

# Large Size – Engineered Plastics


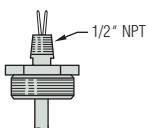
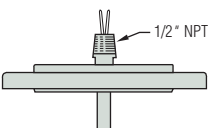
## LS-800PVC Series – Our Most Economical Large Size Unit

- ▶ NSF Approved All-PVC Wetted Parts Available
- ▶ 1 to 7 Actuation Levels
- ▶ Lengths to 60 inches

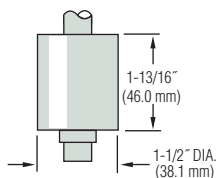
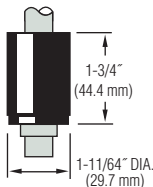
Inexpensive, all-PVC LS-800PVC Series switches bring reliable level sensing to corrosive liquids. These durable, yet economical, switches use the same high-quality, dependable reed switches found in GEMS' most expensive models. NSF-approved wetted parts make the LS-800PVC suitable for potable water applications.



### 1. Mounting Types

	Type 1 1/2" NPT	Type 3 2" NPT	Type 4 3", 150# Flange
			
Mounting and All Wetted Parts	PVC		
Operating Temperatures	0°F to 125°F (-17.8°C to 51.7°C)		
Pressure, PSI, Max.	15 @ 70°F (21°C)		
Max. Length (Lo)	60 inches (152.4cm)		
Mounting Position	Vertical ±30° Inclination		

### 2. Float Type

Float Material	PVC*	Buna N
Float Dimensions		
Float Part Number	16306	142251
Min. Liquid Specific Gravity	0.85	0.80

\*Select for potable water applications.

## LS-800PVC Series – Continued

### 3. Number of Actuation Levels and Electrical Specifications

Typically, one float is required for each point at which you need a switch action to occur. The number of actuation levels available depends on type of wiring selected. See below.

**Group I Wiring:** 1 to 7 Actuation Levels

**Group II Wiring:** 1 to 4 Actuation Levels

**Group III Wiring:** 1 to 3 Actuation Levels

**Group IV Wiring:** 1 to 2 Actuation Levels

**Switch (N.O. or N.C.):**

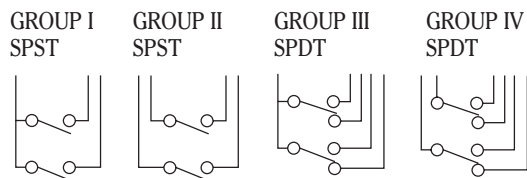
**SPST:** 20 VA or 100 VA

**SPDT:** 20 VA

**Lead Wires:** #22 AWG, 24" L., PVC

Typical Wiring Diagrams

For clarity, only two actuation levels are shown in each group diagram.

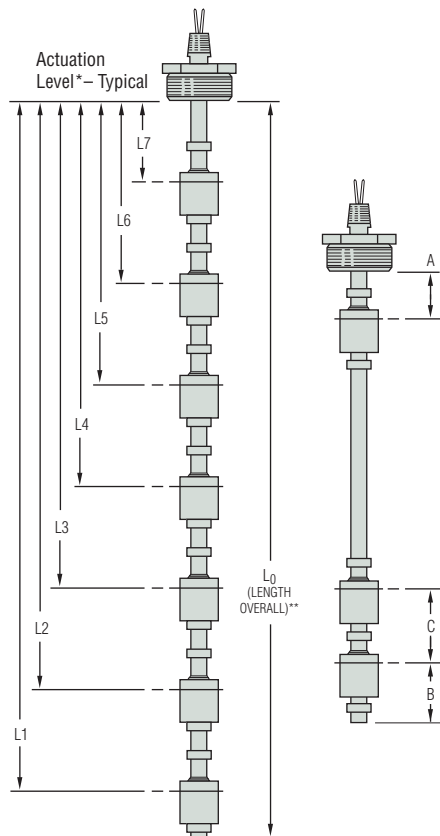


Wiring Color Code

SPST Switches				SPDT Switches 20 VA				
Wiring	Group I	Group II		Group III		Group IV		
Com. Wire	Black	None		Black		None		
	NO/NC	SW. Com.	NO/NC	NO	NC	SW. Com.	NO	NC
L1	Red	Red	Red	Red	Wh/Red	Red	Wh/Red	Wh/Blk/Red
L2	Yellow	Yellow	Yellow	Yellow	Wh/Yel	Yellow	Wh/Yel	Wh/Blk/Yel
L3	Blue	Blue	Blue	Blue	Wh/Blue			
L4	Brown	Brown	Brown					
L5	Orange							
L6	Gray							
L7	White							

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

### 4. Actuation Level Dimensions



Switch actuation levels are determined following the guidelines below.

A = 1-1/2" (38.1 mm) Minimum distance to highest actuation level.

B = 2" (50.8 mm) Minimum distance from end of unit to lowest actuation level.

C = 3" (76.2 mm) Minimum distance between actuation levels.

Notes:

1. Actuation levels are calibrated on descending fluid level, with water as the calibrating fluid, unless otherwise specified.
2. A and B dimensions based on a top mounted unit.
3. Float stops are permanently cemented in place.
4. Tolerance on actuation levels is  $\pm 1/8"$  (3.2 mm).
5. Dimensions based on a liquid specific gravity 1.0.

\* Actuation level distances and  $L_0$  (overall unit length) are measured from inner surfaces of mounting plug or flange.

\*\* Length Overall ( $L_0$ ) =  $L_1$  + Dimension B. See Mounting Types for Maximum Length values.