**Series MULS**

**Miniature Ultrasonic Level Switch**

No Mechanical or Moving Parts

The Series MULS Miniature Ultrasonic Level Switch measures liquid at a single point providing an output for high or low level alarm, overflow prevention, or pump protection. The Series MULS uses ultrasonic wave propagation between the transducer gap to sense the presence or absence of a liquid. Units can be mounted within 15° of horizontal with no additional calibration required. The switches include a 0.5 second delay and have a repeatability of less than .08” (2 mm). The Series MULS can be used to monitor and control levels of water, chemicals, lubricants, acids, or beverages in vessels, storage bins, or tanks.

<table>
<thead>
<tr>
<th>Model</th>
<th>Connection Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>MULS-SN-A</td>
<td>1/4”</td>
</tr>
<tr>
<td>MULS-SN-B</td>
<td>1/2”</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Service:** Compatible liquids (non-coating, low viscosity).
- **Wetted Material:** 316L SS.
- **Temperature Limits:** -20 to 176°F (-29 to 80°C).
- **Pressure Limits:** 250 psig (17.24 bar).
- **Enclosure Rating:** General purpose.
- **Repeatability:** ≤ .08” (2 mm).
- **Switch Type:** SPST normally open dry relay, NPN transistor sink, or PNP transistor source.
- **Electrical Rating:** Relay: 1A @ 5-30 VDC, source & sink: 100mA.
- **Electrical Connections:** 12” (304.8 mm) 5 conductor cable, 24 AWG wire.
- **Leakage Current:** Less than 50µA, sinking and sourcing.
- **Power Requirements:** 5 to 30 VDC.
- **Process Connection:** 1/4” or 1/2” male NPT.
- **Mounting Orientation:** Within 15° of horizontal.
- **Delay:** 0.5 seconds.
- **Agency Approval:** CE.

**Series GULS**

**Miniaturized Ultrasonic Level Switch**

No Mechanical or Moving Parts

The Series MULS Miniature Ultrasonic Level Switch measures liquid at a single point providing an output for high or low level alarm, overflow prevention, or pump protection. The Series MULS uses ultrasonic wave propagation between the transducer gap to sense the presence or absence of a liquid. Units can be mounted within 15° of horizontal with no additional calibration required. The switches include a 0.5 second delay and have a repeatability of less than .08” (2 mm). The Series MULS can be used to monitor and control levels of water, chemicals, lubricants, acids, or beverages in vessels, storage bins, or tanks.

<table>
<thead>
<tr>
<th>Model</th>
<th>Immersion Depth</th>
<th>Supply Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GS10001</td>
<td>1” (25.4 mm)</td>
<td>115 VAC</td>
</tr>
<tr>
<td>GS20000</td>
<td>1” (25.4 mm)</td>
<td>230 VAC</td>
</tr>
</tbody>
</table>

**SPECIFICATIONS**

- **Service:** Compatible liquids (1000:1 wet/dry ratio).
- **Wetted Material:** 316 SS.
- **Temperature Limits:** Sensor: -40 to 200°F (-40 to 93°C); Electronics: -20 to 170°F (-4 to 77°C).
- **Pressure Limits:** 1000 psig (68.9 bar).
- **Enclosure Rating:** Epoxy-coated cast aluminum, NEMA 4.
- **Repeatability:** 2 mm (0.078”) typical.
- **Switch Type:** DPDT.
- **Electrical Rating:** 10A @ 120 VAC resistive.
- **Power Requirements:** 115 VAC, 50/60 Hz (230 VAC optional).
- **Conduit Connection:** 3/4” female NPT.
- **Process Connection:** 3/4” male NPT.
- **Mounting Orientation:** Vertical or horizontal.
- **Delay [On]:** 0.5 seconds.
- **Immersion Depth:** 1” (25.4 mm).
- **Weight:** 1 lb (453 g).
- **Agency Approval:** CE.