

Small Size – Engineered Plastics

LS-300TFE Series – All-PTFE Wetted Parts for Ultra-Pure Fluids

- ▶ Low Particle Generation-One piece Molded Design
- ▶ Corrosion Resistant
- ▶ 1 to 4 Actuation Levels in a Single Unit
- ▶ Lengths to 24 Inches

Typical Applications

- Semiconductor Process Equipment
- Pure Chemical Delivery System
- Wafer Cleaning and Etching Systems
- Cabinet Leak Sensing

1. Mounting Types

Each mounting type can be configured with stem lengths (L_0) and float materials indicated in this bulletin.

Type 11, No Mounting	Type 22, 1" NPT	Type 24, 1/4" NPT	Type 25, 3/8" NPT

2. Electrical Connections

Type 1 Leadwire	Type 2 Cable	Type 3* Liquid-Tight Cable
Extended Leads	#22 AWG Teflon• Wire or #24 AWG PVC Jacketed Cable	

* Available on Mounting Type 22 only.

3. Float Types

Float Material	PTFE	PVDF
Float Dimensions		
Operating Temperature	+32°F to +212°F (0°C to 100°C)	-40°F to +250°F (-40°C to 121°C)
Pressure, PSIG (bar), Max. at Ambient Temperature	25 (1.7)	50 (3.4)
Min. Liquid Specific Gravity	0.90	0.86

Note: A single float type is selected for use at all actuation points.

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4. 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 the Group Type Wiring selected; see below.

Group I Wiring: 1 to 4 Actuation Levels.

Group II Wiring: 1 or 2 Actuation Levels.

Switch (SPST, N.O. or N.C.): 10/20/50/100VA.

Notes:

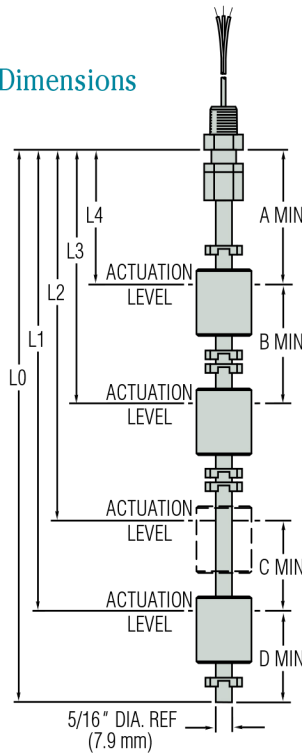
1. Other wiring options available. Consult factory.
2. Consult Factory for load information.

Electrical Connection	Group 1	Group 2
Lead Wire (*)		
Cable (*)		

* Pin correlation of plug connectors shown in parenthesis.

5. Actuation Level Dimensions

- * Actuation level distances and L_0 (overall unit length) are measured from inner surface of mounting. See mounting types on opposite page for L_0 reference point.
- ** Length Overall (L_0) = L_1 + Dimension D. $L_{0max.} = 24"$.



Switch actuation levels are determined following the guidelines below.

A = Minimum distance from highest actuation level to bottom of mounting.

B = Minimum distance between actuation levels.

C = Minimum distance between two actuation levels with one float (Note: One float for two levels can be used only when low level is N.C. dry and high level is N.O. dry).

D = Minimum distance from end of unit to lowest level.

Float Material	Dimensions			
	A	B	C	D
PTFE	$\frac{1-3/4}{44.5^*}$	$\frac{2}{50.8}$	$\frac{1/8}{3.2}$	$\frac{1-5/8}{41.3}$
PVDF	$\frac{1-3/4}{44.5^*}$	$\frac{2}{50.8}$	$\frac{1/8}{3.2}$	$\frac{1-7/16}{36.5}$

inch
mm

*Mounting Type 22 (1" NPT) requires a minimum "A" dim. of 2-1/16" (52.4mm)



Photocopy This Form

Use one form for each product type you are selecting.

This form may also be completed online at gemssensors.com for RFQ.

This is a Request for a Quote
 Order P.O.# _____
 Quantity Needed _____
 Date Required ____/____/____
 Shipping Method: _____
 Partial Accepted: Yes
 No

Name _____
 Company _____
 Street _____
 City _____ State ____ Zip _____
 Phone (____) _____
 Fax (____) _____

LS-300TFE Custom Length Level Switches

Application Environmental Conditions

This information is essential to the accurate and proper operation of your GEMS configurable sensors. Please complete fully and accurately.

- 1. **Liquid Media:** _____
- 2. **Pressure:** Minimum _____ psig Maximum _____
- 3. **Temperature:** Minimum _____ °F Maximum _____
- 4. **Specific Gravity:** Minimum _____ Maximum _____
- 5. **Viscosity:** _____ SSU
- 6. **Tank Material:** _____
- Tank Depth:** _____
- 7. **Unit is Mounted In:** Tank Top Tank Bottom

Product Parameters

1. Mounting Type:

- Type 11 – No Mounting
- Type 22 – 1" NPT
- Type 24 – 1/4" NPT
- Type 25 – 3/8" NPT

2. Electrical Connections:

- Type 1, Leadwire
- Type 2, Cable
- Type 3, Liquid-Tight Cable (Type 22 Mounting Only)

3. Float Types:

- PTFE
- PVDF

4. Electrical Specifications:

- A. Group I Wiring Group II Wiring
- B. 10 VA 20 VA
- 50 VA 100 VA

5. Actuation Level Dimensions:

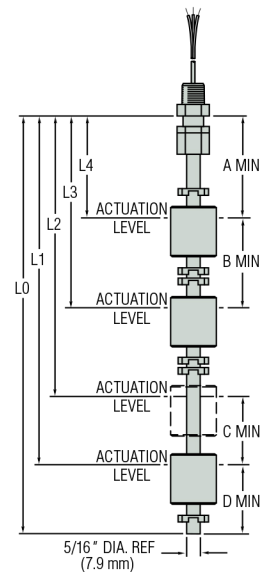
Actuation Level	Distance to Actuation Level – Inches*	SPST Switch Operation** (Check Type)	
		N.O.	N.C.
L4			
L3			
L2			
L1***			

* Measured from inner surface of mounting.
 ** Switch position is "normal" with unit dry (tank empty).
 *** L1 is the distance to the lowest actuation level with mounting "up," and is the distance to the highest actuation level with mounting "down."

B. Length Overall _____ inches

Lead Wire Length:

- 24"
- Other: _____ inches



Please contact GEMS Sensors Inc. for any configuration or special requirements not covered on this form. **800-378-1600**

Quote: \$ _____ Date Quoted: ____/____/____

Additional minimum charges may apply on special orders.

