The SERIES B-190 Liquid Level Switches and Controls is a top mount displacer type level control. They work on the principle that submerged solids weigh less in liquids, and as the liquid level rises and their weight decreases, the tension on the spring by which they are suspended is decreased. This Series is offered in a range of cable lengths, specific gravities, circuit types and enclosure ratings.

FEATURES/BENEFITS
- Extremely versatile design
- Displacers are suspended on a coil spring and do not float on the surface of liquids
- Excellent for applications with viscous or dirty liquids

APPLICATIONS
- Pumping stations
- Foaming liquids
- Sanitary/sewage treatment
- Paints & varnishes
- Agitated or turbulent fluids
- Heavy oil refineries
- Chemical plants
- Power generating stations
- Viscous or dirty liquids

SPECIFICATIONS
- Service: Compatible liquids.
- Wetted Materials: Cable, spring and stops: 316 SS; Optional Inconel® spring; Displacers: Porcelain; Optional 304 SS, 316 SS, or carbon graphite.
- Temperature Limits: Ambient Temperature: 32 to 200°F (0 to 93°C); Process Temperature: 32 to 200°F (0 to 93°C).
- Pressure Limit: 125 psig (8.6 bar). Higher ratings available.
- Enclosure Rating: NEMA 4X. Optional general purpose or explosion-proof.
- Switch Type: SPDT snap switch, hermetically sealed snap switch, or mercury switch. Optional DPDT or two stage.
- Electrical Rating: Snap switch: 12 A @ 120 VAC, 5 A @ 240 VAC, 0.5 A @ 125 VDC resistive, 0.25 A @ 250 VDC resistive; Hermetically sealed snap switch: 5 A @ 120 VAC, 5 A @ 240 VAC, 5 A @ 30 VDC resistive; Mercury switch: 4 A @ 120 VAC/DC, 2 A @ 240 VAC/DC. Higher contact ratings available for the mercury switch.

MODEL CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Switch Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>B190-WT-4810-P-A-1.0-2</td>
<td>SPDT mercury</td>
<td>$1053.50</td>
</tr>
<tr>
<td>B190-WT-7810-P-A-1.0-2</td>
<td>SPDT snap</td>
<td>1041.50</td>
</tr>
<tr>
<td>B190-WT-7810HM-P-A-1.0-2</td>
<td>SPDT hermetically sealed</td>
<td>1194.50</td>
</tr>
</tbody>
</table>

The SERIES OLS Optical Level Switches is a low cost, rugged optical level switch that indicate the presence or absence of liquid via infrared light that is reflected back through the prism lens. This series offers three optional materials, 316 SS, polysulfone and PFA.

FEATURES/BENEFITS
- Provides rapid response while employing no moving parts for stable process control
- Bright red and green LED’s indicate the presence or absence of liquid for true, local indication
- Three optional materials, 316 SS, polysulfone and PFA provide application flexibility
- Compact switch can be quickly mounted horizontally or vertically for each installation

APPLICATIONS
- Food and beverage systems
- Liquid holding tanks
- Hydraulic reservoirs
- Pharmaceutical systems
- Air conditioning systems
- Sumps

SPECIFICATIONS
- Service: Noncoating compatible liquids.
- Wetted Materials: See model chart.
- Temperature Limit: Process: OLS-10, 11: 200°F (93.3°C), OLS-12: 120°F (48.9°C); Ambient: OLS-10, 11: 175°F (79.4°C), OLS-12: 120°F (48.9°C).
- Pressure Limit: OLS-11, 12: 200 psig (13.8 bar); OLS-10: 1000 psig (69 bar).
- Repeatability: ±0.02” (0.5 mm).
- Switch Type: NPN open collector.
- Power Requirements: 10 to 28 VDC.

MODEL CHART

<table>
<thead>
<tr>
<th>Model</th>
<th>Wetted Materials</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLS-10</td>
<td>316 SS/polysulfone</td>
<td>$97.50</td>
</tr>
<tr>
<td>OLS-11</td>
<td>Polysulfone</td>
<td>53.50</td>
</tr>
<tr>
<td>OLS-12</td>
<td>PFA</td>
<td>121.00</td>
</tr>
</tbody>
</table>

**LIQUID LEVEL SWITCHES-CONTROLS**

Top Mounted Displacer Type, Adjustable Setpoints, Magnetic Operation, Optional Hermetically Sealed Snap Switch

**SERIES B-190 | MERCOID® BY DWYER**

**SERIES OLS | W.E. ANDERSON® BY DWYER**

**OPTICAL LEVEL SWITCH**

Low Cost, Compact, LED Indication, No Moving Parts

The LIQUID LEVEL SWITCHES-CONTROLS is a top mount displacer type level control. They work on the principle that submerged solids weigh less in liquids, and the liquid level rises and their weight decreases, the tension on the spring by which they are suspended is decreased. This Series is offered in a range of cable lengths, specific gravities, circuit types and enclosure ratings.

**SERIES OLS | W.E. ANDERSON® BY DWYER**

The LIQUID LEVEL SWITCHES-CONTROLS is a top mount displacer type level control. They work on the principle that submerged solids weigh less in liquids, and the liquid level rises and their weight decreases, the tension on the spring by which they are suspended is decreased. This Series is offered in a range of cable lengths, specific gravities, circuit types and enclosure ratings.