

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



FDA
CE
UL US

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

Polypropylene Float (Hollow)



CE
UL US

Features a low specific gravity float offering broad chemical compatibility.

Polypropylene Float (Solid)



CE
UL US

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

Buna N Float



CE
UL US

Ideal for oils and fuels.

ALL-PVDF



UL US
CE
FDA

Wetted materials of construction comply with FDA food contact regulations.

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

New 3/4" Polypropylene Float



UL US
CE

See next page for details.



RoHS Compliant:

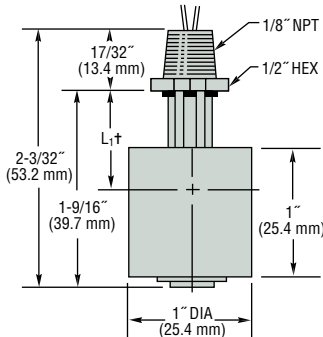
All LS-3 Series level switches featured on this page and the next are in compliance with EU-directive 2011/65/EC.

Common Specifications

Approvals: U.L. Recognized – File No. E45168; CSA Listed – File No. 30200. CE Declaration Available Upon Request. NSF materials are NSF 169 Standard compliant. For NSF approved level switches contact Gems. RoHS – In compliance with EU-directive 2011/65/EC requirements for chemicals and substances.

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



† L₁ = Actuation Level (see chart on next page)

| Electrical Termination | Alternate Mountings | | |
|------------------------|----------------------------|----------------------|------------------------------|
| | 3/8"-16 Straight Thread | G1/8" 1/8"-28 BSP | M12x 1.75 Straight Thread |
| Lead Wires | | | |
| Cable | | | |

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

| Stem and Mounting Material | Float Material | Float Dia. | Actuation Level ¹ | Min. Liquid Sp. Gravity | Pressure Max. @ 70°F (21°C) | Operating Temperature | Mounting Type | Electrical Termination | Part Number |
|--|--|------------|------------------------------|-------------------------|--------------------------------|---|---------------|---|-----------------|
| Polysulfone | Polysulfone | 1" | 3/4" (19.0 mm) | .75 | 50 psi (3 bar) | -40°F to +225°F (-40°C to +107°C) | 1/8" NPT | Lead Wires | 42295 ⚡ |
| Polypropylene ² | Polypropylene (Hollow) | 1" | 13/16" (20.6 mm) | .60 | 50 psi (3 bar) | -40°F to +225°F (-40°C to +107°C) | 1/8" NPT | Lead Wires | 142505 ⚡ |
| | | | | | | | 3/8"-16 | Lead Wires | 171517 ⚡ |
| | | | | | | | G 1/8"-28 | Cable | 171518 |
| Polypropylene ³ NSF Std. 169 (Kynar float retaining clip) | Polypropylene ³ (Hollow) NSF Std. 169 | 1" | 13/16" (20.6 mm) | .60 | 50 psi (3 bar) | -40°F to +225°F (-40°C to +107°C) | M12x1.75 | Cable | 189739 |
| | | | | | | | 1/8" NPT | Lead Wires | 209475 |
| | | | | | | | 3/8"-16 | Lead Wires | 209455 |
| Polypropylene ² | Polypropylene (Solid) | 1" | 9/16" (14.3 mm) | .90 | 150 psi (10 bar) @ 68°F (20°C) | -40°F to +150°F (-40°C to +66°C) | 1/8" NPT | Lead Wires | 209460 |
| | | | | | | | 3/8"-16 | Lead Wires | 209465 |
| | | | | | | | M12x1.75 | Cable | 116826 ⚡ |
| Nylon | Buna | 1" | 13/16" (20.6 mm) | .45 | 150 psi (10 bar) | -40°F to +176°F (-40°C to +80°C) | 1/8" NPT | Lead Wires | 171514 ⚡ |
| | | | | | | | M12x1.75 | Cable | 189787 |
| PVDF | PVDF | 1" | 1/2" (12.7 mm) | .86 | 50 psi (3 bar) | -40°F to +250°F (oil) (-40°C to +121°C [oil]) -40°F to +176°F (water) (-40°C to +80°C [water]) | 1/8" NPT | Lead Wires | 162745 ⚡ |
| | | | | | | | M12x1.75 | Cable | 189786 |
| PVDF | PVDF | 1" | 1/2" (12.7 mm) | .86 | 50 psi (3 bar) | -40°F to +250°F (-40°C to +121°C) | 1/8" NPT | Teflon [®] Jacketed Lead Wires | 173250 ⚡ |

Notes:

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

⚡ – Stock Items.

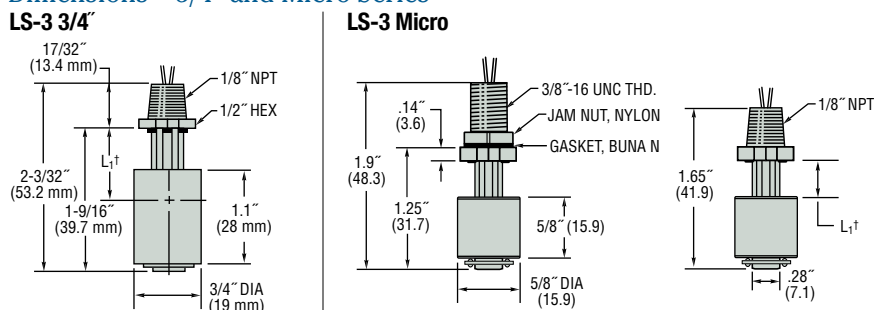
Miniature and Micro Floats for Tiny Tanks

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.



Dimensions – 3/4" and Micro Series



† L₁ = Actuation Level (see chart below)

| Series | Stem and Mounting Material | Float Material | Actuation Level ¹ | Min. Liquid Sp. Gravity | Pressure Max. @ 70°F (21°C) | Operating Temperature | Electrical Termination | Mounting Type | Switch Logic | Part Number |
|------------------------|----------------------------|------------------------|------------------------------|-------------------------|-----------------------------|---|---------------------------------|------------------|------------------------|---------------|
| LS-3 3/4" ² | Polypropylene ² | Polypropylene (Solid) | 7/16" (11.1 mm) | .95 | 100 psi (6.9 bar) | -40°F to +212°F (-40°C to +100°C) | Lead Wires or Cable | 1/8" NPT | N.C./N.O. | 201540 |
| | Nylon | Buna | 11/16" (17.5mm) | .85 | 150 psi (10.3 bar) | -40°F to +250°F (oil) (-40°C to +121°C [oil]) | Lead Wire | | Reverse Float Position | 177818 |
| LS-3 Micro | Polypropylene | Polypropylene (Hollow) | 3/8" (9.5 mm) | .95 | 50 psi (3 bar) | -40°F to +176°F (-40°C to +80°C) | PVC Jacketed Lead Wires 24"-26" | 1/8" NPT | N.O. | 247135 |
| | | | | | | | | 3/8"-16 Straight | N.C. | 247137 |
| | | | | | | | | | N.O. | 246985 |
| | | | | | | | | | N.C. | 246986 |

Notes:

- Based on a liquid specific gravity of 1.0.
- Utilizes a Kynar[®] retaining clip.