

Ordering No. 48240-CE44-0003

| Description   |  |   |
|---|--|---|
| Flange  |  | DN 100 CF-F   |
| Actuator  |  | Pneumatic double acting<br>- with solenoid valve<br>- with position indicator   |
| Feed through  |  | Bellows   |
| Option  | =  | Standard  |
| Technical data  |  |   |
| Leak rate   | – Valve body<br>– Valve seat   | < $1 \cdot 10^{-10}$ mbar ls <sup>-1</sup><br>< $1 \cdot 10^{-10}$ mbar ls <sup>-1</sup>  |
| Pressure range  |  | XUHV to 2 bar (abs)   |
| Test pressure   |  | 1 bar   |
| Differential pressure on the gate   |  | ≤ 2 bar   |
| Differential pressure at opening  |  | $\leq$ 500 mbar, 1 bar with reduced cycle life  |
| Conductance (molecular flow)  |  | 1 400 ls <sup>-1</sup>  |
| Cycles until first service  |  | 20 000  |
| Bake-out temperature<br>(Maximum values: depending on<br>operating conditions and sealing<br>materials) | <ul> <li>Valve body</li> <li>Actuator</li> <li>Position indicator</li> <li>Solenoid</li> </ul>   | ≤ 300 °C<br>≤ 200 °C(for max. 100h)<br>≤ 80 °C<br>≤ 80 °C   |
| Heating and cooling rate  |  | ≤ 50 °C h <sup>-1</sup>   |
| Material  | <ul> <li>Valve body</li> <li>Flange</li> <li>Gate</li> <li>Mechanism</li> <li>Bellows</li> </ul> | 1.4435, AISI 316 L<br>1.4435 ESU, AISI 316 L ESR<br>1.4435, AISI 316 L<br>1.4435, AISI 316 L<br>1.4435, AISI 316 L<br>1.4435, AISI 316 L                                      |
| Seal  | – Bonnet<br>– Gate<br>– Actuator   | metal, silver plated<br>metal, silver plated<br>FKM (Viton <sup>®</sup> )   |
| Mounting position   |  | any   |
| Radiation resistance  | <ul> <li>Valve body</li> <li>Actuator</li> <li>Position indicator</li> <li>Solenoid</li> </ul>   | 10 <sup>8</sup> Gy (10 <sup>10</sup> rad)<br>10 <sup>5</sup> Gy (10 <sup>7</sup> rad)<br>10 <sup>5</sup> Gy (10 <sup>7</sup> rad)<br>10 <sup>4</sup> Gy (10 <sup>6</sup> rad) |
| Volume of pneumatic actuator  |  | 1.4 I / 0.049 ft <sup>3</sup>   |
| Compressed air<br>min. – max. overpressure  |  | 4 - 8 bar / 58 - 116 psig   |
| Compressed air connections  |  | R 1⁄8" (USA: 1⁄8" NPT)  |

| Created by: Kurt Sonderegger | Release date: 2004-06-02 | 1 of 2   |
|------------------------------|--------------------------|----------|
| Modified by: René Brulc      | Release date: 2014-02-21 | 250849EC |



## **Product data sheet** All-metal gate valve, Series 482, DN 100 (ID 4")

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| Actuation time<br>(valid for RT, Ø6mm tubing at 4 bar with<br>flow rate of 400 l/min) | – Closing<br>– Opening                            | ≤ 4.0 sec<br>≤ 4.0 sec                           |
|---|---|--|
| Weight  |   | 27 kg / 60 lbs                                   |
| Behavior in case of<br>compressed air pressure<br>drop                                | <ul><li>Valve closed</li><li>Valve open</li></ul> | Valve remains in closed position<br>Undefined    |
| Behavior in case of power failure   | <ul><li>Valve closed</li><li>Valve open</li></ul> | Valve remains in closed position<br>Valve closes |
|   |   |  |

346725C

according to PO

 $\leq 2.5 \text{ W}$ 

## **Related documents**

Dimensional drawing No.

## **Electrical connections**

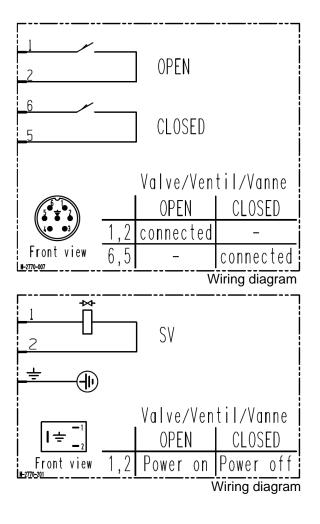
| Position | indicator |
|----------|-----------|
|          |           |

Solenoid

Power consumption

Voltage

| Туре         | micro switch        |
|--------------|---------------------|
| Voltage      | $\leq$ 50 V AC / DC |
| Current max. | ≤ 1.2 A             |



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