Description

The L150 Series Level Switchgage instrument is a combination liquid level gauge and low limit switch; each unit includes (1) a chamber with pivotal float, (2) an indicating dial with pointer, and (3) a low level contact. When properly installed and maintained, the float operates the pointer which, in turn, indicates level during normal operation, and closes a switching circuit if the level falls to the low-limit set point.

Applications

The primary use of the L150/EL150K1 is for engine cooling systems, surge or expansion tanks, condenser radiator or vapor phase systems, pressurized or atmospheric systems. The Level Switchgage instrument can also be used to monitor lube oil, hydraulic fluid or diesel fuel reservoirs and activates alarms and/or shut-down at a predetermined minimum level.

L150 Specifications

Case: Die cast aluminum, poly-urethane coated; approximate dimensions; 4-1/2 x 4-3/4 x 2-3/4 in. (114 x 121 x 70 mm).
Mounting Holes: (2) 9/32 in. (7 mm) diameter at 4-1/2 in. (114 mm) on center.
Float: Brass.
Lens: Polycarbonate.

O-rings: Saturated Nitrile, are suitable for coolant or hydrocarbons. Maximum temperature 250°F (121°C).
Gasket: Nitrile.
Vent Tube: 1/4 x 5 in. (6 x 127 mm) copper cane with 1/4 NPT x 1/4 in. (6 mm) tube fitting.
Contact Rating: 2 A @ 30 VAC/DC.
Wire: (1) 16 AWG x 26 in. (1.5 mm² x 660 mm)
with terminals.
Shipping Weight: 29 oz. (0.82 kg.).
Shipping Dimensions: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm).

L150K1 Specifications

Case: Die cast aluminum, poly-urethane coated; approximate dimensions; 5 x 4-3/4 x 2-3/4 in.
(127 x 121 x 70 mm).
Mounting Holes: (2) 9/32 in. (7 mm) diameter at 4-1/2 in. (114 mm) on center.
Float: Brass.
Lens: Polycarbonate.
O-rings: Saturated Nitrile, are suitable for coolant or hydrocarbons. Maximum temperature 250°F (121°C).
Gasket: Nitrile.
Vent Tube: 1/4 x 5 in. (6 x 127 mm) copper cane with 1/4 NPT x 1/4 in. (6 mm) tube fitting.
Snap-Switch: SPDT rated 10 A @ 125 VAC; 0.5 A @ 125 VDC; 10 A 30 VDC.
Wire: (3) 18 AWG x 14 in. (1 mm² x 356 mm).
Shipping Weight: 42 oz. (1.2 kg.).
Shipping Dimensions: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm).

EL150EX Specifications

Case: Sand cast aluminum, painted; approximate dimensions; 6-1/2 x 5-3/4 x 5-1/4 in. (165 x 146 x 133 mm).
Mounting Holes: (2) 5/16 in. (8 mm) diameter at 5-1/2 in. (140 mm) on center.
Float: 304 Stainless steel.
Lens: Tempered glass.
O-rings: Saturated Nitrile, are suitable for coolant or hydrocarbons. Maximum temperature 250°F (121°C).
Gasket: Nitrile.
Vent Tube: 1/4 x 5 in. (6 x 127 mm) copper cane with 1/4 NPT x 1/4 in. (6 mm) tube fitting and 1/2 NPT to 1/4 NPT reducer fitting.
Snap-Switch: SPDT rated 10 A @ 125 VAC; 0.5 A @ 125 VDC; 10 A 30 VDC.
Wire: Wired to terminal block.
Laboratory Approvals:
CSA Listed for Hazardous Locations Class I, Division 1, Groups C & D.
Shipping Weight: 5 lbs. (2.26 kg.).
Shipping Dimensions: 6-1/2 x 6-3/4 x 6-3/8 in. (165 x 171 x 162 mm).

** Products covered by this bulletin comply with EMC Council directive 89/336/EEC regarding electromagnetic compatibility except as noted.

EL150EX Models are CSA Listed for Class I, Division 1, Group C & D Hazardous Locations.
Radiator Fittings

Murphy PS, PS Barbed and PS-D fittings allow the installation of the L150/EL150K1 to the radiator when a fitting is not available.

- **15-00-0107 (PS):** thin wall, 1/4 in. (6 mm) tube fitting.
- **15-01-0167 (PS-Barbed):** thin wall, 1/4 in. (6 mm) tubing or hose.
- **15-01-0202 (PS-D):** for diesel or oil, thick wall (to 1/4 in. [6 mm]), accepts 1/2 in. (13 mm) I.D. hose or 1/4 in. (6 mm) O.D. tubing.

**Repair Kits**

<table>
<thead>
<tr>
<th>L150</th>
<th>15-00-0138</th>
<th>All parts except case and body</th>
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<tbody>
<tr>
<td></td>
<td>15-00-0101</td>
<td>Case/body assembly</td>
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</table>

<table>
<thead>
<tr>
<th>EL150K1</th>
<th>15-00-0139</th>
<th>All parts except case and body</th>
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<tr>
<td></td>
<td>15-00-0101</td>
<td>Case/body assembly</td>
</tr>
<tr>
<td></td>
<td>15-00-0100</td>
<td>Lens/switch assembly</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EL150EX</th>
<th>15-00-0110</th>
<th>Cover and float assembly</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>15-00-0108</td>
<td>Lid assembly</td>
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<tr>
<td></td>
<td>15-00-0109</td>
<td>Switch/terminal assembly</td>
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</table>

**Accessories**

<table>
<thead>
<tr>
<th>15-00-0107</th>
<th>Radiator fitting (PS)</th>
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</thead>
<tbody>
<tr>
<td>15-01-0202</td>
<td>Radiator fitting (PS-D)</td>
</tr>
<tr>
<td>15-01-0167</td>
<td>Radiator fitting (PS Barbed)</td>
</tr>
</tbody>
</table>

**Fittings Kits Order Separately**

- 15010235 FM3
- 15010236 FM4
- 15010237 FM5
- 15010238 FM12
- 15010349 CECO

**Warranty**

A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm

**Dimensions**

**L150**

- 2-3/4 in. (70 mm) NPT
- 1/4 in. tube fitting

**EL150K1**

- 4-15/16 in. (125 mm) NPT
- 11/16 in. (17 mm) NPT

**EL150EX**

- 5-9/16 in. (141 mm) NPT
- 5-1/2 in. (140 mm) NPT

**Standard Electrical Diagrams**

**WARNING:** This typical wiring diagram is shown for clarity only. It is not intended for use as installation instructions.

**Fittings Kits Order Separately**

- 15010235 FM3
- 15010236 FM4
- 15010237 FM5
- 15010238 FM12
- 15010349 CECO

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