SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES

The 3-way vacuum solenoid valves in this series are 2-position valves with pneumatically servo-controlled conical shutters. They can normally be used either open or closed. They are composed of an anodised aluminium body, two vulkollan® shutters assembled onto a stainless steel stem, a membrane for servo-control made with special compounds and a thrust spring for the shutter return; an actuator activated by an electric coil managed the compressed air supply.

These valves allow reducing frictions and internal dynamic stresses to the minimum, the result being a high response speed and a guarantee of long lasting duration.

The standard electric coil is fully plasticiised with synthetic resin, tight execution, insulation class F (up to 155 °C) compliant with VDE standards, with 6.3 mm 3-terminal electrical connections in compliance with EN 175301-803 (ex DIN 43650), Protection degree IP 54; IP 65 for inserted connector.

Allowed tolerance on the voltage nominal value: ±10%.

Max. absorption: 16.5 V.A. in c.a. e 16 W in c.c.

The electric coil can be rotated by 360°. The connector can be rotated by 180° on the coil and can be supplied, upon request, with Led lights, anti-interference circuit and/or with protection devices against overvoltage and polarity reversal.

3-way vacuum solenoid valves are usually used for intercepting vacuum on feeders and cup stackers, robots, sheet feeders, sack openers and in all those cases where a quick response is needed between suction and the air inlet into the circuit, for a quick restoration of the atmospheric pressure.

They can be supplied upon request with an SM device for manually opening and closing the solenoid valves already installed.

Technical features

Working pressure: from 0.5 to 3000 mbar abs.

Servo-control pressure: see table

Temperature of the sucked fluid: from -5 to +60 °C

<table>
<thead>
<tr>
<th>Art.</th>
<th>A Max. capacity</th>
<th>Vacuum level mbar abs.</th>
<th>Reaction time ms</th>
<th>Ø</th>
<th>Passage section mm²</th>
<th>Servo-control pressure bar</th>
<th>Weight Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 01 11</td>
<td>G1/4&quot; 6</td>
<td>1000</td>
<td>0.5</td>
<td>16</td>
<td>27</td>
<td>56.8</td>
<td>8.5</td>
</tr>
<tr>
<td>07 02 11</td>
<td>G3/8&quot; 10</td>
<td>1000</td>
<td>0.5</td>
<td>16</td>
<td>27</td>
<td>103.8</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Note: The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).
SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES

Conversion ratio: inch = mm; pounds = g = Kg

GAS-NPT thread adapters available at page 117

Art.  A  Max. capacity  Vacuum level  Reaction time  Ø  Passage section  Servo-control  Weight
07 03 11  G1/2"  20  1000  0.5  16  40  15.0  176  6  8  0.73

* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

Note: The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).

Conversion ratio: inch = mm; pounds = g = Kg

GAS-NPT thread adapters available at page 117
SERVO-CONTROLLED 3-WAY VACUUM SOLENOID VALVES

3D drawings available at www.vuototecnica.net

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GAS-NPT thread adapters available at page 1.117

Conversion ratio: inch = \( \frac{25.4}{\text{mm}} \), pounds = \( \frac{453.6}{\text{Kg}} \)

<table>
<thead>
<tr>
<th>Art.</th>
<th>A</th>
<th>Max. capacity</th>
<th>Vacuum level mbar abs.</th>
<th>Reaction time msec</th>
<th>Ø</th>
<th>Passage section mm²</th>
<th>Servo-control pressure bar (g)</th>
<th>Weight Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 04 11</td>
<td>g3/4&quot;</td>
<td>40</td>
<td>1000</td>
<td>0.5</td>
<td>16</td>
<td>40</td>
<td>20</td>
<td>314</td>
</tr>
<tr>
<td>07 05 11</td>
<td>g1&quot;</td>
<td>90</td>
<td>1000</td>
<td>0.5</td>
<td>18</td>
<td>42</td>
<td>25</td>
<td>490</td>
</tr>
</tbody>
</table>

* Add the letters LP to the article for servo-control pressure 4 ÷ 6 bar (g).

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (See solenoid valve accessories).
### Servo-Controlled 3-Way Vacuum Solenoid Valves

#### Conversion Ratio:

- **Inch to mm:** \( 25.4 \) mm
- **Pounds to Kg:** \( 0.4536 \) Kg

#### Table

<table>
<thead>
<tr>
<th>Art.</th>
<th>A</th>
<th>Max. Capacity</th>
<th>Vacuum Level mbar abs.</th>
<th>Reaction Time msec</th>
<th>Ø mm</th>
<th>Passage Section mm²</th>
<th>Servo-control Pressure bar (g)</th>
<th>Weight Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>07 06 11</td>
<td>01 1/2</td>
<td>180 min, 1000 max</td>
<td>0.5 exc. 60, deexc. 38</td>
<td>40</td>
<td>1256</td>
<td></td>
<td>6 - 8</td>
<td>4.73</td>
</tr>
</tbody>
</table>

*Add the letters LP to the article for servo-control pressure 4 - 6 bar (g).*

**Note:** The coil and the connectors are not integral part of the solenoid valves, therefore, they must be ordered separately (see solenoid valve accessories).