### Application

The general purpose non-intrusive capacitance level switch provides reliable liquid level detection of water based conductive liquids with non-coating and/or scaling characteristics with a 1A relay output. Media examples include hydrochloric, sulfuric acid and water. The liquid level sensor is bracket mounted on the exterior wall of non-metallic tanks and applied as a high level alarm or low level alarm.

### Features

- Non-intrusive level detection through plastic or fiberglass walls
- Installed with polyethylene, polypropylene or PVDF adhesive 3M mounting brackets
- Rugged PSO enclosure rated NEMA 4X with conduit connector
- 60VA relay selectable NO or NC via power supply wiring polarity

### Key Benefits

- Ideal for high purity conductive liquids
- Three different bracket materials makes attachment to tank easy
- Great for non-metallic or FRP tanks up to 1" thick
- Use as a high or low level switch

### Tech Tip

With two calibration adjustments, the non-intrusive switch set point will be customized to your specific tank wall thickness and application media.

### Compatible Products

**Switch-Pro™ Remote Level Controller**

**Application**

Available in general purpose classification, the level controller is offered in three configurations for pump and valve control. The LC40 accepts one level sensor input and provides one 10A relay. The LC41 accepts two level sensor inputs and provides one latching 10A relay for automatic fill or empty control. The LC42 accepts three level sensor inputs with one latching 10A relay output for automatic fill or empty control, and a second non-latching 10A relay for high level alarm or low level alarm. For field mount installation, add a single or dual indicator NEMA box.
Specifications

- **Accuracy:** ±1 mm in water
- **Repeatability:** ±0.5 mm in water
- **Dielectric range:** >10 constants
- **Conductance range:** >100 µ
- **Supply voltage:** 12-36 VDC
- **Consumption:** 25 mA maximum
- **Contact type:** (1) SPST relay
- **Contact rating:** 60 VA, 1A maximum
- **Process temp.:** F: -40° to 176°
  C: -40° to 80°
- **Enclosure rating:** NEMA 4X (IP65)
- **Enclosure mat.:** PSO
- **Cable jack. mat.:** Polypropylene
- **Cable type:** 4-conductor, shielded #22 AWG
- **Cable length:** 10’ (3m)
- **Conduit entrance:** 1/2” NPT
- **Tank mat. comp.:** Non-metallic
- **Tank mounting:** Bracket w/3M adhesive, plastic thermal weld
- **Tank wall thickness:** <1” (25mm)
- **Bracket material:**
  - 6005: Polyethylene
  - 1005: Polypropylene
  - 5005: PVDF
- **Classification:** General purpose
- **Compliance:** CE

Dimensions

- **RELAY**
  - Red (+)
  - Black (-)
  - White: NO/NC
  - Green: COM
- **10’ Cable (3m)**

Accessories

For enhanced flexibility and performance, use the below recommended power supply.

<table>
<thead>
<tr>
<th>P/N</th>
<th>Description</th>
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<tbody>
<tr>
<td>Non-Intrusive Capacitance Mounting Bracket</td>
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<tr>
<td>LP95-1001</td>
<td>Mounting Bracket, Polypropylene</td>
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<tr>
<td>LP95-6001</td>
<td>Mounting Bracket, Polyethylene</td>
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<tr>
<td>LP95-5001</td>
<td>Mounting Bracket, PVDF</td>
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<table>
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<th>Single &amp; Two Controller NEMA Box</th>
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<tr>
<td>LM92-1202</td>
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<tr>
<td>LM92-2202</td>
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Ordering

1) Select the bracket material that matches the tank wall. Each level sensor comes with one bracket. Additional brackets may be ordered separately.

2) To special order a 25’ (7.6m) or 50’ (15.2 m) level sensor cable, place the cable length at the end of the part number (ie: LP50-6005-25’). Add $20 for 25’ (7.6m) or $40 for 50’ (15.2m) to the price.

Bracket material (1) (2)

1 PP
5 PVDF
6 PE

Notes

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