

Application



The general purpose level switch package provides reliable, high or low liquid level detection with one relay or reed switch output and a compact junction box for integral wiring termination. Available in three level sensor technologies, select the sensor type based upon your application media. This polypropylene or PVDF liquid level switch package is broadly applied in bulk storage, sump and day tank level applications as a high level alarm or low level alarm.



Features

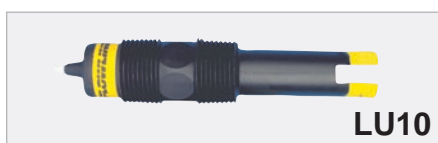
- ✓ Polypropylene or PVDF single-point level switch package for corrosive liquids
- ✓ 60VA relay or 15VA dry contact selectable NO or NC via wiring
- ✓ Offered in 3 sensing technologies for broad application coverage: ultrasonic, vibration & buoyancy
- ✓ Polypropylene enclosure rated NEMA 4X with swivel base and terminal strip

Key Benefits

- ✓ Mount on the top wall of tank
- ✓ Select length for either high or low switch points
- ✓ Switch output interfaces directly with PLC/ SCADA
- ✓ Ideal for high alarm/low alarm indication/control
- ✓ Can be used as low level pump protection or high level overflow protection

Compatible Products

Switch-Tek™ Ultrasonic Level Switch



LU10

Broadly applied in chemicals and light weight oils

Switch-Tek™ Vibration Level Switch



LZ12

Applied in wastewater with light coating or scaling

Switch-Tek™ Vertical Buoyancy Level Switch



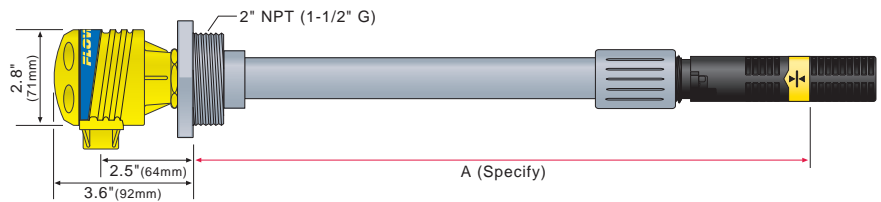
LV10

Applied in clean water and non-coating chemicals

Specifications

Length: 6" to 10' (15cm to 3m)
 Accuracy: ± 1mm in water
 Repeatability: ± 0.5mm in water
 Orientation: ± 20° vertical
 Switch points: 1 (factory set)
 Supply voltage: AV16: N/A
 AU18: 12-36 VDC
 AZ18: 12-30 VDC
 Consumption: AV16: N/A
 AU18 / AZ18: 25 mA max.
 Contact type: AV16: (1) SPDT reed
 AU18 / AZ18: (1) SPST relay
 Contact rating: AV16: 15 VA, 0.25A max.
 AU18 / AZ18: 60 VA, 1A max.
 Contact output: Selectable NO / NC
 Process temp.: F: -40° to 176°
 C: -40° to 80°
 Ambient temp.: F: -40° to 140°
 C: -40° to 60°
 Installed height: 3.6" (9.1cm) above tank process mount
 Pressure: AV16: 25 psi (1.7 bar)
 AU18 / AZ18: 150 psi (10 bar)
 Enclosure rating: NEMA 4X (IP65)
 Enclosure mat.: PP, UL94VO
 Terminal strip: 6-pole, socket
 Conduit entrance: 1/2" NPT
 Wetted material: AV16-224X: PP
 AU18-224X: PP
 AU18-524X: PVDF
 AZ18-424X: PP-Ryton®
 Process mount: -X243: 2" NPT
 -X247: 1 1/2" G
 Classification: General purpose
 Compliance: CE

Dimensions



Fittings

For optimum performance, install the level sensor using the below recommended or direct equivalent fittings.

| | P/N | Description |
|--|-----------|--------------------------------|
| | LM52-2400 | 3" NPT x 2" NPT (Sch. 40) |
| | LM52-2800 | 3" NPT x 2" NPT (Sch. 80) |
| | LM52-3800 | 4" NPT x 2" NPT (Sch. 80) |
| | LM52-2410 | 3" Socket x 2" NPT (Sch. 40) |
| | LM52-3410 | 4" Socket x 2" NPT (Sch. 40) |
| | LM52-2810 | 3" Socket x 2" NPT (Sch. 80) |
| | LM52-3810 | 4" Socket x 2" NPT (Sch. 80) |
| | LM52-2890 | 2" NPT Bulkhead Fitting, PVC |
| | LM52-2850 | 2" NPT Flange - 150# (Sch. 80) |
| | LM50-1001 | 2" NPT Bracket, Polypropylene |

Ordering

A 1 - 24 -

Sensor technology (1)

Z Vibration
 U Ultrasonic
 V Buoyancy

Contacts (2)

6 SPDT reed
 8 SPST relay

Wetted material (3)

4 PP
 5 PVDF

Process mount

3 2" NPT (US)
 7 1 1/2" G (Metric)

Dimensions (4) (5)

A Specify (PP)
 (PVDF)

Notes

- Select the best level sensor technology based upon your application.
- Available only in the following configurations:
 Vibration = AZ18
 Ultrasonic = AU18
 Buoyancy = AV16
- PVDF is available in ultrasonic and buoyancy configurations.
- Specify the A-dimension at the end of the part number (ie: AV16-4243-17"). The dimension may be specified in 1/2" (1.3cm) increments from 6" to 10' (15cm to 3m).
- To calculate the length adder, round up the A-dimension to the next foot (30cm), multiply it by the selected material, and add that sum to the price. For PP, add \$10 per foot (30cm). For PVDF, add \$40 per foot (30cm).