The Model F7-LPP Vertical Level Float Switch provides simple, cost-effective control of the liquid level within a tank. Switch ratings are suitable for high current solid-state control systems and monitors or alarms. The F7-LPP’s mechanically rugged polypropylene construction is ideal for use in a variety of applications due to its heat and chemical resistance.

**BENEFITS/FEATURES**
- Fast start up due to simple installation
- Long product life due to hermetically sealed, rugged construction reed switches with permanently bonded magnets
- Increase application use by easily rotating the float to reverse switch action
- Meet high demand applications with high current switch

**APPLICATIONS**
- Water level monitoring
- Oil level control
- Chemical level indication
- Sumps
- Standpipes
- Tank level control
- High viscosity liquids

**INSTALLATION**
When mounted near ferromagnetic parts the switching distance of Model F7-LPP may vary. Electromagnetic influences and magnetic fields may change the switching behaviour of the sensor.

Choose a location away from fill pipes, drains, or other areas where turbulence or wave motion might occur. Turbulence will cause false actuations and shorten contact life. Excess contaminants in fluid may inhibit float operation and an occasional wipe-down may be necessary. Care should be taken that switches are always operated within electrical ratings.

**Installation Notes**
Do not subject reed switch controls to excessive shock or vibration or any of the following:
- Bending or placing force loads on reed switch housing
- Over-torquing fittings on reed switch housing
- Placing pull-out force on lead wire

**SPECIFICATIONS**
- **Service:** Compatible liquids.
- **Wetted Materials:** Float/stem: Polypropylene; O-ring: Silicone.
- **Temperature Limits:** -4 to 176°F (-20 to 80°C).
- **Pressure Limit:** 72.5 psi (5 bar).
- **Enclosure Rating:** IP67.
- **Switch Type:** SPST field adjustable NO or NC (supplied NO).
- **Electrical Rating:** 140 VAC/200 VDC, 1.2 A max.
- **Electrical Connection:** 24 AWG, 11.8” (30 cm) long.
- **Process Connection:** M8 thread with included fastening nut.
- **Float Density:** 0.67.
- **Specific Gravity:** 0.8.
- **Weight:** 0.38 oz (11 g).

**MODEL CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F7-LPP</td>
<td>Vertical level float switch</td>
</tr>
</tbody>
</table>
Mounting
Install the F7-LPP in an appropriately sized hole. This unit mounts internally, which means the switch must be secured to the top or bottom wall of the tank or vessel from the inside. Install the F7-LPP in a suitable size hole and secure it with the nut provided. The unit should be aligned vertically at either the top or the bottom of the tank. The tank wall should not exceed 1/8" (5 mm).

Switch Action
(Normally Open, Normally Closed)
Units are supplied with normally open switch contacts that close as the float rises toward the mounting threads as seen in Figure 1. Should the switch be mounted stem up at the base of the tank, operating functions are reversed. See Figure 2.

To reverse the switch action, carefully remove the clip at the base of the stem. Remove the float, rotate it end-for-end, and then replace it back on the stem followed by the clip. The floats are not marked for Normally Open or Normally Closed orientation.

MAINTENANCE/REPAIR
Upon final installation of the Model F7-LPP, no routine maintenance is required. The Model F7-LPP is not field serviceable. Field repair should not be attempted and may void warranty.

WARRANTY/RETURN
Refer to “Terms and Conditions of Sale” in our catalog and on our website. Contact customer service to receive a Return Materials Authorization (RMA) number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.