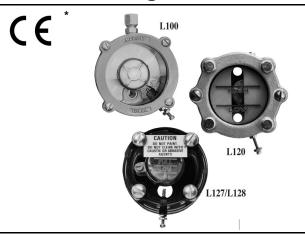


Float Actuated Oil Level Swichgage[®] Instrument For Small Engines and Pumps



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

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 mm2x 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 mm2x 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)

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

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

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Typical Wiring Diagram

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

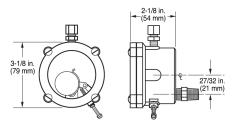
Murphy magnetic switch Magneto OR

Dimensions

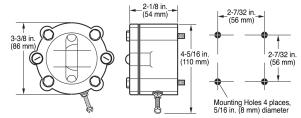
L100 and L100W

Shipping Dimensions: • L100: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)

- L100W: 4-3/4x 4-3/4x 3-1/4 in. (121 x 121 x 83 mm)
- Shipping Weight:
- L100: 2 lbs. (0.91 kg)
- L100W: 2 lbs. (0.91 kg)

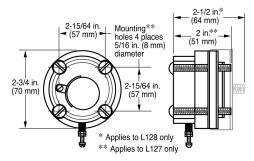


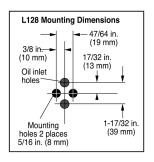
L120



 $\textbf{Shipping Weight:} \ 1 \ 1b \ 8 \ oz \ (0.68 \ kg) \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 - ^{1} / 4 \ in. \ (121 \ x \ 121 \ x \ 83 \ mm) \\ \textbf{Shipping Dimensions:} \\ \textbf{Shipping Dimensions:} \ \ 4 - ^{3} / 4 \ x \ 3 -$

L127 and L128





Shipping Weight:

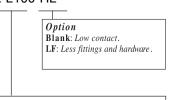
- L127: 8 oz (0.23 kg)
- L128: 10 oz (0.36 kg)

Shipping Dimensions (L127 and L128):

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

How to Order

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



Base Model (refer to "Application" section)

L100: Sight gage with low limit switch.

L100W: Same as L100 except fittings.

L120: Sight gage with low limit switch.

L127: Sight gage with low limit switch.

L128: Sight gage with low limit switch.