## Product data sheet

UHV gate valve, Series 108, DN 250 (ID 10') Ordering No. 10848-CE28

## Description

Flange
Actuator

Feedthrough

## Technical data

| Leak rate | - Valve body <br> - Valve seat | $\begin{aligned} & <5 \cdot 10^{-10} \mathrm{mbar} \mathrm{Is}^{-1} \\ & <1 \cdot 10^{-9} \mathrm{mbar} \mathrm{ls}^{-1} \end{aligned}$ |
| :---: | :---: | :---: |
| Pressure range |  | $1 \cdot 10^{-10} \mathrm{mbar}$ to $1.2 \mathrm{bar}(\mathrm{abs})$ |
| Differential pressure on the gate |  | $\leq 1.2 \mathrm{bar}$ |
| Differential pressure at opening |  | $\leq 30 \mathrm{mbar}$ |
| Conductance (molecular flow) |  | $19990 \mathrm{ls}^{-1}$ |
| Cycles until first service |  | 50000 (unheated and under clean conditions) |
| Temperature (Maximum values: depending on operating conditions and sealing materials) | - Valve body <br> - Actuator <br> - Position indicator | $\begin{aligned} & \leq 250^{\circ} \mathrm{C} \text { open } / \leq 200^{\circ} \mathrm{C} \text { closed (bake-out max. 24h) } \\ & \leq 200^{\circ} \mathrm{C} \\ & \leq 80^{\circ} \mathrm{C} \end{aligned}$ |
| Heating and cooling rate |  | $50{ }^{\circ} \mathrm{C} \mathrm{h}^{-1}$ |
| 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 FKM (Viton }\mp@subsup{}{}{\circledR}\mathrm{ ), O-ring FKM (Viton*),NBR``` |
| Mounting position |  | any |
| Volume of pneumatic actuator |  | $0.35 \mathrm{l} / 0.0122 \mathrm{ft}^{3}$ |
| Compressed air min. - max. overpressure |  | 5-7 bar / 73-102 psi |
| Compressed air connection |  | 1/8" ISO / NPT |
| Actuation time | - closing <br> - opening | $\begin{aligned} & 4 \mathrm{~s} \\ & 4 \mathrm{~s} \end{aligned}$ |
| Weight |  | $42 \mathrm{~kg} / 92 \mathrm{lbs}$ |


| Created by: MAEM | Release date: 2013-03-01 | 1 of 2 |
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| Modified by: | Release date: | $\mathbf{6 0 0 9 8 7 E A}$ |

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| Behavior in case of compressed | - Valve closed |
| :--- | :--- |
| air pressure drop | - Valve open |
|  | - Middle position |
| Behavior in case of power failure | - Valve closed |
|  | - Valve open |
|  | - Middle position |

Position indicator
Type
Voltage
Current max.

Micro switch
$\leq 50 \mathrm{~V} \mathrm{AC} \mathrm{/} \mathrm{DC}$
$\leq 1.2 \mathrm{~A}$

```
valve remains closed undefined undefined
depending on customer installation depending on customer installation depending on customer installation
```



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