SV-10 Series
PVC Solenoid Valves

INSTRUCTION SHEET

M2195/0695

Unpacking Instructions
Remove the Packing List and verify that you have received all equipment, including the following (quantities in parentheses):

SV-10 Series PVC Solenoid Valves (1)
Operator’s Manual (1)

If you have any questions about the shipment, please call the OMEGA Customer Service Department.

When you receive the shipment, inspect the container and equipment for signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

The carrier will not honor damage claims unless all shipping material is saved for inspection. After examining and removing contents, save packing material and carton in the event reshipment is necessary.

Available Models (Normally Closed Valves)

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Port Connection (NPT)</th>
<th>Cv</th>
<th>Pressure Range (PSI)</th>
<th>Orifice Diameter (in)</th>
<th>Weight (lb)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SV-11</td>
<td>1/2</td>
<td>5.8</td>
<td>7-85</td>
<td>9/16</td>
<td>1.4</td>
</tr>
<tr>
<td>SV-12</td>
<td>3/4</td>
<td>7.0</td>
<td>7-85</td>
<td>3/4</td>
<td>1.8</td>
</tr>
<tr>
<td>SV-13</td>
<td>1</td>
<td>16.3</td>
<td>7-85</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>SV-14</td>
<td>1-1/4</td>
<td>18.6</td>
<td>7-85</td>
<td>1-1/4</td>
<td>2.6</td>
</tr>
<tr>
<td>SV-15</td>
<td>1-1/2</td>
<td>35.0</td>
<td>7-85</td>
<td>1-1/2</td>
<td>4.9</td>
</tr>
<tr>
<td>SV-16</td>
<td>2</td>
<td>41.9</td>
<td>7-85</td>
<td>2</td>
<td>4.9</td>
</tr>
</tbody>
</table>

For normally open version, add suffix "-NO" to the part number. PVDF versions are available on request.

Options

<table>
<thead>
<tr>
<th>Ordering Suffix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-24VDC</td>
<td>24 Vdc operation</td>
</tr>
<tr>
<td>-12VDC</td>
<td>12 Vdc operation</td>
</tr>
<tr>
<td>-240VAC</td>
<td>240 Vac operation</td>
</tr>
</tbody>
</table>

Description
The SV-10 Series solenoid valves for corrosive applications

Fluids Handled
Neutral or aggressive gases or liquids which do not attack the valve body material PVDF and PVC (rigid PVC in accordance with DIN 8061 and 8062, resistant) or the selected seal material. Seal material: A = EPDM, B = NBR, F = FPM; see the rating plate. Seal materials is marked on the rating plate after nominal size.

Attention
Note permissible pressure range on the rating plate.
Pressure difference: at least 0.5 bar
Pressure [bar]

Temperature of Medium [°C]
Ambient temperature: up to +40 °C

Installation
Can be installed in any position. Installation with magnet system upright is recommended. Note direction of flow.
Stick-on sleeves: Use special Tangit adhesive.
Fusion joint: PVDF
Nuts: Screw on evenly on both sides - by hand only.
Contamination in the piping (seal material, metal chips, etc.) must be removed.
The valve body should not be stressed when installed. The manual actuator is locked in place by pressing down and turning to the right (clockwise direction). The valve body can be fastened on the bottom.

Electrical Connection
Note the voltage and type of current indicated on the rating plate. Voltage tolerance of ±10%. Connection via cable connector.
Flat connector lug = ground connection.
Connector: Insert can be turned 4 x 90°; tightening torque is 1 Nm.

Spare Parts
See chart for spare part sets. Remove pilot valve: Loosen the 2 (non-secured) screws.
WARRANTY

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 13 months from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; or misuse of operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

Specifications

Mounting Position: Any (preferably with the coil at the top)

Material: Body and internals PVC

Max. Ambient Temp.: 40°C (104°F)

Max. Viscosity: Approx. 2.3 x 10^4 ft^2/sec

Coil Voltage: 120 Vac Standard; 12 Vdc, 240 Vdc; 240 Vac optional

Voltage Tolerance: ±10%

Power Consumption in Warm State:
- ac: 20 VA (inrush);
- 11 VA/5 W (hold)
- dc: 5 W

Opening Time (msec): 100-800

Closing Time (msec): 1000-4000

Response times are measured at nominal pressure of 85 PSI using water and are dependent on orifice and operation of the valve and also on pressure and viscosity of the medium

Cycling Rate: Approx. 10-50 cpm

Duty Cycle: Continuous (100%)

Electrical Connection: F-type connector

Dimensions: See above

Conversion Table

<table>
<thead>
<tr>
<th>DN 15</th>
<th>DN 20</th>
<th>DN 25</th>
<th>DN 32</th>
<th>DN 40</th>
<th>DN 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/16&quot;</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
<td>1-1/4&quot;</td>
<td>1-1/2&quot;</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>

OMEGA warrants this unit to be free of defects in materials and workmanship and to give satisfactory service for a period of 13 months from date of purchase. OMEGA Warranty adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit should malfunction, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. However, this WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of being damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear or which are damaged by misuse are not warranted. These include contact points, fuses, and triacs.

Specifications

Mounting Position: Any (preferably with the coil at the top)

Material: Body and internals PVC

Max. Ambient Temp.: 40°C (104°F)

Max. Viscosity: Approx. 2.3 x 10^4 ft^2/sec

Coil Voltage: 120 Vac Standard; 12 Vdc, 240 Vdc; 240 Vac optional

Voltage Tolerance: ±10%

Power Consumption in Warm State:
- ac: 20 VA (inrush);
- 11 VA/5 W (hold)
- dc: 5 W

Opening Time (msec): 100-800

Closing Time (msec): 1000-4000

Response times are measured at nominal pressure of 85 PSI using water and are dependent on orifice and operation of the valve and also on pressure and viscosity of the medium

Cycling Rate: Approx. 10-50 cpm

Duty Cycle: Continuous (100%)

Electrical Connection: F-type connector

Dimensions: See above

Conversion Table

<table>
<thead>
<tr>
<th>DN 15</th>
<th>DN 20</th>
<th>DN 25</th>
<th>DN 32</th>
<th>DN 40</th>
<th>DN 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/16&quot;</td>
<td>3/4&quot;</td>
<td>1&quot;</td>
<td>1-1/4&quot;</td>
<td>1-1/2&quot;</td>
<td>2&quot;</td>
</tr>
</tbody>
</table>