

Ordering No. 57044-GE24-0001

| Description                                                                                             |                                                                              |                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Flange                                                                                                  |                                                                              | DN 160 CF-R                                                                                                                       |
| Actuator                                                                                                |                                                                              | Pneumatic double acting<br>- without solenoid valve<br>- with position indicator                                                  |
| Feed through                                                                                            |                                                                              | Bellows                                                                                                                           |
| Option                                                                                                  | =                                                                            | Standard                                                                                                                          |
| Technical data                                                                                          |                                                                              |                                                                                                                                   |
| Leak rate                                                                                               | – Valve body<br>– Valve seat                                                 | < 1 • 10 <sup>-10</sup> mbar Is <sup>-1</sup><br>< 1 • 10 <sup>-10</sup> mbar Is <sup>-1</sup>                                    |
| Pressure range                                                                                          | – T = 200°C<br>– T = 450°C                                                   | XUHV to 5 bar (abs)<br>XUHV to 3.5 bar (abs)                                                                                      |
| Test pressure                                                                                           |                                                                              | 1 bar                                                                                                                             |
| Differential pressure on the gate                                                                       |                                                                              | ≤ 5 bar                                                                                                                           |
| Differential pressure at opening                                                                        |                                                                              | $\leq$ 1 bar, > 1 bar with reduced cycle life                                                                                     |
| Conductance (molecular flow)                                                                            |                                                                              | 940 ls <sup>-1</sup>                                                                                                              |
| Cycles until first service                                                                              |                                                                              | 10 000                                                                                                                            |
| 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> </ul> | ≤ 450 °C (open)<br>≤ 350 °C (closed)<br>≤ 200 °C (for max. 100h)<br>≤ 80 °C                                                       |
| Heating and cooling rate                                                                                |                                                                              | ≤ 60 °C h <sup>-1</sup>                                                                                                           |
| Material<br>(in contact with media)                                                                     | – Valve body<br>– Mechanism<br>– Bellows                                     | 1.4435/1.4404, AISI 316 L<br>1.4435 ESU, AISI 316 L ESR<br>1.4404, 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> </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) |

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| Volume of pneumatic actuator                                                          |                                                   | 3.3   / 0.116 ft <sup>3</sup> |
|---------------------------------------------------------------------------------------|---------------------------------------------------|-------------------------------|
| Compressed air<br>min. – max. overpressure                                            |                                                   | 4 - 5 bar / 58 - 73 psig      |
| Compressed air connections                                                            |                                                   | R 1⁄8" (USA: 1⁄8" NPT)        |
| Actuation time<br>(valid for RT, Ø6mm tubing at 4 bar with<br>flow rate of 400 l/min) | – Closing<br>– Opening                            | ≤ 7.0 sec<br>≤ 7.0 sec        |
| Weight                                                                                |                                                   | 65 kg / 143 lbs               |
| Behavior in case of<br>compressed air pressure<br>drop                                | <ul><li>Valve closed</li><li>Valve open</li></ul> | Undefined<br>Undefined        |
| Behavior in case of power<br>failure                                                  |                                                   | Depending on control          |

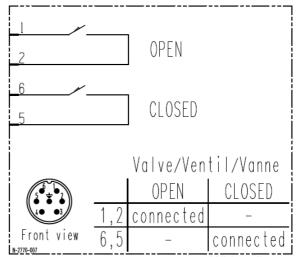
## **Related documents**

Dimensional drawing No. 376675

## **Electrical connections**

## **Position indicator**

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



Wiring diagram

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