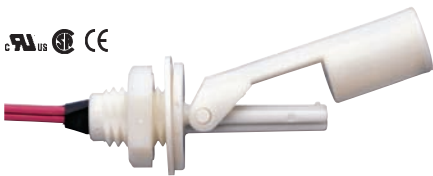


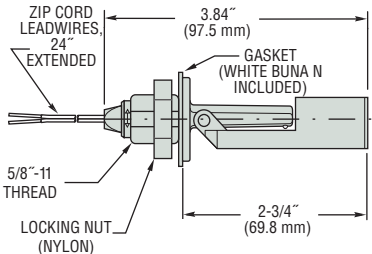
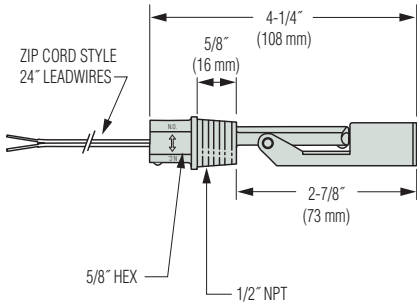
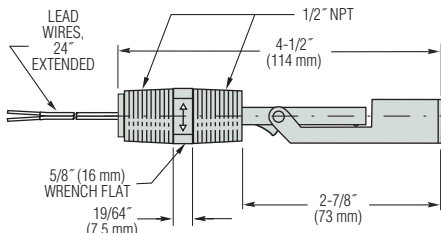


Small Size – Engineered Plastics

LS-7 Series–Compact Side Mounts are the Solution to Many Small Tanks

These low-cost units are ideal for high volume use in small tanks and vessels. Engineered plastics construction offers broad compatibility in water, oils and chemicals.

Type 3 Internal Mounting	Type 5 External Mounting	Type 7 External Mounting
 <p>Polypropylene or Nylon.</p>	 <p>Polypropylene or Nylon.</p>	 <p>Polypropylene or Nylon; conduit connection.</p>
 <p>ZIP CORD LEADWIRES, 24" EXTENDED 3.84" (97.5 mm) GASKET (WHITE BUNA N INCLUDED) 5/8"-11 THREAD LOCKING NUT (NYLON) 2-3/4" (69.8 mm)</p>	 <p>ZIP CORD STYLE 24" LEADWIRES 4-1/4" (108 mm) 5/8" (16 mm) 2-7/8" (73 mm) 5/8" HEX 1/2" NPT</p>	 <p>LEAD WIRES, 24" EXTENDED 1/2" NPT 4-1/2" (114 mm) 5/8" (16 mm) WRENCH FLAT 19/64" (7.5 mm) 2-7/8" (73 mm)</p>

Common Specifications

Switch Rating*: SPST, 20VA

Lead Wire Gauge: No. 22 AWG

Approvals: All LS-7 Series switches on this page are U.L. Recognized – File No. E45168, and are CSA Listed-File No. 30200. For NSF approved level switches contact Gems.

Mounting Attitude: Horizontal.

*See "Electrical Data" on Page X-5 for more information.

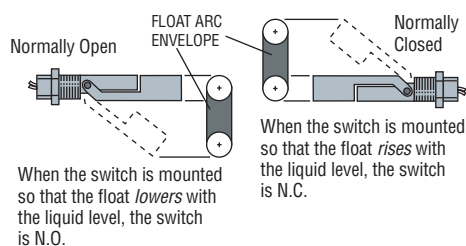
Media Compatibility

Media	LS-7 Compatible Types
Oil, Fuel, Hydrocarbons	Nylon
Broad Range of Chemicals and Water	Polypropylene
Limited Chemicals and Water	Noryl®

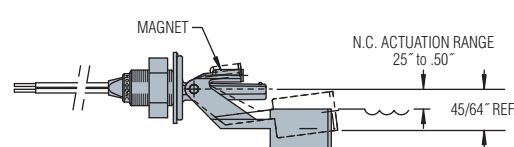
Switch Operation

Depending on the mounting position, the float on these switches can rise or lower with the liquid level. By rotating the switch 180°, the switch operation can be Normally Open or Normally Closed (except Type 12).

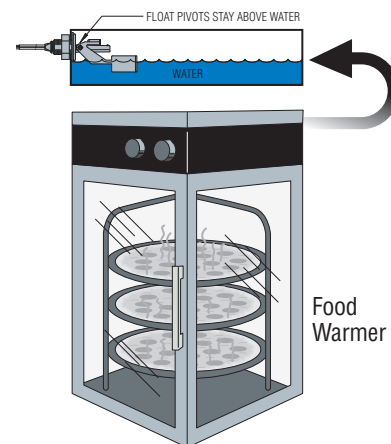
Types 3, 5, 7, 10 and 13



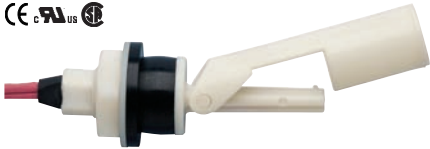
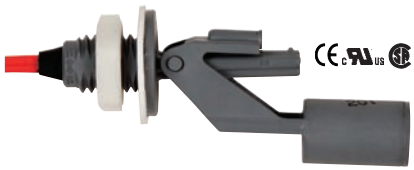

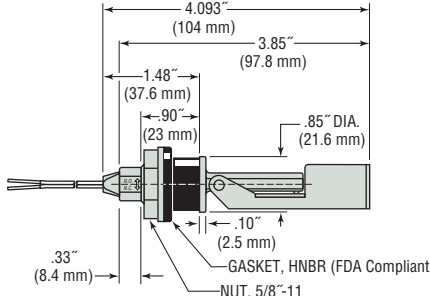
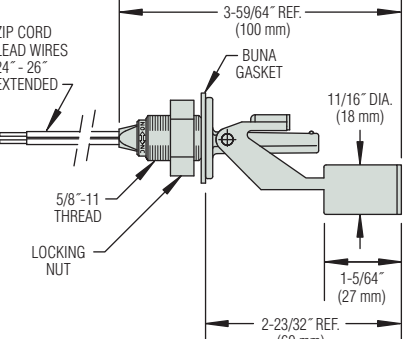
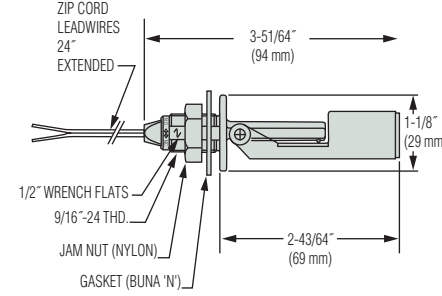
Type 12 – N.C. "Drop Float" Design



The LS-7 Type 12 is ideal for use on food warmers, hot water heaters, steam cookers, small boilers or wherever water evaporation occurs. The switch is used effectively for either high fluid level alarms or water make up systems. The units are made of Noryl®, which carries both NSF and WRC approval for use in potable water, and are supplied with FDA-approved Buna gaskets.



- ▶ Nylon is ideal for oils and fuels.
- ▶ NSF Standard 61 polypropylene is ideal for potable water and broad chemicals.

Type 10 External Mounting	Type 12 Internal Mounting	Type 13 Internal Mounting
 <p>Externally mounts through and seals non-threaded holes using a HNBR compression gasket.</p>	 <p>Side mount “Drop Down” design for calcifying hot water applications. NSF and WRC compliant Noryl®.</p>	 <p>Polypropylene or Nylon.</p>
 <p>Note: Recommended hole size = 7/8" dia. x 1/32" - 5/32" thick panel.</p>		

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

Mounting Type	Materials*			Min. Liquid Sp. Gr.	Operating Temperature	Operating Pressure, Max.	Float Arc Envelope	Part Number
	Stem and Mounting	Float	Lead Wire Jacket					
3	Nylon	TPE†		.65	-40°F to +250°F (-40°F to +121.1°C)	100 psi @ 70°F	2.20	165570 ⚡
	Polypropylene			.55	-40°F to +225°F (-40°C to +107.2°C)			164520 ⚡
5	Polypropylene	TPE†		.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F	1.25	131100 ⚡
	Nylon			.65	-40°F to +250°F (-40°F to +121.1°C)			140620 ⚡
7	Polypropylene	TPE†		.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F	1.50	160450 ⚡
	Nylon			.65	-40°F to +250°F (-40°F to +121.1°C)			160460 ⚡
10	Polypropylene	TPE†		.55	-40°F to +225°F (-40°C to +107.2°C)	50 psi @ 70°F	2.08	165800 ⚡
	Nylon			.65	-40°F to +250°F (-40°F to +121.1°C)			165900
12	Noryl®	TPE†		.80	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F	.70	191080 ⚡
13	Polypropylene	TPE†		.55	-40°F to +225°F (-40°C to +107.2°C)	100 psi @ 70°F	2.20	197050

* Polysulfone and Rytan® R-4 are available upon request.
† Thermoplastic Elastomer Zip Cord, 22 AWG.
Note: NSF C2 Versions available. Contact factory.

⚡ – Stock Items.

See alloy versions on next page.

Small Size - Alloys

LS-7 Series - Compact Alloy and Alloy/Plastics Side Mounts

Built for durability, our LS-7 Series switches utilize stainless steel, or zinc bodies. Ideal for any small tank or vessel destined for a rugged environment. All-stainless steel material of construction of Types 9 and 11 is generally recognized as safe with FDA for food contact regulations.

Type 6 – External Mounting



Polysulfone float. Zinc alloy body with polypropylene or nylon float. SAE Mounting.

Type 8 – External Mounting



Zinc alloy body with nylon or polypropylene float.

Type 9 – External Mounting



316 Stainless Steel body with 316 SS, nylon or polypropylene float.

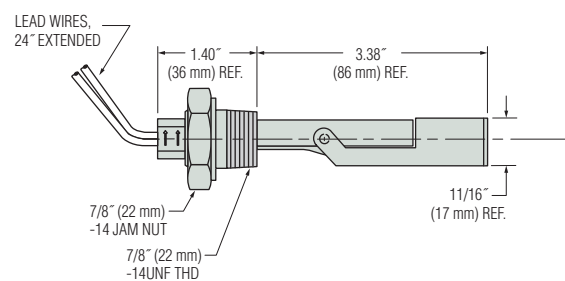
Type 11 – Internal Mounting



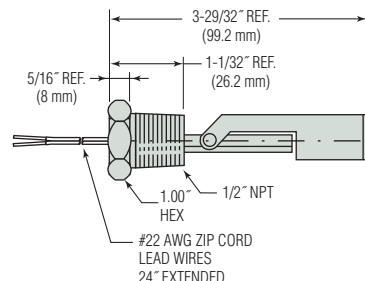
316 Stainless Steel body with 316 SS float.

Dimensions

Type 6



Type 8



Common Specifications

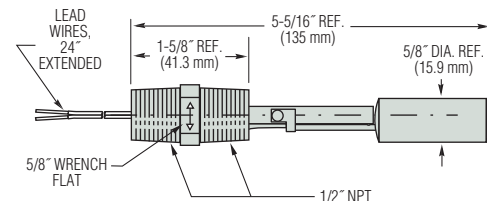
Switch Rating*: SPST, 20VA

Lead Wire Gauge: No. 22 AWG

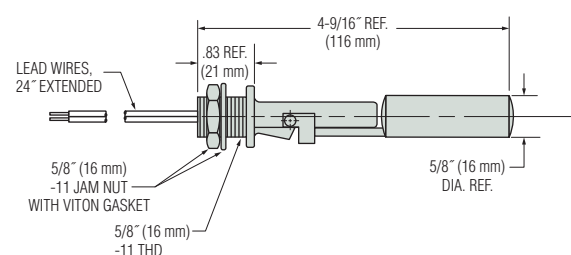
Mounting Attitude: Horizontal.

*See "Electrical Data" on Page X-5 for more information.

Type 9

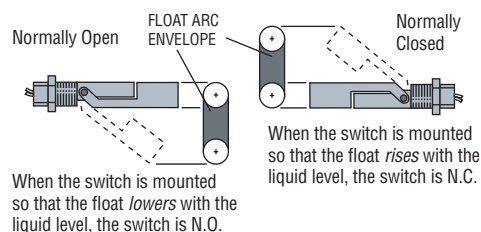


Type 11



Switch Operation

Depending on the mounting position, the float on these switches can either rise or lower with the liquid level. By rotating the switch 180°, the switch operation can be Normally Open or Normally Closed.



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

Mounting Type	Materials			Min. Liquid Sp. Gr.	Operating Temperature	Operating Pressure, Max.	Float Arc Envelope	Part Number
	Stem and Mounting	Float	Lead Wire Jacket					
6	Zinc Alloy*	Nylon	TFE [†]	.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.36	155660
		Polypropylene		.75	-40°F to +225°F (-40°C to +107°C)	150 psi @ 70°F	1.36	179870
8	Zinc Alloy*	Nylon	TFE [†]	.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.40	160950
		Polypropylene		.55	-40°F to +225°F (-40°C to +107°C)	150 psi @ 70°F	1.40	162795
9	316 Stainless Steel	316 S.S.	TFE [†]	.80	-40°F to +300°F (-40°C to +149°C)	300 psi @ 70°F	1.43	164870 ⚡
		Nylon		.65	-40°F to +250°F (-40°C to +121°C)	100 psi @ 70°F	1.40	164850
		Polypropylene		.55	-40°F to +225°F (-40°C to +107°C)	100 psi @ 70°F	1.40	164860
11	316 Stainless Steel		Teflon®	.80	-40°F to +300°F (-40°C to +149°C)	300 psi @ 70°F	1.65	179445

[†]Thermoplastic Elastomer Zip Cord.

⚡ – Stock Items.

*Zinc Alloy Material Note:

When mounted in certain cathodic metals, including stainless steel, and used in water-based liquids, galvanic corrosion may occur. Consult factory for information.