Large Size – Engineered Plastics

LSP-800 Series – Features Inert Materials for Corrosive Liquids

- All-Plastic Wetted Parts - PVC, Polypropylene or PVDF
- 1 to 6 Actuation Levels
- Lengths to 70 inches

Specifically designed for corrosive liquids and vapors. Three standard model types in a choice of materials offer broad chemical compatibility.

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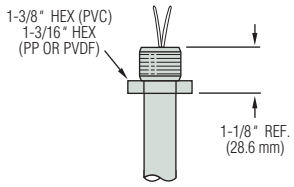
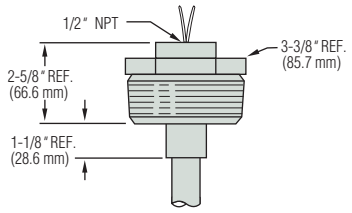
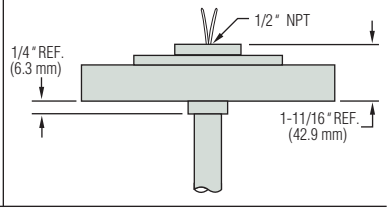
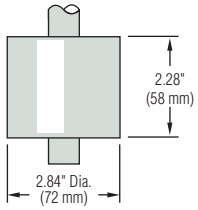
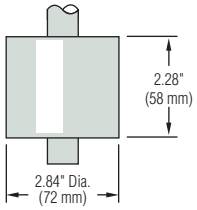
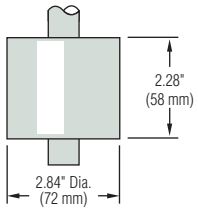
1. Mounting Types

Each mounting type can be configured with stem lengths (L_0) and materials indicated in the table below. Floats and float stop collars are of same material specified for mounting.

	Type A 1" NPT	Type B 3" NPT	Type C 3", 150# Flange
			
Stem, Mounting, Float and Collar Material	PVC, Polypropylene or PVDF		
Max. Length (L_0)	70 inches (177.8 cm)		
Mounting Position	Vertical ±30° Inclination		

2. Float Types

Float Material	PVC	Polypropylene	PVDF
Float Dimensions			
Operating Temperature and Pressure	See Ratings Chart at top of following page		
Min. Liquid Specific Gravity	0.60	0.40	0.75

Note: Floats are always supplied in same material as specified for mounting.

LSP-800 Series – Continued

Temperature and Pressure Ratings Chart

Maximum Pressure vs. Temperature

	Operating Temperature							
LSP-800 Material	0°F (-17.7°C)	70°F (21.1°C)	100°F (37.7°C)	125°F (51.7°C)	140°F (60.0°C)	170°F (76.6°C)	200°F (93.3°C)	210°F (98.8°C)
PVC	50 PSI (3.4 bar)	50 PSI (3.4 bar)	35 PSI (2.4 bar)	20 PSI (1.4 bar)	10 PSI (0.68 bar)	X	X	X
Polypropylene	50 PSI (3.4 bar)	50 PSI (3.4 bar)	40 PSI (2.7 bar)	35 PSI (2.4 bar)	30 PSI (2.0 bar)	25 PSI (1.7 bar)	X	X
PVDF	50 PSI (3.4 bar)	50 PSI (3.4 bar)	45 PSI (3.1 bar)	40 PSI (2.7 bar)	35 PSI (2.4 bar)	30 PSI (2.0 bar)	25 PSI (1.7 bar)	25 PSI (1.7 bar)

3. Electrical Specifications

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

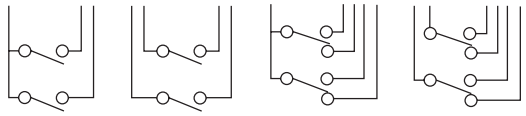
SPST: 20 VA or 100 VA

SPDT: 20 VA

Lead Wires: #22 AWG, 24˝ L., Polymeric

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

GROUP I SPST | GROUP II SPST | GROUP III SPDT | GROUP IV SPDT

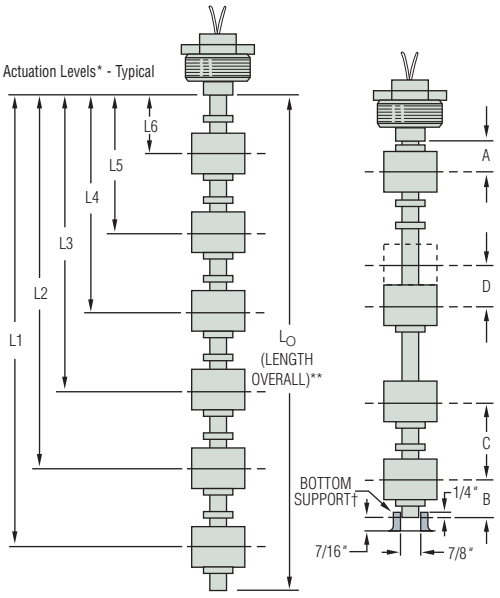


Wiring Color Code

	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	Blue	Wh/Blu	Wh/Blk/Blu
L4	Brown	Brown	Brown	Brown	Wh/Brn	Brown	Wh/Brn	Wh/Blk/Brn
L5	Orange	Orange	Orange	Orange	Wh/Orn	Orange	Wh/Orn	Wh/Blk/Orn
L6	Gray	Gray	Gray	Gray	Wh/Gra	Gray	Wh/Gra	Wh/Blk/Gra

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

4. Actuation Level Dimensions



* 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.

† Bottom support recommended for units longer than 36 inches, or in applications having turbulent conditions.

Switch actuation levels are determined following the guidelines below.

A = 2-1/16˝ (52.4 mm) ±1/16˝ minimum distance to centerline of float (ref. mounting).

B = 2-11/16˝ (68.3 mm) ±1/16˝ minimum distance to centerline of float (ref. stem end).

C = 3-1/2˝ (88.9 mm) minimum distance between actuation levels.

D = Distance between actuation levels using one float.

Minimum = 1/4˝ (6.3 mm)

Maximum = 3-1/2˝ (88.9 mm)

Notes:
1. The centerline of the float is used as a standard reference for actuating the switches.
2. All levels are set on descending float travel with overtravel = 1/4˝ (6.3mm) ±1/8˝ (3.2mm).
   Overtravel on Ascending = 1/8˝ (3.2mm) min.
3. Tolerance on all actuation levels is ±1/8˝ (3.2 mm) Ref.