

Small Size – Engineered Plastics

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

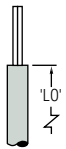
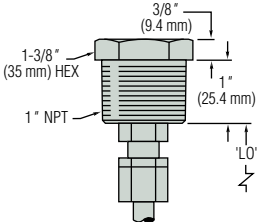
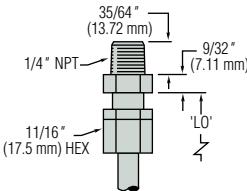
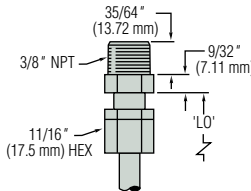
- ▶ Low Particle Generation-One piece Molded Design
- ▶ Corrosion Resistant
- ▶ 1 to 4 Actuation Levels in a Single Unit
- ▶ Lengths to 24 Inches

Typical Applications

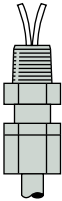
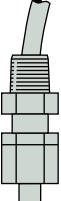
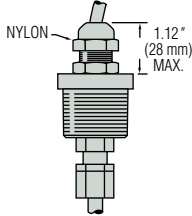
- Semiconductor Process Equipment
- Pure Chemical Delivery System
- Wafer Cleaning and Etching Systems
- Cabinet Leak Sensing

1. Mounting Types

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

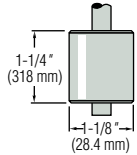
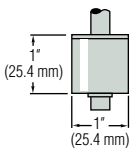
| Type 11, No Mounting | Type 22, 1" NPT | Type 24, 1/4" NPT | Type 25, 3/8" NPT |
|---|--|---|--|
|  |  |  |  |

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:

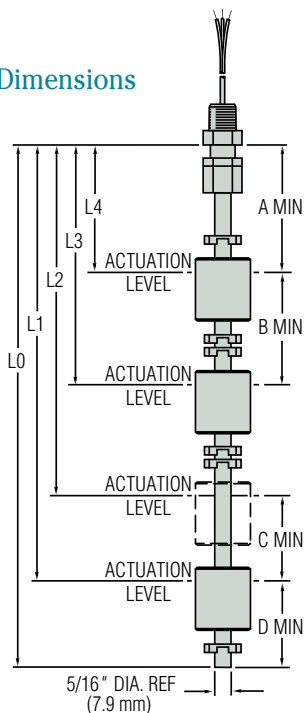
1. Other wiring options available. Consult factory.
2. Consult Factory for load information.

| 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 | $\frac{1-3/4}{44.5^*}$ | $\frac{2}{50.8}$ | $\frac{1/8}{3.2}$ | $\frac{1-7/16}{36.5}$ |

$\frac{\text{inch}}{\text{mm}}$

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

LEVEL SWITCHES - MULTI POINT

| | | |
|--|--|---|
| <p align="center">FAX IT! 860-747-4244</p> <p>Photocopy This Form</p> <p>Use one form for each product type you are selecting.</p> <p>This form may also be completed online at gemssensors.com for RFQ.</p> | This is a <input type="checkbox"/> Request for a Quote <input type="checkbox"/> Order P.O.# _____ | Name _____ Company _____ Street _____ City _____ State _____ Zip _____ Phone (____) _____ Fax (____) _____ |
| | Quantity Needed _____ Date Required ____/____/____ Shipping Method: _____ Partial Accepted: <input type="checkbox"/> Yes <input type="checkbox"/> No | |

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: _____ | 5. Viscosity: _____ SSU |
| 2. Pressure: Minimum _____ psig Maximum _____ | 6. Tank Material: _____ |
| 3. Temperature: Minimum _____ °F Maximum _____ | Tank Depth: _____ |
| 4. Specific Gravity: Minimum _____ Maximum _____ | 7. Unit is Mounted In: <input type="checkbox"/> Tank Top <input type="checkbox"/> 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. <input type="checkbox"/> Group I Wiring | <input type="checkbox"/> Group II Wiring |
| B. <input type="checkbox"/> 10 VA | <input type="checkbox"/> 20 VA |
| <input type="checkbox"/> 50 VA | <input type="checkbox"/> 100 VA |

5. Actuation Level Dimensions:

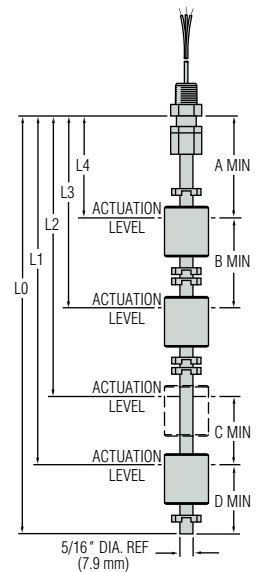
| Actuation Level | Distance to Actuation Level – Inches* | SPST Switch Operation** (Check Type) | |
|-----------------|---------------------------------------|--------------------------------------|------|
| | | N.O. | N.C. |
| L4 | | | |
| L3 | | | |
| L2 | | | |
| L1*** | | | |

* 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.

