**INSTALLATION**

1. Unpack switch and remove any packing material found inside lower housing or float chamber (tee).

2. **WARNING** Mechanical shock and vibration can cause damage to the reed switch. Care should be taken to avoid dropping the switch on hard surfaces or impacting the switch assembly.

3. Switch must be installed with body in a horizontal plane with arrow on side of body pointing down.

4. If switch has an external float chamber (tee), connect it to vertical sections of 1” NPT pipe installed outside vessel walls at appropriate levels. If unit has no external float chamber, it must be mounted in a 1” NPT half coupling welded to the vessel wall. The coupling must extend through the wall. Use Teflon® thread tape or pipe joint compound to assure a good seal.

5. Connect the wiring in accordance with local electrical codes.

6. Inductive, capacitive and lamp loads can all create conditions harmful to the reed switch.
   
   a. **Inductive loads** can be caused by electromagnetic relays, electromagnetic solenoids and electromagnetic counters, all with inductive components as the circuit load.
   
   b. **Capacitive loads** can be caused by capacitors connected in series with or parallel to the reed switch. If in a closed circuit, the cable length (150 ft or more) to the switch can introduce a capacitance.
   
   c. **Lamp loads** can be caused by switching lamp filaments which have low cold resistance.

   In addition to these causes, exceeding any of the maximum electrical ratings can lead to premature or immediate failure. This includes inrush and surge currents greater than the maximum switching current. To accommodate these conditions, see diagrams on the reverse for possible solutions.

7. After installation, set the switch action to NO (normally open) or NC (normally closed). Normally open contacts close and normally closed contacts open when liquid level in the vessel lifts the float past the actuation point. To change, loosen, but do not remove, the two screws on the switch cap. Slide the reed switch assembly to expose the switch action needed. Tighten screws when adjustment is complete.

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**SPECIFICATIONS - INSTALLATION AND OPERATING INSTRUCTIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Line Size</th>
<th>Installation/ Mounting</th>
<th>Float Material</th>
<th>Max. Press. psig (bar)</th>
<th>Min. S.G.</th>
</tr>
</thead>
<tbody>
<tr>
<td>L10-B-3-O</td>
<td>Brass 1” NPT</td>
<td>Side Wall</td>
<td>Solid Polypropylene</td>
<td>1000 (68.9)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-A</td>
<td>Brass 1” NPT</td>
<td>Side Wall</td>
<td>Cylindrical St. Steel</td>
<td>200 (13.8)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-C</td>
<td>Brass 1” NPT</td>
<td>Side Wall</td>
<td>Round St. Steel</td>
<td>350 (24.1)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-B</td>
<td>Brass 1” NPT Ext. Te</td>
<td>Side Wall</td>
<td>Solid Polypropylene</td>
<td>250 (17.2)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-H</td>
<td>Brass 1” NPT Ext. Te</td>
<td>Side Wall</td>
<td>Round St. Steel</td>
<td>250 (17.2)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-J</td>
<td>Brass 1” NPT Ext. Te</td>
<td>Side Wall</td>
<td>Solid Polypropylene</td>
<td>2000 (137.8)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-A</td>
<td>Brass Ext. Te</td>
<td>Side Wall</td>
<td>Cylindrical St. Steel</td>
<td>200 (13.8)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-C</td>
<td>Brass Ext. Te</td>
<td>Side Wall</td>
<td>Round St. Steel</td>
<td>350 (24.1)</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-J</td>
<td>Brass Ext. Te</td>
<td>Side Wall</td>
<td>Solid Polypropylene</td>
<td>2000 (137.8)</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>L10-B-3-K</td>
<td>Brass Ext. Te</td>
<td>Side Wall</td>
<td>Round St. Steel</td>
<td>350 (24.1)</td>
<td>0.7</td>
<td></td>
</tr>
</tbody>
</table>

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**Electrical Connections:**

- **18 AWG (0.75 mm²)**
- **1/4” NPT (6.35 mm)**
- **3/4” NPT (19.05 mm)**
- **1” BSPT (25.40 mm)**
- **2” BSPT (50.80 mm)**
- **3” BSPT (76.20 mm)**

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**Agency Approvals:**

- CE
- CSA
- UR

**Switch Enclosure:**

- Nylon
- Weatherproof, meets NEMA 4X (IP66).

**Weight:**

- Approximately 10 oz (0.283 kg) without external float chamber, 2.32 lb (1.05 kg) with external float chamber.

**Pressure Limit:**

- 200°F (93°C).

**Temperature Limit:**

- 300°F (149°C).

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**Wetted Materials:**

- Float: Solid polypropylene or 304 SS; Body: Brass or 303 SS; Magnet: Ceramic; External float chamber (tee): None, brass, or 304 SS; Other: Lever arm, pin, spring, etc.: 301 SS, 302 SS, 316 SS.

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**Service:**

- Compatible liquids.
CIRCUIT INFORMATION FOR REED SWITCH PROTECTION
Read information below before installing your new reed switch control!
Exceeding the current capacity of this Reed Switch control may cause FAULTY OPERATION! Be aware of the inductive and capacitive or lamp loads you may be placing on your Reed Switch Control. The circuits below outline possible solutions to preventing overloads due to inrush or surge currents exceeding maximum or when the switch current and product of the lamps (low “cold” resistance) is outlined below. Failure to follow these measures to protect Reed Switch Contacts may cause the contacts to weld together or result in premature wear.

Possible Circuit Solutions Indicated by Dashed Lines

Inductive Loads
Possible causes –
An electromagnetic relay, electromagnetic solenoid, electromagnetic counter with inductive component as circuit load.

Capacitive Loads
Possible causes –
A capacitor connected in series or parallel with Reed Switch control. In a closed circuit, a cable length (usually greater than 50m [162.5 ft.]) used to connect reed switch may also introduce static capacitance.

Lamp Loads
Possible causes –
A tungsten filament lamp load.

MAINTENANCE/REPAIR
Upon final installation of the Series L10, no routine maintenance is required. The Series L10 is not field serviceable and should be returned if repair is needed. Field repair should not be attempted and may void warranty.

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