

Float Actuated Oil Level Swichgage® For Small Engines and Pumps

The 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 closed 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 shut down. Models are also available without limit switches.

The level instruments can be used on a variety of crankcases, pump gearcases or oil reservoirs — primarily on small engines and pumps. Installation is simple, and these instruments save on reduced downtime and repair costs.

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

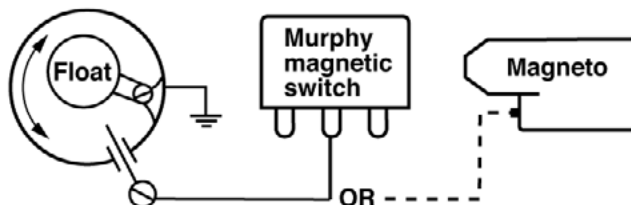
L120: Machined surface on crankcase such as Witte, National-Oilwell/Garland

L127: Machined surface on crankcase, specifically, Fairbanks-Morse ZC Series and Bell Engines

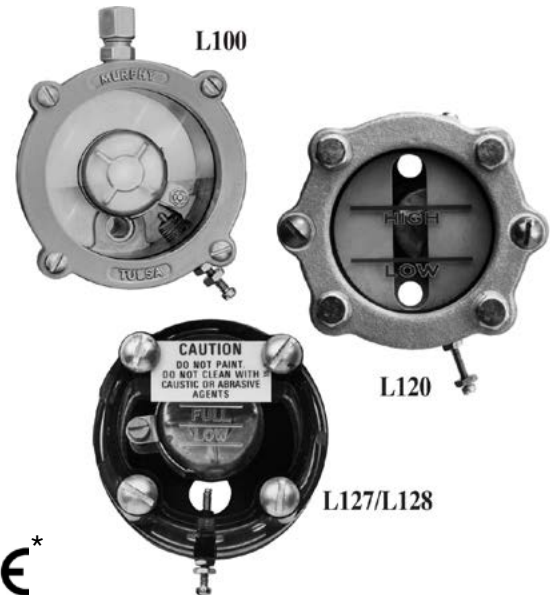
L128: Machined surface on crankcase, specifically, Arrow and Continental Emsco/Climax

Typical Wiring

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.



† Models available with high and low options.



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

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 required)

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)

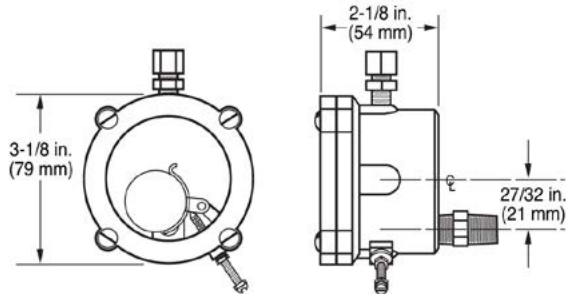
Mounting Bolts:

L127: 1/4-20 NC x 2 in. (4 required)

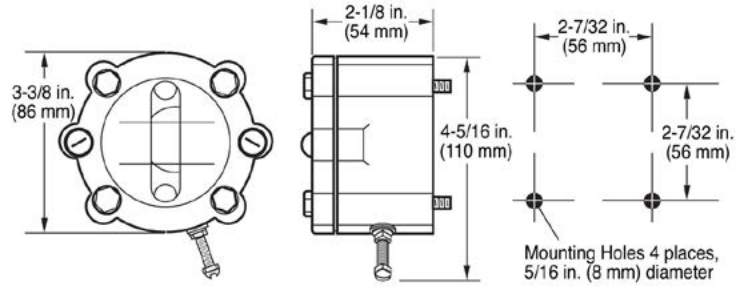
L128: 3/8-16 NC x 3/4 in. (2 required)

Dimensions

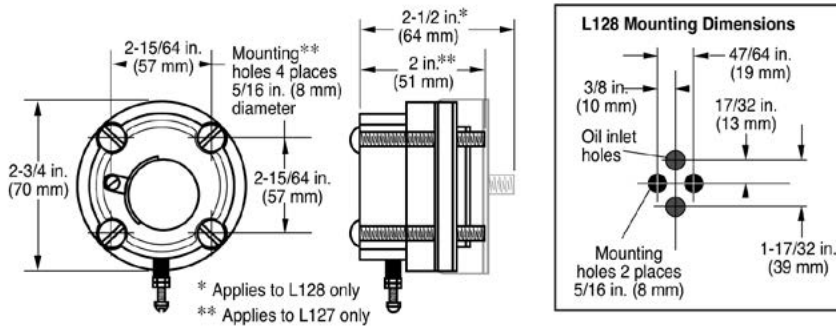
L100 and L100W



L120

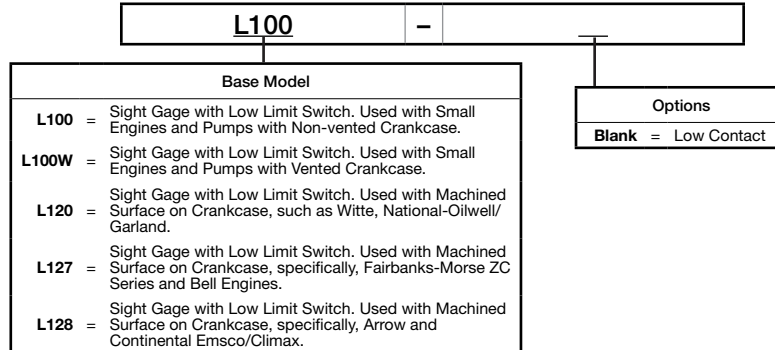


L127 and L128



How to Order

Options listed below. All configurations may not be available. Call your sales representative or Enovation Controls for more information.



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)

Warranty — A limited warranty on materials and workmanship is given with this Murphy product.

A copy of the warranty may be viewed or printed by going to www.murphybyenovationcontrols.com/support/warranty.htm