

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 40 Inches

Typical Applications

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



Ordering is Easy! See Page B-9.
Easy online ordering too!

1. Mounting Types

Each mounting type can be configured with stem lengths ($L_{\rm o}$) 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
"LO"	3/8" (9.4 mm) 1" NPT (25.4 mm)	1/4" NPT 79/32" 1/4" NPT 77.11 mm) 11/16" 1.0' (17.5 mm) HEX	35/64 (13.72 mm) 3/8 * NPT (7.11 mm) 11/16 (17.5 mm) HEX

2. Electrical Connections

Type 1 Leadwire	Type 2 Cable	Type 3* Liquid-Tight Cable
		NYLON 1.12° (28 mm) 1.14 MAX.
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	1-1/4* (318 mm) 1-1-1/8*(28.4 mm)	(25.4 mm) (25.4 mm)	
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.

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.

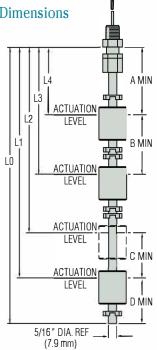
Electrical Connection	Group 1	Group 2
Lead Wire (*)	A POLICION (3) RELUCK (1) RELUCK (1) RELUCK (1) RELUCK (1) RELUCK (1)	FED (1) The state of the state
Cable (*)		BLACK (1) 52 GREEW (3) 64 / 0 WHITE (4) REO (2)

^{*}Pin correlation of plug connectors shown in parenthesis.

5. Actuation Level Dimensions

- Actuation level distances and L₀ (overall unit length) are measured from inner surface of mounting. See mounting types on opposite page for L_n reference point.
- for L₀ reference point.

 ** Length Overall (L₀) = L₁ +
 Dimension D.
 L0max. = 40".



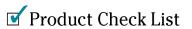
Switch actuation levels are determined following the guidelines below.

- 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	Dimensions			
Material	A	В	C	D
PTFE	1-3/4	<u>2</u>	<u>1/8</u>	1 <u>-5/8</u>
	44.5*	50.8	3.2	41.3
PVDF	1-3/4	<u>2</u>	<u>1/8</u>	<u>1-7/16</u>
	44.5*	50.8	3.2	36.5

inch

*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	Name
□ Order P.O.#	Company
Quantity Needed	Street
Date Required//	City State Zip
Shipping Method:	Phone ()
Partials Accepted: ☐ Yes ☐ No	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	٥F	Maximum	

- 4. Specific Gravity: Minimum _____ Maximum ____
- 5. Viscosity: 6. Tank Material: ____
- 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:

Tank Depth:

A.	Actuation Level	 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

B. Length Overall	inche

- 1	ead	Wire	l enath:

⊐ າ/″	□ Othor

r.	Inches
1.	inches

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

Date Quoted:____/___/___

Additional minimum charges may apply on special orders.



A MIN

ACTUATION LEVEL

ACTUATION

5/16 " DIA. REF (7.9 mm)