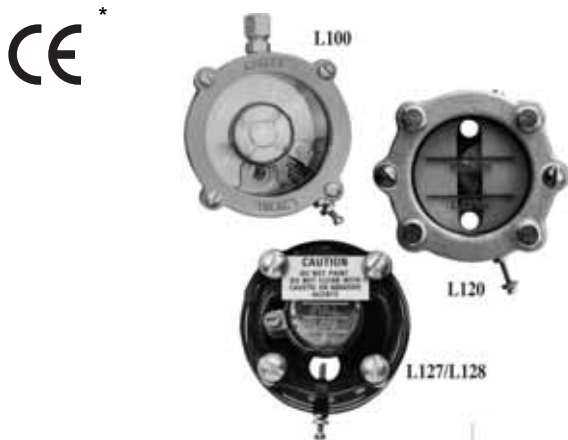


Float Actuated Oil Level Swichgage[®] Instrument For Small Engines and Pumps



Features

- 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

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

These float actuated Oil Level Swichgage 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[†]: Small engines and pumps with non-vented crankcase.

L100W[†]: Small engines and pumps with vented crankcase.

L120: 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.

Specifications

Maximum Pressure Rating (all models): 30 psi (207 kPa) [2.07 bar]

L100 and L100W

Case: Die cast aluminum

Float: Brass

Rating: 2 A @ 30 VAC/DC

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

Inlet Fitting: Hex Nipple 1/4 NPT

Hardware (shipped loose)

L100:

- Copper Tubing: 1/4 x 48 in. dia. (6 mm x 1.2 m)
- Reducer Bushing: 1/2 NPT x 1/4 NPT
- Close Nipple: 1/2 NPT
- Tee: 1/2 NPT, black pipe
- Wire: 16 AWG x 24 in. (1.5 mm² x 610 mm)

L100W:

- Vent Tube: 1/4 x 3-3/8 in. (6 x 86 mm)
- Reducer Bushing: 3/4 NPT x 1/4 NPT
- Close Nipple: 3/4 NPT
- Tee: 3/4 NPT, black pipe
- Wire: 16 AWG x 24 in. (1.5 mm² x 610 mm)

L120

Case: Cast Aluminum

Float: Brass

Rating: 2 A @ 30 VAC/DC

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

L127 and L128

Case: TROGAMID[®] Nylon

Float: Brass

Rating: 2 A @ 30 VAC/DC

Wire: 16 AWG x 48 in. (1.5 mm² x 1.2 m)

Mounting Bolts:

- L127: 1/4-20 NC x 2 in. (4 required)
- L128: 3/8-16 NC x 3/4 in. (2 require d)

Shipping Weight:

- **L100**: 2 lbs. (0.91 kg)
- **L100W**: 2 lbs. (0.91 kg)
- **L120**: 1 lb 8 oz (0.68 kg)
- **L127**: 8 oz (0.23 kg)
- **L128**: 10 oz (0.36 kg)

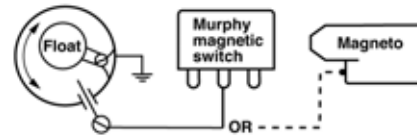
Shipping Dimensions

- **L100**: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)
- **L100W**: 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)
- **L120**: 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)
- **L127 and L128**: 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)

[†] Models available with high and low options. See How to Order on reverse side

Typical Wiring Diagram

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



Dimensions

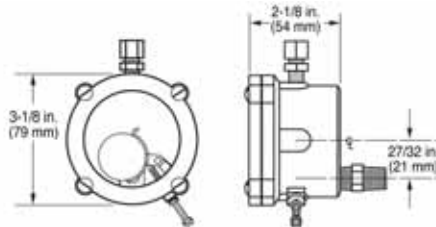
L100 and L100W

Shipping Dimensions:

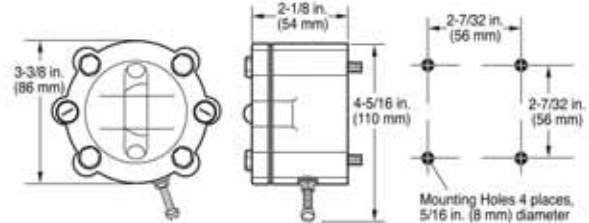
- L100: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)
- L100W: 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)

Shipping Weight:

- L100: 2 lbs. (0.91 kg)
- L100W: 2 lbs. (0.91 kg)

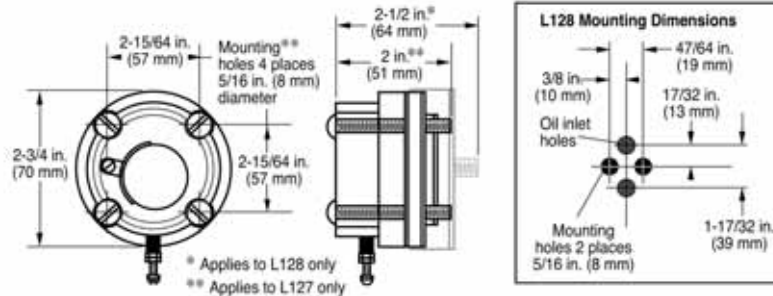


L120



Shipping Weight: 1 lb 8 oz (0.68 kg) 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:

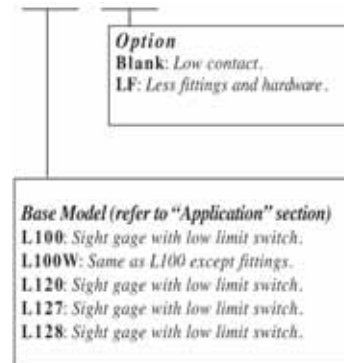
- L127: 8 oz (0.23 kg)
- L128: 10 oz (0.36 kg)

Shipping Dimensions (L127 and L128):

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

How to Order

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



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 <http://www.fwmurphy.com/warranty>