Switch-Pak™ AX13
with Compact Level Controller

Application
The general purpose level switch package provides high or low liquid level detection with one 16A compact relay controller for pump or valve shut off. The optional flash alarm brings attention to alarm conditions. Available in three sensor technologies, choose the sensor type based upon your application media. This PP or PVDF level switch package is selected for bulk storage, IBC or drum, and neutralization tank applications, requiring detection and control.

Features
- Fail-safe relay shut off of pumps or valves with adjustable time delay
- Offered in three sensor technologies for broad application coverage
- Rugged polypropylene or PVDF construction for use with corrosive liquids
- Easy setup with LED indicators for sensor, power and relay status
- Optional strobe brings immediate attention to level alarm conditions
- Polypropylene enclosure rated NEMA 4X with swivel base for conduit alignment
- Invert switch changes relay state from NO to NC without rewiring

Key Benefits
- Complete solution to shut off a pump or close a valve to prevent overflows or run dry - just add power
- Available in three sensor technologies and two materials for all types of liquid media

Sensor Technologies

LU10
SWITCH-TEK™
Ultrasonic Level Switch
Broadly applied in chemicals and light weight oils

LV10
SWITCH-TEK™
Vertical Buoyancy Level Switch
Applied in clean water and

AU13-4213 Shown
Select the best level sensor technology based upon your application.

- **Vibration** is only available in PP material with a Ryton® sensor body.
- **CE compliance** is only available in the non-strobe configuration.

Specify the A-dimension at the end of the part number (ie: AV13-4223-17”). 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 $50 per foot (30cm).

### Specifications

- **Length:** 6” to 10’ (15cm to 3m)
- **Accuracy:** ± 1mm in water
- **Repeatability:** ± 0.5mm in water
- **Orientation:** ± 20° vertical
- **Switch type:** -X22X: N/A, -X21X: Xenon tube
- **Strobe flash:** -X22X: N/A, -X21X: 1 per second
- **Contact type:** (1) SPDT relay
- **Contact rating:** 250 VAC @ 16A
- **Contact output:** Selectable NO / NC
- **Contact delay:** 0.15 - 60 seconds
- **Process temp.:** F: -40° to 176°
- **Ambient temp.:** F: -40° to 80°
- **Installed height:** _21_: 6.5” (16.5cm), _22_: 4.9” (12.4cm)
- **Pressure:** AV13: 25 psi (1.7 bar), AU13 / AZ13: 150 psi (10 bar)
- **Enclosure rating:** NEMA 4X (IP65)
- **Encl. material:** -X21X: PP, UL94VO & PC, -X22X: PP, UL94VO
- **Conduit entrance:** 1/2” NPT
- **Process mount:** -X22X: 2” NPT, -X2X7: 1-1/2” G
- **Classification:** General purpose
- **Compliance:** CE

### Dimensions

- **2” NPT (1-1/2” G)**
- **A (Specify)**

### Fittings

For optimum performance, install Switch-Pak™ using the below recommended or direct equivalent fittings.

<table>
<thead>
<tr>
<th>P/N</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>LM52-2400</td>
<td>3” NPT x 2” NPT, PVC, schedule 40</td>
</tr>
<tr>
<td>LM52-2800</td>
<td>3” NPT x 2” NPT, PVC, schedule 80</td>
</tr>
<tr>
<td>LM52-3800</td>
<td>4” NPT x 2” NPT, PVC, schedule 80</td>
</tr>
<tr>
<td>LM52-2410</td>
<td>3” socket x 2” NPT, PVC, schedule 40</td>
</tr>
<tr>
<td>LM52-3410</td>
<td>4” socket x 2” NPT, PVC, schedule 40</td>
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<tr>
<td>LM52-2810</td>
<td>3” socket x 2” NPT, PVC, schedule 80</td>
</tr>
<tr>
<td>LM52-3810</td>
<td>4” socket x 2” NPT, PVC, schedule 80</td>
</tr>
<tr>
<td>LM52-2890</td>
<td>2” NPT bulkhead, PVC</td>
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<tr>
<td>LM52-2850</td>
<td>2” ANSI x 2” NPT, PVC, schedule 80</td>
</tr>
<tr>
<td>LM50-1001</td>
<td>2” NPT side mount bracket, PP</td>
</tr>
</tbody>
</table>

### Ordering

**SENSOR TECHNOLOGY**  
- Z Vibration
- U Ultrasonic
- V Buoyancy

**WETTED MATERIAL**  
- 4 PP
- 5 PVDF

**CONFIGURATION**  
- 1 Controller with Strobe Alert
- 2 Controller only

**PROCESS MOUNT**  
- 3 2” NPT (US)
- 7 1 1/2” G (Metric)

**DIMENSIONS**  
- A Specify (PP) (PVDF)

### NOTES

1) Select the best level sensor technology based upon your application.
2) Vibration is only available in PP material with a Ryton® sensor body.
3) CE compliance is only available in the non-strobe configuration.
4) Specify the A-dimension at the end of the part number (ie: AV13-4223-17”). The dimension may be specified in 1/2” (1.3cm) increments from 6” to 10’ (15cm to 3m).
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