

Single level switch LS-3

SINGLE POINT

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

Buna N Float



Ideal for oils and fuels

Polypropylene Float (Solid)

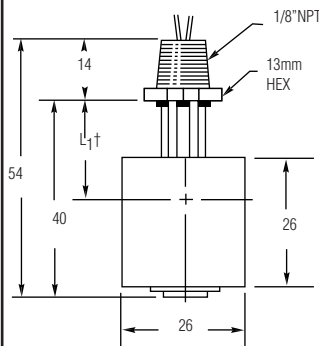


With Polypropylene stem and float, switch offers broad chemical compatibility

Polypropylene Float (Hollow)

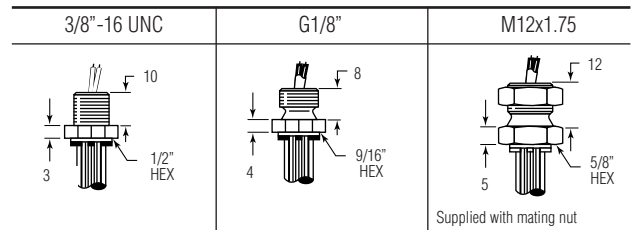


Features a low specific gravity float offering broad chemical compatibility to satisfy a wide variety of applications



L₁ † Switch actuation level, nominal (based on a liquid specific gravity of 1.0).
 Polysulfone Float: 19.0mm
 Polypropylene Float (Hollow): 20.6mm
 Polypropylene Float (Solid): 14.3mm
 Buna N Float: 20.6mm

Alternate Mountings



Specifications

	Polysulfone	Nylon/Buna N	Polypropylene	Polypropyl. (hollow)
Material stem:	Polysulfone	Nylon*	Polypropylene**	Polypropylene**
Material float:	Polysulfone	Buna N	Polypropylene (solid)	Polypropylene (hollow)
Operating pressure:	3 bar	10 bar	10 bar	3 bar
Temperature: cable	-40°C...+80°C	-20°C...+80°C	-40°C...+65°C	-40°C...+80°C
leads	-40°C...+107°C	-20°C...+121°C	-40°C...+65°C	-40°C...+107°C
Depth of immersion at a density of 1:	~15 mm	~9 mm	~19 mm	~13 mm
Min. specific gravity of the liquid:	0.75	0.45 (0.85 19mm)	0.90 (0.85 19mm)	0.60
Type of reed switch:	SPST 50 VA cable SPST 20 VA leads	SPST 50 VA (cable) SPST 20 VA (leads)	SPST 50 VA (cable) SPST 20 VA (leads)	SPST 50 VA (cable) SPST 20 VA (leads)
Electrical connection: (Length: appr. 0.6 m)	Cable: 0.34 mm ² PVC Fly lead: AWG 22 PVC	Cable: 0.34 mm ² PVC Fly lead: AWG 22 PVC	Cable: 0.34 mm ² PVC Fly lead: AWG 22 PVC	Cable: 0.34 mm ² PVC Fly lead: AWG 22 PVC
Mounting thread:	1/8" NPT	1/8" NPT, G1/8", M12x1.75, 3/8x16		
Protection rating :	IP64	IP64	IP64	IP64
Weight: approx	20 g	20 g	20 g	20 g

How To Order

	Mounting	Polysulfone	Nylon/Buna N 25mm 19mm	Polypropylene 25mm 19mm	Polypropylene
Cable	G1/8	010 - 2919(1/8 NPT)	171512 177820	171515 -	171518
	M12 + NUT	-	189786 -	189787 -	189739
Leads	1/8 NPT	42295	162745 177818	116826 201540	142505
	3/8 UNC	-	171511 177819	171514 -	171517

* Not suitable for long term use in water. ** Not suitable for Hydrocarbons Standard Products in **bold**

LS-3 Specials

Unique features make these LS-3 Models special. These small switches feature unique configurations for special applications.



LS-3 Slosh Shield

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



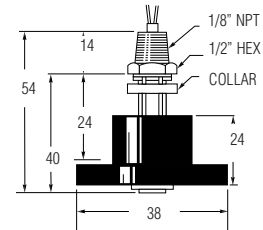
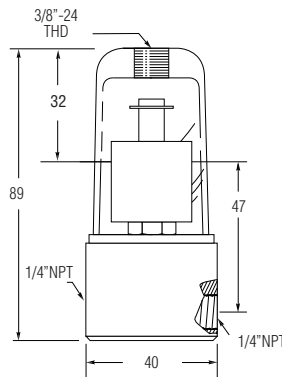
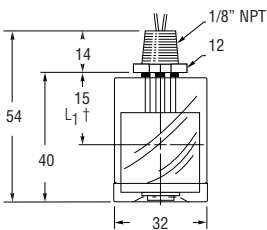
LS-3 Bottle Level

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



LS-3 Low Level

For detecting levels as low as 16mm from tank bottom. Use in water, gasoline, some oils and chemicals.



Specifications

	LS-3 Slosh Shield	LS-3 Bottle Level	LS-3 Low Level
Materials			
Stem and mounting	Polypropylene ††	Polysulfone	Polysulfone
Float	Polypropylene	Polysulfone	Buna N
Other wetted	—	Brass, Aluminium,	Epoxy
			Polycarbonate, Viton A
Min. liquid Sp.Gr.	.90	.75	—
Operating temperature	-40°C to +65.6°C	-40°C to +48.9°C	-40°C to +82.2°C
Pressure, bar, Max. ***	10	3	3
Switch, SPST	20 VA, N.C./N.O. Dry**	20 VA, N.C. Dry	20 VA, N.C. Dry
Material compliance			
Electrical termination	No. 22 AWG, 0.6m L., PVC Lead Wires	No. 22 AWG, 1.8m L., Polymeric Lead Wires	No. 22 AWG, 1.8m L., PVC Lead Wires
Mounting	1/8" NPT	3/8 UNF/1/4NPT	1/8" NPT
Protection rating	IP64	IP64	IP64
Weight approx.	80g	170g	60g

** 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.

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

How to Order

LS-3 Slosh Shield	LS-3 Bottle Level	LS-3 Low Level
142545	46999	76707