

### 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.



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



Features a low specific gravity float offering broad chemical compatibility.



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

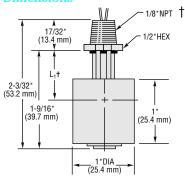


Ideal for oils and fuels.



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

#### **Dimensions**



1/8\*NPT † L<sub>1</sub>= 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) PVDF Float:

1/2" (12.7 mm)

	Alternate Mountings								
•	3/8"-16 Straight Thread	G1/8" 1/8"-28 BSP	M12x 1.75 Straight Thread						
	7.390° REF. (9.9mm) 14' 14' (2.6mm)	315*REF. (8.0mm) 14* (3.6mm)	475° REF. (12mm)						
	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 No. 22AWG Cable. PVDF unit: No.22 AWG, FEP Teflon® Jacketed, 24" - 26".

Electrical

Termination

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						
Stem and Mounting	Float	Min. Liquid Sp. Gr.	Pressure,** PSI/Bar, Max.	Operating Temperature	Mounting Type	Part Number
Polysulfone	Polysulfone	.75	50/3	-40° F to +225° F (-40° C to +107° C)	1/8" NPT	42295
	Polypropylene (Hollow)	.60	50/3	-40° F to +225° F (-40° C to +107° C)	1/8" NPT	142505 🗲
					3/8"-16	171517
				-40° F to +176° F (-40° C to +80° C)	G 1/8"-28	171518
Dolunronulono					M12x1.75	189739
Polypropylene	Polypropylene (Solid)	.90	150/10	-40° F to +150° F	1/8" NPT	116826 🗲
				(-40° C to +66° C)	3/8"-16	171514
				-40° F to +176° F (-40° C to +80° C)	M12x1.75	189787
Nylon	Buna	.45	150/10	-40° F to +250° F (OIL) (-40° C to +121° C [OIL])	1/8" NPT	162745 🗲
inglott				-40° F to +176° F (-40° C to +80° C)	M12x1.75	189786
PVDF	PVDF	.86	50/3	-40° F to +250° F (-40° C to +121° C)	1/8" NPT	173250

<sup>\*\*</sup>Maximum Pressure at 70°F (30°C)

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

## Unique Features Make These LS-3 Models Special These small switches feature unique

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

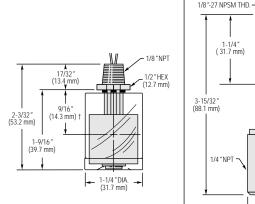


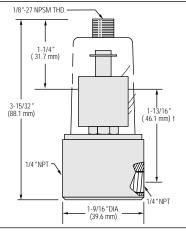
For external mounting on tanks too small to accommodate internally mounted switches. (See note below)

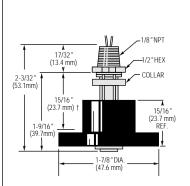
Part No. 76707 For Low Level



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 <i>*</i>	
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	Ероху	
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	

<sup>\*</sup> See "Electrical Data" on Page D-4 for more information.

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.

<sup>\*\*</sup> Switch operation is selectable, N.O. or N.C., by inverting the float on the unit stem.

<sup>\*\*\*</sup> Maximum pressure at 70°F (30°C).

<sup>†</sup>  $L_1$ = Switch actuation level, nominal (based on a specific gravity of 1.0).

 $L_1$  = Switch actuation level, normal (based of the consult factory for other available materials.

Stock Items.