

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 approved 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 to satisfy a wide variety of applications.

Polypropylene Float (Solid)



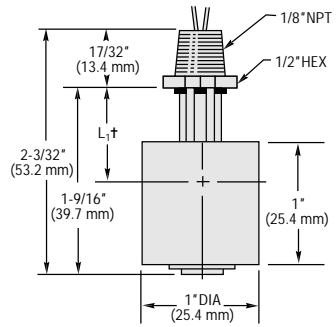
With Polypropylene stem and float, switch offers broad chemical compatibility.

Buna N Float



Ideal for oils and fuels.

Dimensions



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

Polysulfone Float: 3/4" (19.0 mm)

Polypropylene Float (Hollow): 13/16" (20.6 mm)

Polypropylene Float (Solid): 9/16" (14.3 mm)

Buna N Float: 13/16" (20.6 mm)

Alternate Mountings

| | 3/8"-16 Straight Thread | G1/8" 1/8"-28 BSP | M12x 1.5 Straight Thread |
|------------------------|-------------------------|-------------------|--------------------------|
| Electrical Termination | Lead Wires | Cable | Cable |
| | | | |

Common Specifications

Electrical Termination: No. 22 AWG, 24" L., PVC Lead Wires. On BSP and Metric mounting: PVC Jacketed 2-Conductor #22AWG Cable.

Approvals: U.L. Recognized – File No. E45168; CSA Listed – File No. 30200. CE Declaration Available Upon Request.

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.

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

| Materials | | Min. Liquid Sp. Gr. | Pressure,** PSI/Bar, Max. | Operating Temperature | Mounting Type | Part Number |
|-------------------|------------------------|---------------------|---------------------------|---|---------------|-------------|
| Stem and Mounting | Float | | | | | |
| Polysulfone | Polysulfone | .75 | 50/3 | -40°F to +225°F (-40°C to +107°C) | 1/8" NPT | 42295 ⚡ |
| Polypropylene | Polypropylene (Hollow) | .60 | 50/3 | -40°F to +225°F (-40°C to +107°C) | 1/8" NPT | 142505 ⚡ |
| | | | | -40°F to +176°F (-40°C to +80°C) | 3/8"-16 | 171517 |
| | Polypropylene (Solid) | .90 | 150/10 | -40°F to +150°F (-40°C to +66°C) | G 1/8"-24 | 171518 |
| | | | | -40°F to +176°F (-40°C to +80°C) | M12x1.5 | 171519 |
| Nylon | Buna | .45 | 150/10 | -40°F to +250°F (OIL) (-40°C to +121°C [OIL]) | 1/8" NPT | 116826 ⚡ |
| | | | | -40°F to +176°F (-40°C to +80°C) | 3/8"-16 | 171514 |
| | | | | -40°F to +176°F (-40°C to +80°C) | G 1/8"-24 | 171515 |
| | | | | -40°F to +176°F (-40°C to +80°C) | M12x1.5 | 171516 |
| | | | | -40°F to +250°F (OIL) (-40°C to +121°C [OIL]) | 1/8" NPT | 162745 ⚡ |
| | | | | -40°F to +176°F (-40°C to +80°C) | 3/8"-16 | 171511 |
| | | | | -40°F to +176°F (-40°C to +80°C) | G 1/8"-24 | 171512 |
| | | | | -40°F to +176°F (-40°C to +80°C) | M12x1.5 | 171513 |

**Maximum Pressure at 70°F (30°C)
⚡ – Stock Items.

Accessories Available in OEM Quantities:
Jam Nut, Gaskets, and Sloss Shields.

Unique Features Make These LS-3 Models Special

These small switches feature unique configurations for special applications.

Part No. 142545
With Slosh Shield



Cut-away version shown

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

Part No. 46999
Bottle Level

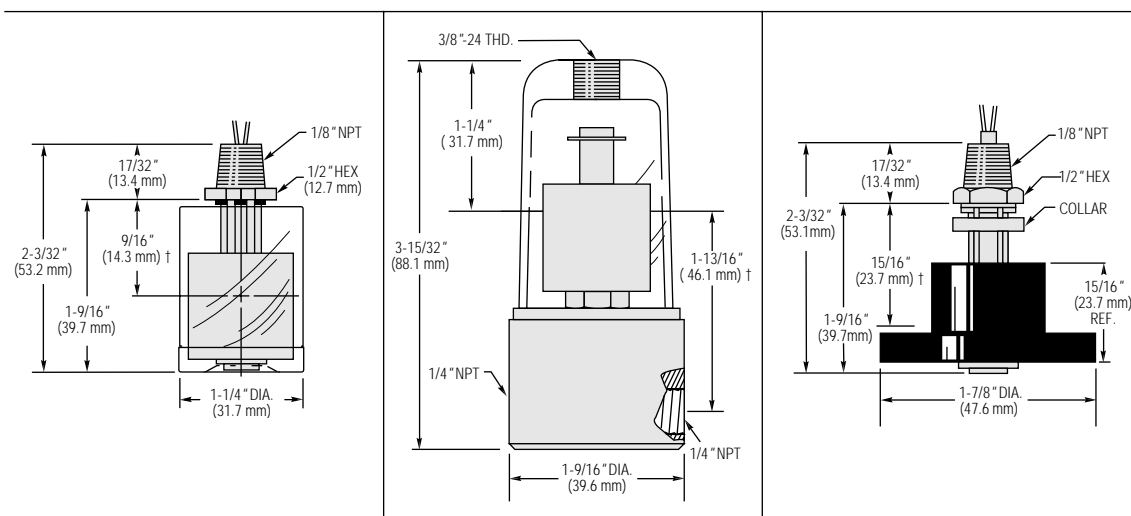


For external mounting on tanks too small to accommodate internally mounted switches. (See note below)

Part No. 76707
For Low Level



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



| Order By Part Number | 142545 ⚡ | 46999 ⚡ | 76707 ⚡ |
|-------------------------|--|---|------------------------------------|
| Materials | | | |
| Stem and Mounting | All Polypropylene (Including Shield††) | Polysulfone | All Polysulfone (Including Collar) |
| Float | Polypropylene (Solid) | Polysulfone | Buna N |
| Other Wetted | — | Brass, Aluminum, Polycarbonate, Viton A | 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 | |
| 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 |

* See "Electrical Data" on Page A-4 for more information.

** Switch operation is selectable, N.O. or N.C., by inverting the float on the unit stem.

*** Maximum pressure at 70°F (30°C).

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

†† Consult factory for other available materials.

⚡ - Stock Items.

Note: LS-3 Series Bottle Level Switch is also available with any of the float materials shown on opposite page. Contact GEMS for correct part number.