# Level SWICHGAGE® Series For Engine Liquids

# L150/EL150K1 Series for Coolants, Lube Oils, Fuel and Hydraulic Fluid

# 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 shutdown at a predetermined minimum level.

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

- Monitors level of coolant, lube oil, diesel fuel and hydraulic fluid.
- Indicating Gauge
- Low Limit Switch
- Float Operated
- Explosion-proof model is available.





# Specifications

#### L150

**Case:** Die cast aluminum, poly-urethane coated; approximate dimensions;  $4-1/2 \times 4-3/4 \times 2-3/4$  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.

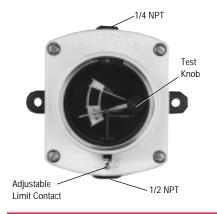
Vent Tube: 1/4 x 5 in. (6 x 127 mm) copper cane with 1/4 NPT x 1/4 in. (6 mm) tube fitting.

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**

**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. (1.0 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

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

**Shipping Dimensions:** 6-1/2 x 6-3/4 x 6-3/8

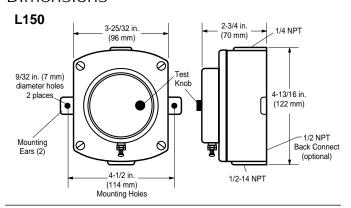
in. (165 x 171 x 162 mm).

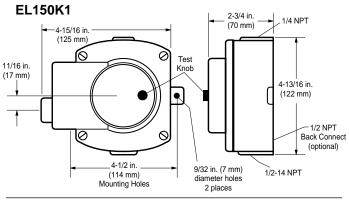


CSA Listed for Hazardous Location: Class I, Division 1, Group C & D

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

#### **Dimensions**





#### 6 in. 4-11/16 in. (152 mm) (119 mm) 1/2 NPT Connection 5-9/16 in. ۰ (141 mm) 5/16 in. (8 mm) diameter holes 2 places 5-1/2 in 1/2-14 NPT (140 mm)

# Warranty

EL150EX

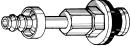
A two-year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.

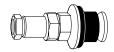
# Radiator Fittings

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.







15-00-0107 (PS)

15-01-0167 (PS Barbed)

15-01-0202 (PS-D)

## 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 Lens/switch assembly

15-00-0110 Cover and float assembly

15-00-0108 Lid assembly

15-00-0109 Switch/terminal assembly

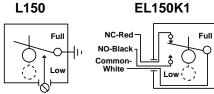
#### Specify Description

Accessories

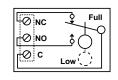
15-00-0107 Radiator fitting (PS) 15-01-0202 Radiator fitting (PS-D) 15-01-0167 Radiator fitting (PS Barbed)

# Standard Electrical Diagrams

#### L150



#### EL150EX



# Fittings Kits Order Seperately

15010235 FM3

15010236 FM4

15010237 FM5

15010238 FM12

15010349 CECO

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.



#### ■ Frank W. Murphy Manufacturer

Mounting Holes

P.O. Box 470248; Tulsa, Oklahoma 74147; USA tel. (918) 627-3550 fax (918) 664-6146 e-mail sales@fwmurphy.com

#### ■ Frank W. Murphy Southern Division

P.O. Box 1819; Rosenberg, Texas 77471; USA tel. (281) 342-0297 fax (281) 341-6006 e-mail murphysd@intertex.net

#### ■ Frank W. Murphy, Ltd.

Church Rd.; Laverstock, Salisbury SP1 1QZ; U.K. tel. +44 1722 410055 fax +44 1722 410088 tlx 477088 e-mail sales@fwmurphy.co.uk

## ■ Frank W. Murphy Pte., Ltd.

No. 2 Tuas South Street 2, Sprintecs Bldg., #02-01/02 Singapore 638042

tel. +65 863-1398 fax +65 863-0208 e-mail fwmsales@fwmurphy.com.sg

#### ■ Murphek Pty., Ltd.

1620 Hume Highway; Campbellfield, Vic 3061; Australia tel. +61 3 9358-5555 fax +61 3 9358-5558 e-mail murphy@macquarrie.com.au

#### ■ Murphy de México, S.A. de C.V.

Blvd. Antonio Rocha Cordero 300, Fracción del Aguaje San Luis Potosí, S.L.P.; México 78384 tel. +52-48-206264 fax +52-48-206336 e-mail murmexsl@sanluis.podernet.com.mx

#### ■ Murphy Switch of California

P.O. Box 900788; Palmdale, California 93590; USA tel. (805) 272-4700 fax (805) 947-7570 e-mail sales@murphyswitch.com

#### ■ Frank W. Murphy France

tel. +33 1 30 762626 fax +33 1 30 763989