

# Smart-Trak™ AXXX

with Compact Junction Box



## Application

The intrinsically safe or general purpose level switch package provides liquid level detection up to 10' (3m) with 1-4 adjustable level switch points and a compact junction box for wiring termination. Offered in three sensor technologies, choose the type based upon your application media. This PP level switch package is selected for day tank, skid or machine, cooling tower, waste sump or process tank applications, connected to a PLC or relay controller.



## Features

- Rugged polypropylene construction for use with corrosive liquids
- Available in intrinsically safe and general purpose classifications
- 60VA relay or 15VA dry contact switches selectable NO or NC via wiring
- Offered in three sensor technologies for broad application coverage
- Adjustable level switch cars enable sensor position adjustments in the field
- Polypropylene junction box rated NEMA 4X with swivel base and terminal strip



AU38-4343 Shown

## Key Benefits

- Corrosion resistant multi-point level switch solution for PLC or controller input
- Sensor positions are easily adjusted enabling fine tuning of the level switch points in the field

## Sensor Technologies



LU10

### SWITCH-TEK™

#### Ultrasonic Level Switch - IS

Broadly applied in chemicals and light weight oils



LZ12

### SWITCH-TEK™

#### Vibration Level Switch - GP

Applied in wastewater with light coating or scaling



LV10

### SWITCH-TEK™

#### Vertical Buoyancy Level Switch - GP

Applied in clean water and non-coating chemicals

# Smart-Trak™ AXXX

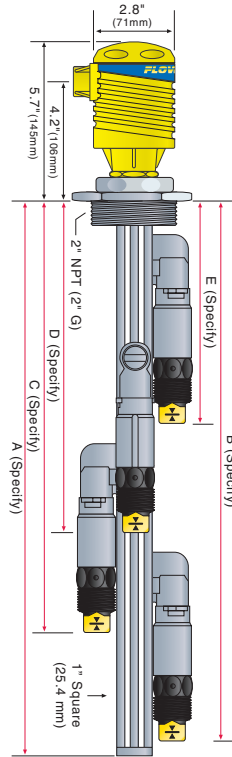
with Compact Junction Box



## Specifications

|                          |   |
|--------------------------|---|
| <b>Length:</b>           | 8" to 10' (20cm to 3m)  |
| <b>Accuracy:</b>         | ± 1mm in water  |
| <b>Repeatability:</b>    | ± 0.5mm in water  |
| <b>Orientation:</b>      | ± 20° vertical  |
| <b>Switch points:</b>    | 1-4 (field adjustable)  |
| <b>Supply voltage:</b>   | AVX6: N/A<br>AUX8: 12-36 VDC<br>AZX8: 12-30 VDC   |
| <b>Consumption:</b>      | AVX6: N/A<br>AUX8 / AZX8: 25 mA per point maximum   |
| <b>Contact type:</b>     | AVX6: SPDT reed(s)<br>AUX8 / AZX8: SPST relay(s)  |
| <b>Contact rating:</b>   | AVX6: 120VAC/VDC @ 15 VA<br>AUX8 / AZX8: 120 VAC/VDC @ 1A                                   |
| <b>Contact output:</b>   | Selectable NO / NC  |
| <b>Process temp.:</b>    | F: -40° to 176°<br>C: -40° to 80°   |
| <b>Ambient temp.:</b>    | F: -40° to 140°<br>C: -40° to 60°   |
| <b>Installed height:</b> | 5.7" (14.4cm) above tank process mount  |
| <b>Pressure:</b>         | Atmospheric   |
| <b>Encl. rating:</b>     | NEMA 4X (IP65)  |
| <b>Enclosure mat.:</b>   | PP, UL94VO  |
| <b>Terminal strip:</b>   | 12-pole, socket   |
| <b>Cond. entrance:</b>   | 1/2" NPT  |
| <b>Wetted mat'l:</b>     | PP (20% glass fill)   |
| <b>Process mount:</b>    | 2" NPT (2" G)   |
| <b>Classification:</b>   | AVX6 / AZX8: general purpose,<br>AUX8: intrinsically safe (see LU10 data sheet for details) |
| <b>Compliance:</b>       | CE  |

## Dimensions



## Fittings

For optimum performance, install Smart Trak™ using the below recommended or direct equivalent fittings.

|   | P/N              | DESCRIPTION                          |
|---|------------------|--------------------------------------|
|    | <b>LM52-2400</b> | 3" NPT x 2" NPT, PVC, schedule 40    |
|    | <b>LM52-2800</b> | 3" NPT x 2" NPT, PVC, schedule 80    |
|    | <b>LM52-3800</b> | 4" NPT x 2" NPT, PVC, schedule 80    |
|    | <b>LM52-2410</b> | 3" socket x 2" NPT, PVC, schedule 40 |
|   | <b>LM52-3410</b> | 4" socket x 2" NPT, PVC, schedule 40 |
|  | <b>LM52-2810</b> | 3" socket x 2" NPT, PVC, schedule 80 |
|  | <b>LM52-3810</b> | 4" socket x 2" NPT, PVC, schedule 80 |
|  | <b>LM52-2890</b> | 2" NPT bulkhead, PVC                 |
|  | <b>LM52-2850</b> | 2" ANSI x 2" NPT, PVC, schedule 80   |
|  | <b>LM50-1001</b> | 2" NPT side mount bracket, PP        |

## Relay Control

For remote relay control, add a LC4X (general purpose) or LC9X (isolation) controller to Smart Trak™. They're available in three configurations for tank automatic fill or empty, and/or high or low level alarm functions.



## Ordering



### SENSOR TECHNOLOGY (1) (2)

- Z** Vibration - GP
- U** Ultrasonic - IS
- V** Buoyancy - GP

### NUMBER OF SENSORS

- 1** One sensor - add 1 x ST
- 2** Two sensors - add 2 x ST
- 3** Three sensors - add 3 x ST
- 4** Four sensors - add 4 x ST

### CONTACTS

- 6** SPDT reed
- 8** SPST relay

### PROCESS MOUNT

- 3** NPT (US)
- 7** G (Metric)

### DIMENSIONS (3) (4)

- A** Specify
- B** Specify
- C** Specify (if applicable)
- D** Specify (if applicable)
- E** Specify (if applicable)

### NOTES

- 1) Select the best sensor technology based upon your application.
- 2) Available only in the following configurations:
  - Vibration = AZ\_8 (General purpose with relay contact)
  - Ultrasonic = AU\_8 (Intrinsically safe with relay contact)
  - Buoyancy = AV\_6 (General purpose with reed contact)
- 3) Specify the applicable A, B, C, D, E dimensions at the end of the part number (ie: AZ28-4343-87"-76"-17"). The dimensions may be specified in 1/2" (1.3 cm) increments. The track length or A-dimension may be specified from 12" to 10' (20cm to 3m). The sensor or B, C, D, E dimensions may be specified from 4" to 10' (10cm to 3m). For maximum field adjustability, specify all sensor dimensions equal to the A-dimension.
- 4) To calculate the track length adder, round up the A-dimension to the next foot (30cm) and add \$20 per foot (30cm) to the price.