

# Large Size – Engineered Plastics

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

- ▶ 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' LS-800 model.



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LEVEL SWITCHES – MULTI POINT

### 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	<b>16306</b>	<b>142251</b>
Min. Liquid Specific Gravity	0.85	0.80

## 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.):**

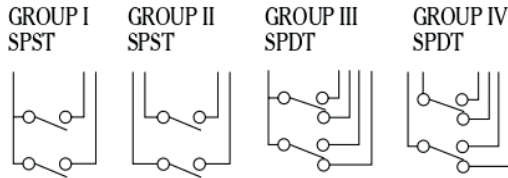
SPST: 20 VA or 100 VA

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.

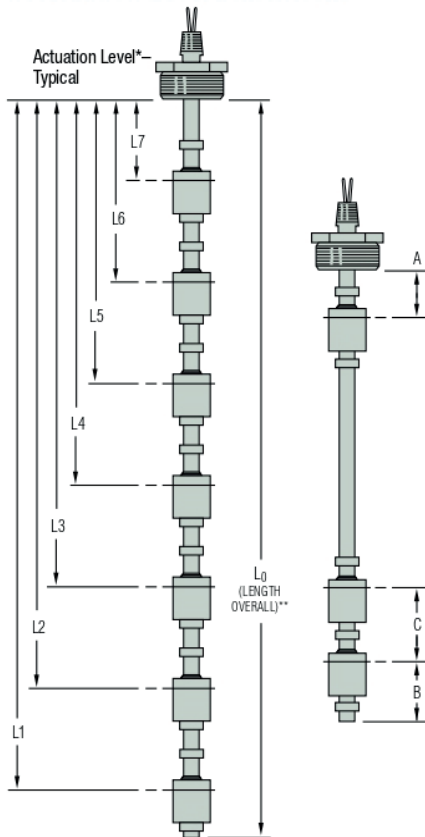


Wiring Color Code

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