Level Swichgage® for Engine Liquids
L150 and EL150K1 Series

The L150 Series Level Swichgage instrument is a combination liquid level gage 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, both indicates level during normal operation and closes a switching circuit if the level falls to the low-limit set point.

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 Swichgage 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. These instruments are built for low pressure systems with a maximum of 25 psi (172 kPa) [1.72 bar].

Dimensions

L150

EL150K1

EL150EX

Standard Electrical Diagrams

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

1. EL150EX Models are CSA Listed for Class I, Division 1, Group C & D Hazardous Locations.
2. Products covered by this bulletin comply with EMC Council directive 89/336/EEC regarding electromagnetic compatibility except as noted.

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**Specifications**

**L150**

- **Maximum Temperature:** 250° F (121° C)
- **Maximum Operating Pressure:** 25 PSI (172 kPa)
- **Case:** Die cast aluminum, polyurethane 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
- **Gasket:** Nitrile
- **Vent Tube:** 1/4 x 5 in. (6 x 127 mm) copper pipe 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 mm 2 x 660 mm) with terminals

**EL150K1**

- **Maximum Temperature:** 250° F (121° C)
- **Maximum Operating Pressure:** 25 PSI (172 kPa)
- **Case:** Die cast aluminum, polyurethane coated; approximate dimensions: 5 x 4-3/4 x 2-3/4 in. (127 x 121 x 70 mm)
- **Enclosure Rating:** P35
- **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
- **Gasket:** Nitrile
- **Vent Tube:** 1/4 x 5 in. (6 x 127 mm) copper pipe 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 mm 2 x 356 mm)

**EL150EX**

- **Maximum Temperature:** 250° F (121° C)
- **Maximum Operating Pressure:** 25 PSI (172 kPa)
- **Case:** Sand cast aluminum, painted; approximate dimensions: 6-1/2 x 5-3/4 x 5-1/4 in. (165 x 146 x133 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, suitable for coolant or hydrocarbons
- **Gasket:** Nitrile
- **Vent Tube:** 1/4 x 5 in. (6 x 127 mm) copper pipe 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

**Radiator Fittings**

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

**How to Order**

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<thead>
<tr>
<th>Part Number</th>
<th>Model and Description</th>
<th>Notes</th>
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<tbody>
<tr>
<td>15700135</td>
<td>L150</td>
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<tr>
<td>15700144</td>
<td>L150-BC</td>
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<td>EL150EX</td>
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<td>L150K1-BC</td>
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<tr>
<td>15000138</td>
<td>All parts except case and body</td>
<td>L150 Repair Kits</td>
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<tr>
<td>15000139</td>
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<td>EL150K1 Repair Kits</td>
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<tr>
<td>15000100</td>
<td>Lens/switch assembly</td>
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<tr>
<td>15000109</td>
<td>Switch/terminal assembly</td>
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<tr>
<td>15000107</td>
<td>Radiator fitting (PS), thin wall, 1/4 in. (6 mm) tube fitting</td>
<td>Accessories</td>
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<tr>
<td>15010202</td>
<td>Radiator fitting (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</td>
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<tr>
<td>15010167</td>
<td>Radiator fitting (PS Barbed), thin wall, 1/4 in. (6 mm) tubing or hose</td>
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**Approximate Shipping Weight and Dimensions**

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<th>Model</th>
<th>Weight</th>
<th>Dimension</th>
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<tr>
<td>L150</td>
<td>29 oz. (0.82 kg.)</td>
<td>5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)</td>
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<td>EL150K1</td>
<td>42 oz. (1.2 kg.)</td>
<td>5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)</td>
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<tr>
<td>EL150EX</td>
<td>5 lbs. (2.26 kg.)</td>
<td>6-1/2 x 6-3/4 x 6-3/8 in. (165 x 171 x 162 mm)</td>
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