



VAT Vakuumventile AG  
CH-9469 Haag, Schweiz

## Product data sheet

**UHV gate valve, Series 108, DN 200 (ID 8'')**  
**Ordering No. 10846-PE24-0007**

### Description

|             |   |
|-------------|---|
| Flange      | ISO-F 200   |
| Actuator    | pneumatic, double acting<br>– without solenoid valve<br>– with position indicator |
| Feedthrough | Bellows   |

### Technical data

|  |  |  |
|--|--|--|
| Leak rate  | – Valve body<br>– Valve seat                       | $< 5 \cdot 10^{-10}$ mbar ls <sup>-1</sup><br>$< 1 \cdot 10^{-9}$ mbar ls <sup>-1</sup>        |
| Pressure range   |  | $1 \cdot 10^{-10}$ 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)   |  | 12 200 ls <sup>-1</sup>  |
| Cycles until first service   |  | 50 000 (unheated and under clean conditions)   |
| Temperature<br>(Maximum values: depending on operating conditions and sealing materials) | – Valve Body<br>– Actuator<br>– Position indicator | $\leq 250$ °C open / $\leq 200$ °C closed (bake-out max. 24h)<br>$\leq 200$ °C<br>$\leq 80$ °C |
| Heating and cooling rate   |  | 50 °C h <sup>-1</sup>  |
| Material (main components)   | – Valve Body<br>– Mechanism<br>– Bellows           | AISI 304 (1.4301)<br>AISI 316L (1.4404), AISI 304 (1.4301)<br>AISI 316L (1.4404, 1.4435)       |
| Seal   | – Bonnet<br>– Gate<br>– Actuator                   | metal<br>FKM (Viton®), vulcanized<br>FKM (Viton®), NBR   |
| Mounting position  |  | any  |
| Volume of pneumatic actuator   |  | 0.25 l / 0.0087 ft <sup>3</sup>  |
| Compressed air<br>min. – max. overpressure   |  | 4 – 7 bar / 58 – 102 psi   |
| Compressed air connection  |  | 1/8" ISO / NPT   |
| Actuation time   | – closing<br>– opening                             | 2 s<br>2 s   |
| Weight   |  | 34 kg / 75 lbs   |
| Behavior in case of compressed air pressure drop   | – Valve closed<br>– Valve open                     | valve remains closed<br>undefined  |
| Behavior in case of power failure  | – Valve closed<br>– Valve open                     | depending on customer installation   |

|                 |                          |                 |
|-----------------|--------------------------|-----------------|
| Created by: BRR | Release date: 10.07.2017 | 1/2             |
| Modified by:    | Release date:            | <b>901976EA</b> |

## Electrical connections

### Position indicator

|              |                |
|--------------|----------------|
| Type         | Micro switch   |
| Voltage      | ≤ 50 V AC / DC |
| Current max. | ≤ 1.2 A        |

