

LEVEL SWITCHES

- ▶ **LS-3 Series – Engineered Plastic**
- ▶ **LS-1700 Series – Alloy Stems**
- ▶ **LS-1755 Series – All Stainless Steel**

Features

- Durable, rugged
- Broad temperature & pressure capabilities
- Variety of materials
- Compact size
- Economical

Benefits

- Reliable
- Versatile in demanding applications
- Broad chemical compatibility
- Ideal for tight spaces
- Affordable in any application

Equipment Used On

- Chemical sterilizers
- Hypothermia systems
- Laboratory automation
- Dental sterilizers
- MRI

Fluid Monitoring Applications

- Water chillers
- Waste
- Reagents
- Detergent/wash
- Coolant

Compact Liquid Level Switches

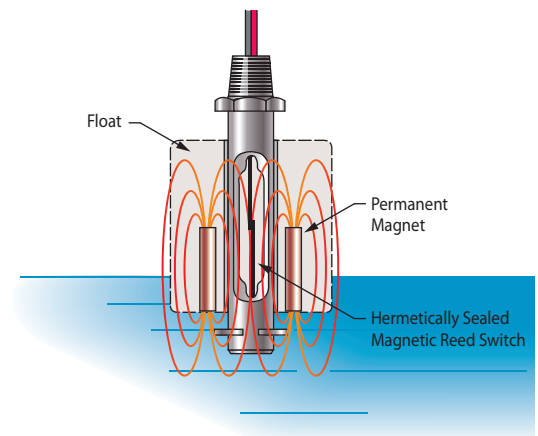


Designed for small fluid tanks, these compact liquid-level switches offer specific materials and features to handle a wide range of fluid, temperature and pressure compatibility. They operate by using the simple float / reed switch technology. Direct indication of the liquid level is accomplished by fluid changes moving the float unlike indirect level indication from more complex methods.

The durable construction of these reed switch designs ensures long, trouble-free service. Using hermetically sealed reed switches, our switches provide repeatability with less than 1% deviation. Shock, wear and vibration resistant, the switch point remains constant over a very long life cycle.

Operating Principle

The cylindrical float encircling a stationary stem is equipped with powerful, permanent magnets. As the float rises or lowers with liquid level, the magnetic field generated from within the float actuates a hermetically sealed magnetic reed switch mounted with the stem. The stem is made of non-magnetic alloys or engineered plastics. When mounted vertically, this design provides a consistent accuracy of $\pm 1/8$ " inch.

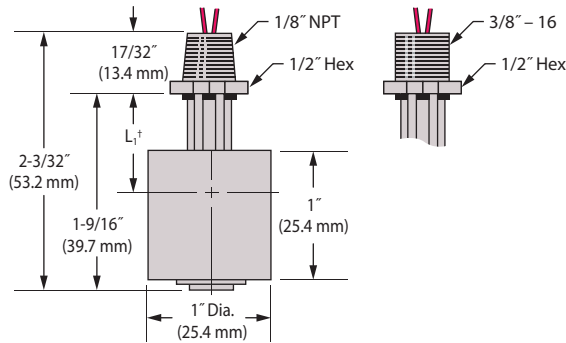


Comparison Chart

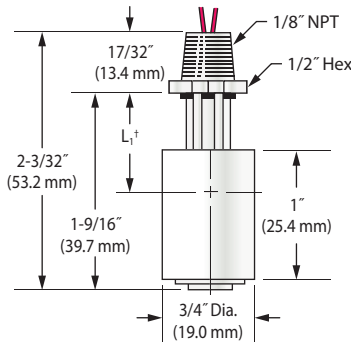
Series	Stem Material	Float Material	Min. Specific Gravity	Operating Temperatures	Pressure, Max.
LS-3	Polysulfone	Polysulfone	.75	-40°F to +225°F (-40°C to +107°C)	50 psi (3 bar)
	Polypropylene	Hollow Polypropylene	.60		
	Polypropylene (1" float)	Solid Polypropylene (1" float)	.90	-40°F to +150°F (-40°C to +66°C)	150 psi (10 bar)
	Solid Polypropylene (3/4" float)	Solid Polypropylene (3/4" float)	.95	-40°F to +212°F (-40°C to +100°C)	Atmospheric
	PVDF	PVDF	.86	-40°F to +250°F (-40°C to +121°C)	50 psi (3 bar)
LS-1700	Brass	Buna N	.45	Water to +180°F (82°C)	50 psi (3 bar)
	Buna N	Buna N			
	316 Stainless Steel	Teflon®	.85	-40°F to +250°F (-40°C to +121°C)	1000 psi (69 bar)
LS-1755	316 Stainless Steel	316 Stainless Steel	.90	-40°F to +300°F (-40°C to +149°C)	275 psi (19 bar)

Dimensions

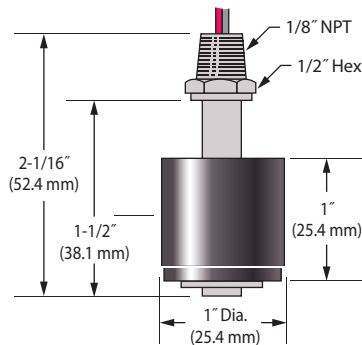
LS-3 – 1" (25.4 mm) floats



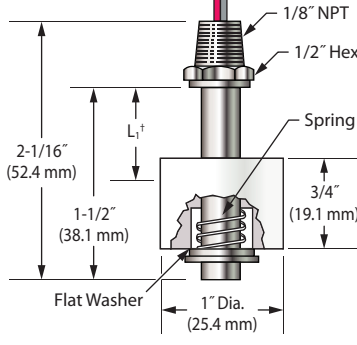
LS-3 – 3/4" (19.0 mm) floats



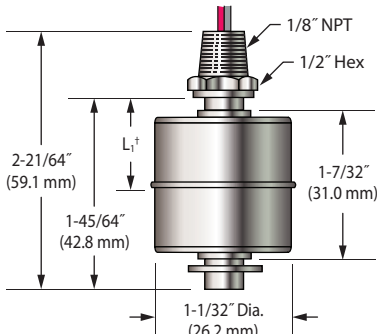
LS-1700 – Buna N floats



LS-1700 – Teflon® floats



LS-1755 – All 316 Stainless Steel



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

LS-3 Series – Engineered Plastic

- 1/8" NPT and Straight Thread, M12x1.75, and 3/8"-16 mountings
- Float diameter as small as 3/4" (19.0 mm)

Ideal for shallow tanks and restricted spaces, or for any low-cost, high volume use. LS-3 Series sensors are available in FDA or NSF Standard 61 compliant materials, including an all-PVDF version. Operate in specific gravities as low as .60.

LS-1700 Series – Alloy Stems

- Brass or stainless stems and mountings
- 1/8" NPT mounting
- Buna N or Teflon® float

These are very durable sensors, with pressure capability up to 1000 PSI (69 bar) and temperatures to 250°F (121°C). Buna N float versions operate in specific gravities as low as 0.45, and are operation selectable (N.O. or N.C) by simply inverting the float on the stem.

LS-1755 Series – All Stainless Steel

- 1/8" NPT mounting
- 275 PSI (19 bar) pressure capability
- 316 stainless steel stem and float

Their rugged construction is suitable for most corrosive or high-purity liquids, and for high temperatures and pressures. The LS-1755 float has a diameter of just 1-1/32" (26.2 mm).

Our Medical Equipment Specialists are ready to discuss your sensor requirements, so don't hesitate to give us a call.



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