Large Size – Engineered Plastics

LS-800 PVC Series –
Our Most Economical Large Size Unit

- NSF Approved All-PVC Wetted Parts Available
- 1 to 7 Actuation Levels
- Lengths to 60 inches

Inexpensive, all-PVC LS-800 PVC Series switches bring reliable level sensing to corrosive liquids. These durable, yet economical, switches use the same high-quality, dependable reed switches found in GEMS’ most expensive models. NSF-approved wetted parts make the LS-800 PVC suitable for potable water applications.

1. Mounting Types

<table>
<thead>
<tr>
<th>Mounting and All Wetted Parts</th>
<th>PVC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperatures</td>
<td>0°F to 125°F (-17.8°C to 51.7°C)</td>
</tr>
<tr>
<td>Pressure, PSI, Max.</td>
<td>15 @ 70°F (21°C)</td>
</tr>
<tr>
<td>Max. Length (Lo)</td>
<td>60 inches (152.4 cm)</td>
</tr>
<tr>
<td>Mounting Position</td>
<td>Vertical ±30° Inclination</td>
</tr>
</tbody>
</table>

2. Float Type

<table>
<thead>
<tr>
<th>Float Material</th>
<th>PVC*</th>
<th>Buna N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Float Dimensions</td>
<td>1-10/16&quot; (48.0 mm)</td>
<td>1-3/4&quot; (44.4 mm)</td>
</tr>
<tr>
<td>1-1/2&quot; DIA. (48.1 mm)</td>
<td>1-1/8&quot; DIA. (28.7 mm)</td>
<td></td>
</tr>
<tr>
<td>Float Part Number</td>
<td>16306</td>
<td>142251</td>
</tr>
<tr>
<td>Min. Liquid Specific Gravity</td>
<td>0.85</td>
<td>0.80</td>
</tr>
</tbody>
</table>

*Select for potable water applications.
LS-800 PVC Series – Continued

3. Number of Actuation Levels and Electrical Specifications

Typically, one float is required for each point at which you need a switch action to occur. The number of actuation levels available depends on type of wiring selected. See below.

Group I Wiring: 1 to 7 Actuation Levels
Group II Wiring: 1 to 4 Actuation Levels
Group III Wiring: 1 to 3 Actuation Levels
Group IV Wiring: 1 to 2 Actuation Levels

Switch (N.O. or N.C.):
SPST: 20 VA or 100 VA
SPDT: 20 VA

Lead Wires: #22 AWG, 24˝ L., PVC

Typical Wiring Diagrams
For clarity, only two actuation levels are shown in each group diagram.

<table>
<thead>
<tr>
<th>GROUP I</th>
<th>GROUP II</th>
<th>GROUP III</th>
<th>GROUP IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPST</td>
<td>SPST</td>
<td>SPDT</td>
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</tr>
</tbody>
</table>

4. Actuation Level Dimensions

Switch actuation levels are determined following the guidelines below.

A = 1-1/2˝ (38.1 mm) Minimum distance to highest actuation level.

B = 2˝ (50.8 mm) Minimum distance from end of unit to lowest actuation level.

C = 3˝ (76.2 mm) Minimum distance between actuation levels.

Notes:
1. Actuation levels are calibrated on descending fluid level, with water as the calibrating fluid, unless otherwise specified.
2. A and B dimensions based on a top mounted unit.
3. Float stops are permanently cemented in place.
4. Tolerance on actuation levels is ±1/8˝ (3.2 mm).
5. Dimensions based on a liquid specific gravity 1.0.

* Actuation level distances and L₀ (overall unit length) are measured from inner surfaces of mounting plug or flange.
** Length Overall (L₀) = L₁ + Dimension B. See Mounting Types for Maximum Length values.