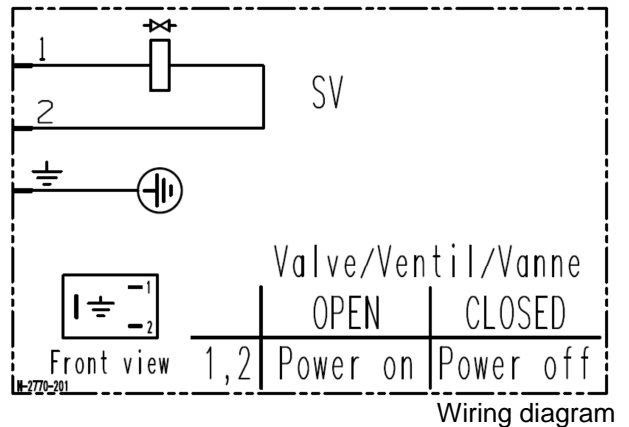
Ordering No. 12148-PA44

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

