# **Level SWICHGAGE** Series For Engine Liquids

LEL-00072B Effective 06-00 Replaces L-6795B Catalog Section 15 (00-02-0058)



# L150/EL150K1 Series

- Monitors Level of Coolant, Lube Oil, Diesel Fuel And Hydraulic Fluid.
- Indicating Gauge
- Low Limit Switch
- Float Operated
- Explosion-Proof Model Is Available.





\*\* 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.

## **Description**

The L150 Series Level SWICHGAGE\* 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, both 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 SWICHGAGE® 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].

## 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: Neo-cork.

**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 mm<sup>2</sup> 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).

## **EL150K1 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: Neo-cork.

**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 mm<sup>2</sup> 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;  $6-1/2 \times 5-3/4 \times 5-1/4$  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: Neo-cork.

**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.

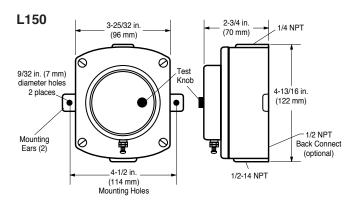
Shipping Weight: 5 lbs. (2.26 kg.).

**Shipping Dimensions:** 6-1/2 x 6-3/4 x 6-3/8 in. (165 x 171 x 162 mm).



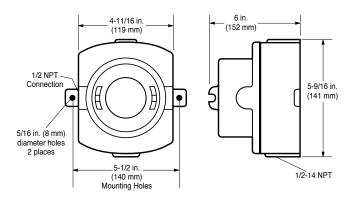


#### **Dimensions**



#### **EL150K1** 2-3/4 in. .1/4 NPT 4-15/16 in Test 11/16 in Knob (17 mm) 4-13/16 in (122 mm) 1/2 NPT **Back Connect** (optional) 4-1/2 in 9/32 in. (7 mm) 1/2-14 NPT (114 mm) diameter holes Mounting Holes 2 places

#### EL150EX



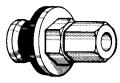
#### Warranty

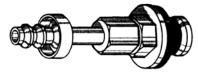
A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to <a href="https://www.fwmurphy.com/support/warranty.htm">www.fwmurphy.com/support/warranty.htm</a>

## **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.





**Accessories** 

Specify

15-00-0107 (PS)

15-01-0167 (PS Barbed)

Description

15-00-0107 Radiator fitting (PS) 15-01-0202 Radiator fitting (PS-D) 15-01-0167 Radiator fitting (PS Barbed)

#### **Repair Kits**

#### L150

15-00-0138	All parts except
	case and body
15-00-0101	Case/body assembly

#### EL150K1

15-00-0139	All parts except
	case and body
15-00-0101	Case/body assembly
15-00-0100	Lans/switch assemb

#### EL150EX

15-00-0110	Cover and float assembly

15-00-0108 Lid assembly

15-00-0109 Switch/terminal assembly

## **Standard Electrical Diagrams**

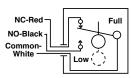


**WARNING:** This typical wiring diagram is shown for clarity only. It is not intended for use as installation instructions.

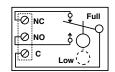
#### L150



## EL150K1



#### EL150EX



## **Fittings Kits Order Separately**

15010235 FM3

15010236 FM4

15010237 FM5

15010238 FM12

15010349 CECO





