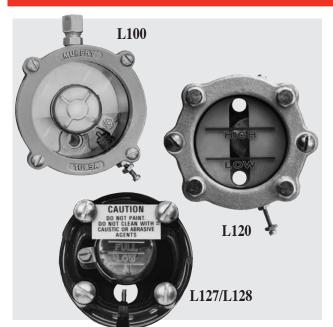
# Float Actuated Oil Level SWICHGAGE<sup>®</sup> Pres Trans



## Description

These float actuated Oil Level SWICHGAGE<sup>®</sup> instruments are a combination oil level sight gage and adjustable, low and/or high limit switch. The limit switches are normally open during operation-yet close if the level drops or rises to where the float contacts the limit screw. The contact completes a circuit to ground a magneto or trip a Murphy magnetic switch. The magnetic switch can be used to activate alarms and/or shutdown. Models are also available without limit switches.

## Application

The level instruments described above can be used on a variety of crankcases, pump gearcases, or oil reservoirs–primarily on small engines and pumps. The following list displays the model and its typical application:

- L100<sup>†</sup>: Small engines and pumps with non-vented crankcase.
- **L100W**<sup>†</sup>: Small engines and pumps with vented crankcase.
- L120<sup>†</sup>: Machined surface on crankcase such as Witte, National-Oilwell/Garland.
- L127: Machined surface on crankcase, specifically, Fairbanks-Morse ZC Series and Bell Engines.
- **L128**: Machined surface on crankcase, specifically, Arrow and Continental Emsco/Climax.



## For Small Engines and Pumps

- See Oil Level and Condition Without Shutting Down
- Shutdown or Alarm on Low Lube Level
- Adjustable Limit Switch for Alarm and/or Shutdown
- Save on Reduced Downtime and Repair Costs
- Simple Installation

Specifications

L100 and L100W

Float: Brass

L100:

mm)

mm)

Float: Brass

L120

L100W:

Maximum Pressure Rating (all models):

Vent Fitting: <sup>1</sup>/4 in. (6 mm) tube x <sup>1</sup>/8 NPT

**Inlet Fitting:** Hex Nipple <sup>1</sup>/4 NPT

• Copper Tubing:  $\frac{1}{4} \times 48$  in. dia.

• Reducer Bushing: <sup>1</sup>/2 NPT x <sup>1</sup>/4 NPT

• Wire: 16 AWG x 24 in. (1.5 mm<sup>2</sup> x 610

• Vent Tube:  $\frac{1}{4} \times \frac{3-3}{8}$  in. (6 x 86 mm)

• Reducer Bushing: <sup>3</sup>/4 NPT x <sup>1</sup>/4 NPT

• Wire: 16 AWG x 24 in. (1.5 mm<sup>2</sup> x 610

Mounting Bolts: 1/4-20 UNC-2A (4 req'd)

30 psi (207 kPa) [2.07 bar]

Rating: 2 A @ 30 VAC/DC

Hardware (shipped loose)

• Close Nipple: <sup>1</sup>/2 NPT

• Close Nipple: <sup>3</sup>/4 NPT

Case: Cast Aluminum

Rating: 2 A @ 30 VAC/DC

• Tee: <sup>3</sup>/4 NPT, black pipe

• Tee: <sup>1</sup>/2 NPT, black pipe

(6 mm x 1.2 m)

Case: Die cast aluminum

### L127 and L128

Case: TROGAMID<sup>®</sup> Nylon Float: Brass Rating: 2 A @ 30 VAC/DC Wire: 16 AWG x 48 in. (1.5 mm<sup>2</sup> x 1.2 m) Mounting Bolts:

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- L127:<sup>-1</sup>/4-20 NC x 2 in. (4 required)
- L128: <sup>3</sup>/8-16 NC x <sup>3</sup>/4 in. (2 required)

#### 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

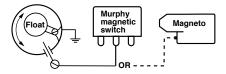
<sup>†</sup> Models available with high and low options. See *How to Order* on reverse side.

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



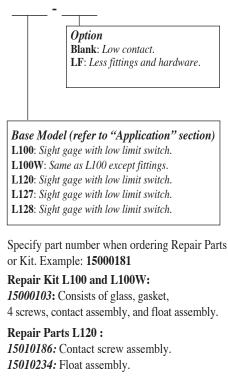
## Typical Wiring Diagram

Below is a typical wiring diagram for a level SWICHGAGE®. A SWICHGAGE® can be connected to a Murphy magnetic switch or magneto. Switch Contact Rating is 2 A @ 30 VAC/DC resistive.



## How to Order

Specify base model designator and options in sequence shown below. Example: L100-HL.



Repair Kits L127 and L128: 15000180: Includes case, contact, 4 mounting bolts, and 2 gaskets. 15000181 (L127 only): Includes 4 mounting bolts, 2 gaskets, float assembly, ground strip, wire, and mounting plate. 15000188 (L128 only): L128 less case assembly.



#### L100 and L100W

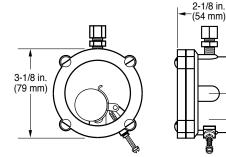
#### **Shipping Dimensions:**

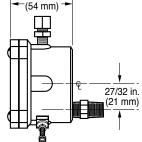
- L100:  $5^{-1}/4 \times 5^{-1}/4 \times 5^{-1}/2$  in. (133 x 133 x 140 mm)
- L100W: 4-<sup>3</sup>/4 x 4-<sup>3</sup>/4 x 3-<sup>1</sup>/4 in. (121 x 121 x 83 mm)
- **Shipping Weight:**
- L100: 2 lbs. (0.91 kg) • L100W: 2 lbs. (0.91 kg)

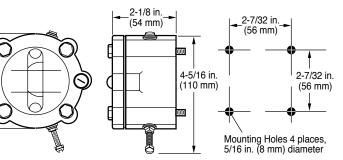
3-3/8 in (86 mm)

Shipping Weight: 1 lb 8 oz (0.68 kg)

L120

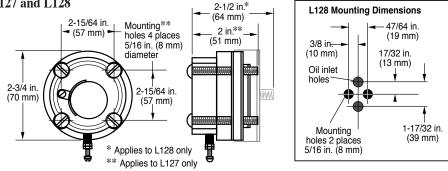






**Shipping Dimensions:** 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)

#### L127 and L128



#### Shipping Weight:

- L127: 8 oz (0.23 kg)
- L128: 10 oz (0.36 kg)

#### Shipping Dimensions (L127 and L128):

4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)





