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.



1. Mounting Types

Type 1	Type 3	Type 4		
1/2" NPT	2" NPT	3", 150# Flange		
	1/2" NPT	1/2* NPT		

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	sition Vertical ±30° Inclination	

2. Float Type

Float Material	PVC	Buna N		
Float Dimensions	1-13/16 ⁻ (46.0 mm) 	1-3/4" (44.4 mm) 1-11/64" DIA. (29.7 mm)		
Float Part Number	16306	142251		
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.

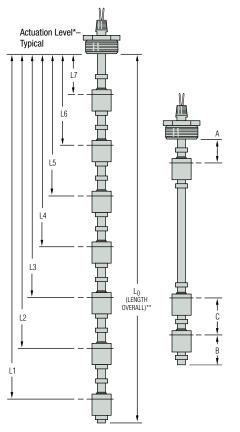
GROUP II GROUP III GROUP IV
SPST SPST SPDT SPDT

Wiring Color Code

SPST Switches			SPDT Switches 20 VA							
Wiring	Group I	Gro	up II	Gro	roup III Group IV			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



- Actuation level distances and L_o (overall unit length) are measured from inner surfaces of mounting plug or flange.
- ** Length Overall (\mathbf{L}_0) = $\dot{\mathbf{L}}_1$ + Dimension B. See Mounting Types for Maximum Length values.

Switch actuation levels are determined following the guidelines below.

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

 $B=\,2^{\prime\prime}\,(50.8$ mm) Minimum distance from end of unit to lowest actuation level.

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

Notes:

- 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).
- Dimensions based on a liquid specific gravity 1.0.