



Switching, Sensing and Control Solutions

from GENTECH INTERNATIONAL LTD

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LS SERIES HORIZONTAL LIQUID LEVEL SENSORS



DESIGN FEATURES

- High or low level sensing
- Normally open or normally closed operation by rotating through 180°
- In three material options: Nylon 6.6, glass filled polypropylene or PPS
- Externally fitted via compression grommet or 1/2" NPT
- Internal fitted M12, M16 or 1/4" NPT
- LS4 and LS5 with UK Water Research Council approval for hot and cold water
- Underwriters Laboratories listed models File No. E98428
- Sealing washers and materials suitable for a wide range of chemicals
- Reed switch reliability
- Temperature range up to 130°C
- Interface option

Operational Characteristics (1)

| Switch Option | | 01 | 03 | 04 | 06 | 07 | 08 |
|--|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Contact Configuration | | SPST | SPST | SPDT | SPST | SPST | SPST |
| Contact ratings | | Reed Switch | Reed Switch | Reed Switch | Reed Switch | Triac(2) | Triac |
| Maximum (resistive loads) | Volts DC | 100 | 100 | 100 | 100 | AC only | AC only |
| | Volts AC | 120 | 250 | 70 | 120 | 250 | 250 |
| | Amps | 1.0 | 1.0 | 0.5 | 3.0 | 3.0 | 1.0 |
| | Watts | 15 | 15 | 3 | 100 | | |
| Minimum withstand across open contacts | Volts | 300 | 800 | 200 | 400 | 600 | 400 |
| | Initial Contact resistance | Ohms | 0.25 | 0.25 | 0.25 | 0.75 | |

1. The above contact ratings are for resistive loads. For inductive, capacitive and tungsten filament lamp loads refer to the circuit protection notebook.

2. Available on 1/2" NPT only.

Environmental Specifications

| Housing and Float Material (a) | Operating Temperature | Minimum Sg |
|--|-----------------------|------------|
| LS3-Glass Filled Nylon 6.6 (b) | -30° to +130°C | 0.85 |
| LS4-WRC approved Glass Filled Polypropylene (c) | -30° to +110°C | 0.65 |
| LS5-WRC approved Glass Reinforced Polyphenylene | -30° to +130°C | 0.70 |
| LS7-Die Cast body Glass Filled Nylon 6.6 Float (b) | -30° to +130°C | 0.85 |
| LS8-Glass Filled Polypropylene (c) | -30° to +110°C | |

Sealing Washer/Compression Grommet

| | |
|----------|----------------|
| Silicone | -54° to +150°C |
| Nitrile | -30° to +110°C |
| EPDM | -54° to +150°C |

a. Detailed chemical resistance information for specific liquids is available on request.

b. Higher temperature models available.

c. For boiling water applications the maximum operating temperature limits are:- Continuous boiling water 80°C. Non continuous boiling water 100°C.

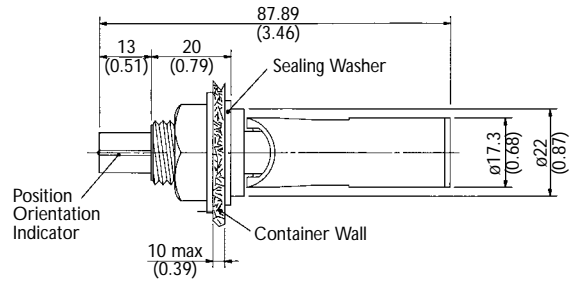
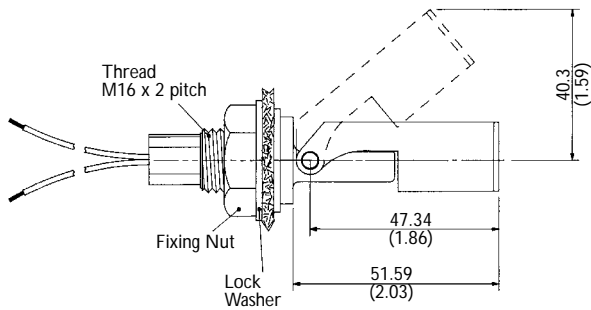
Mechanical Specification

| Mounting Position | Operate Window | Release Angle | Shock | Vibration |
|----------------------|--------------------------------|---------------------------------|--|------------------------------------|
| ±30° from horizontal | Minimum 5° from mounting angle | Maximum 40° from mounting angle | 50g for 11ms duration (reed switch only) | 35g up to 500Hz (reed switch only) |

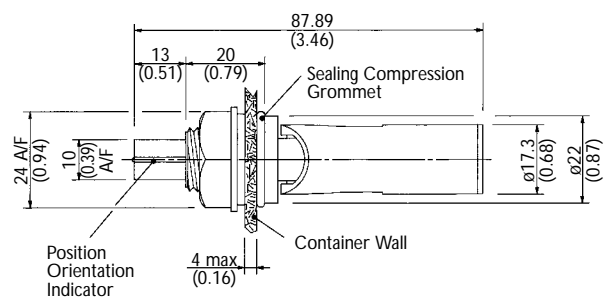
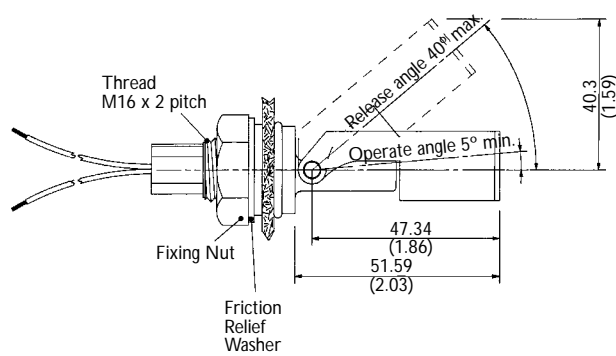
Electrical Connections

Switch options **01, 03 and 06** with Standard Cable are fitted with 2 x 18 AWG, 32/0.2mm stranded, with PVC insulation approved to UL/CAS/BB6361. **07 and 08** with Standard Cable are fitted with 2 x 22 AWG, 16/0.2mm stranded, with PVC insulation approved to UL/CAS/BS6361. **01, 03, and 06** with Double Insulated Cable are fitted with 16/0.2mm stranded, with PVC insulation approved to UL/CAS/BS6500. 04 with Standard Cable is fitted with 3 x 24 AWG, 7/0.2mm stranded with PVC insulation. 04 with Double Insulated Cable is fitted with 7/0.2mm stranded with PVC insulation.

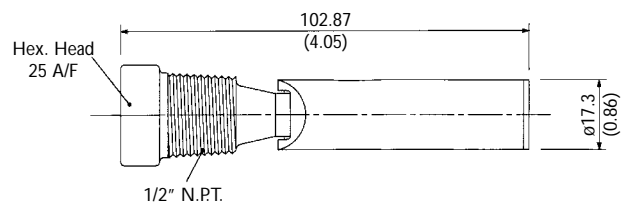
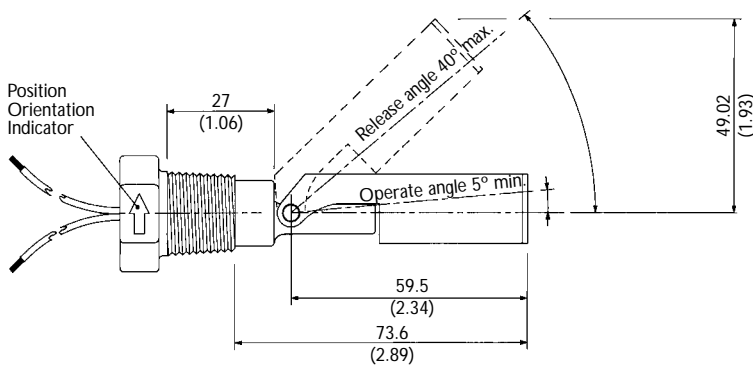
Internal Fitting



External Fitting



Mounting Bush Fitting



Installation

Please contact Sales at Gentech for installation instructions (Ref. FI-0700-R1)

Applications

Please contact Sales at Gentech for applications relating to this product group.



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