Small Size – Engineered Plastics

LS-3 Series – Offers High Reliability, Compact Size and Low Costs in NPT, Straight and Metric Threads

Ideal for shallow tanks or restricted spaces, or for any low-cost, high volume use. LS-3 Series are available in FDA compliant materials, consult GEMS for details.

Polysulfone Float

For water based liquids, with limited use in oils and chemicals.

Polypropylene Float (Hollow)

Features a low specific gravity float offering broad chemical compatibility.

Polypropylene Float (Solid)

With Polypropylene stem and float, switch offers broad chemical compatibility.

Buna N Float

Ideal for oils and fuels.

ALL-PVDF

Stem and float of corrosion-resistant PVDF for ultra-pure applications.

New 3/4˝ Polypropylene Float

See next page for details.

Common Specifications


Switch SPST: 20 VA, 120-240 VAC. Units are shipped N.O. unless otherwise specified. Selectable, N.O. or N.C., by inverting float on unit stem. For LS-3 Micro: 20 VA, 140 VAC/200 VDC.

Dimensions – 1˝ Float Models only

$L_1=$ Actuation Level (see chart on next page)

<table>
<thead>
<tr>
<th>Alternate Mountings</th>
<th>3/8˝-16 Straight Thread</th>
<th>G1/8˝-1/8˝-28 BSP</th>
<th>M12x 1.75 Straight Thread</th>
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<tbody>
<tr>
<td>475° REF. (12mm)</td>
<td>1/4˝ HEX</td>
<td>1/2˝ HEX</td>
<td>315° REF. (8.6mm)</td>
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<tr>
<td>3/8˝ REF. (9.5mm)</td>
<td>1/2˝ HEX</td>
<td>1/2˝ HEX</td>
<td>9/16˝ REF. (6.3mm)</td>
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<td>1/4˝ HEX</td>
<td>1/2˝ HEX</td>
<td>1/2˝ HEX</td>
<td>5/8˝ REF. (12mm)</td>
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<tr>
<td>Lead Wires</td>
<td>Cable</td>
<td>Cable</td>
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</tbody>
</table>

### LEVEL SWITCHES – SINGLE POINT

#### LS-3 3/4˝

<table>
<thead>
<tr>
<th>Stem and Mounting Material</th>
<th>Float Material</th>
<th>Float Dia.</th>
<th>Actuation Level</th>
<th>Min. Liquid Sp. Gravity</th>
<th>Pressure Max. @ 70°F (21°C)</th>
<th>Operating Temperature</th>
<th>Mounting Type</th>
<th>Electrical Termination</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polysulfone</td>
<td>Polysulfone</td>
<td>3/4”</td>
<td>(19.0 mm)</td>
<td>.75</td>
<td>50 psi (3 bar)</td>
<td>-40°F to +225°F (-40°C to +107°C)</td>
<td>1/8” NPT</td>
<td>Lead Wires</td>
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<td>Polypropylene</td>
<td>1”</td>
<td>13/16”</td>
<td>(20.6 mm)</td>
<td>.60</td>
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<td>Lead Wires</td>
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<td>.60</td>
<td>-40°F to +225°F (-40°C to +107°C)</td>
<td>3/8”-16</td>
<td>Lead Wires</td>
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<td>Polypropylene</td>
<td>1”</td>
<td>13/16”</td>
<td>(20.6 mm)</td>
<td>.60</td>
<td>-40°F to +225°F (-40°C to +107°C)</td>
<td>G 1/8”-28</td>
<td>Cable</td>
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<td>M12x1.75</td>
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</table>

### Notes:
1. Based on a liquid specific gravity of 1.0.
2. All Polypropylene units carry a Kynar® retaining clip. Accessories Available in OEM Quantities: Jam Nut, Gaskets, and Slosh Shields.
3. NSF 169 Approved unit, for water use only.

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### How To Order – Select Part Number based on specifications required.

**Miniature and Micro Floats for Tiny Tanks**

**Our smallest LS-3 Series switches yet!**

Small yes, but with BIG performance.

No other miniature float switches match our LS-3 specs. These units are ideal for potable water, medical devices and other compact appliances, such as printers.

Gems proprietary float enables use in lighter-than-water fluids. Switches are made from FDA compliant materials.

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**Dimensions – 3/4” and Micro Series**

**LS-3 3/4”**

**LS-3 Micro**

**Notes:**
1. Based on a liquid specific gravity of 1.0.
2. Utilizes a Kynar® retaining clip.

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Unique Features Make These LS-3 Models Special

These small switches feature unique configurations for special applications.

Part No. 142545  
With Slosh Shield

Part No. 46999  
Bottle Level

Part No. 76707  
For Low Level

Compact, all-polypropylene switch with slosh shield is ideal for use with turbulent liquids in small tanks. FDA compliant materials.

For external mounting on tanks too small to accommodate internally mounted switches. (See note below)

For detecting levels as low as 5/8” from tank bottom. Use in water, some oils and chemicals.

Notes:
1. See “Electrical Data” on Page X-5 for more information.
2. Switch operation is selectable, N.O. or N.C., by inverting the float on the unit stem.
3. Maximum pressure at 70°F (21°C).
4. Consult factory for other available materials.

†  L1 = Switch actuation level, nominal (based on a specific gravity of 1.0).

---

Order By Part Number  
142545  
46999  
76707

Materials
Stem and Mounting  
All Polypropylene (Including Shield*)  
Polypropylene (Solid)  
Polypropylene (Including Collar)

Float  
——  
Brass, Aluminum, Polycarbonate, Viton A  
Buna N

Other Wetted  
——  
——  
Epoxy

Min. Liquid Sp. Gr.  
.90  
.75  
——

Operating Temperature  
-40°F to +150°F (-40°C to +65.6°C)  
-40°F to +120°F (-40°C to +48.9°C)  
-40°F to +180°F (-40°C to +82.2°C)

Pressure, PSI, Max.  
150  
50  
30

Switch*, SPST  
20 VA, N.C./N.O. Dry†  
20 VA, N.C. Dry

Electrical Termination  
No. 22 AWG, 22” L., PVC Lead Wires  
No. 22 AWG, 72” L., Polymeric Lead Wires  
No. 22 AWG, 72” L., PVC Lead Wires