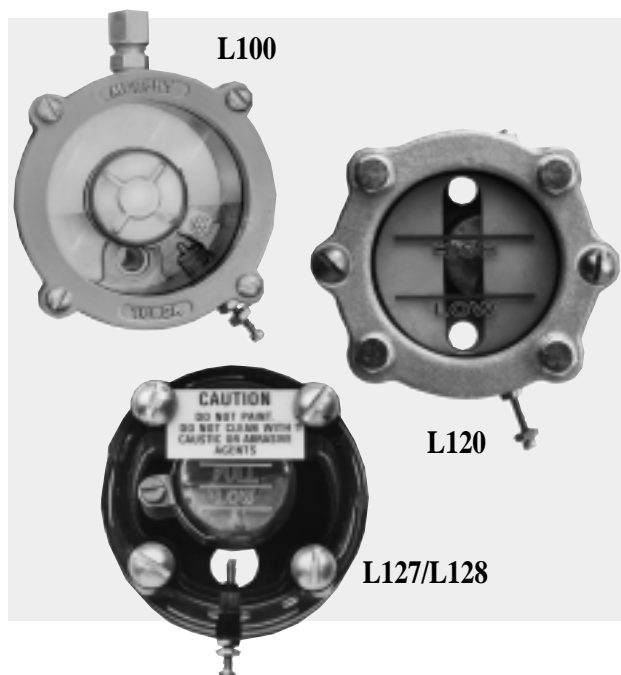


Float Actuated Oil Level SWICHGAGE®



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



Description

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 required)

Warranty

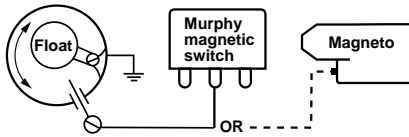
A two-year limited warranty on materials and workmanship is given with these Murphy products. Details are available on request and are packed with each unit.

† 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**.

Option
Blank: Low contact.
LF: Less fittings and hardware.

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.

Specify part number when ordering Repair Parts or Kit. Example: **15000181**

Repair Kit L100 and L100W:

15000103: Consists of glass, gasket, 4 screws, contact assembly, and float assembly.

Repair Parts L120 :

15010186: Contact screw assembly.

15010234: Float assembly.

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.

Dimensions

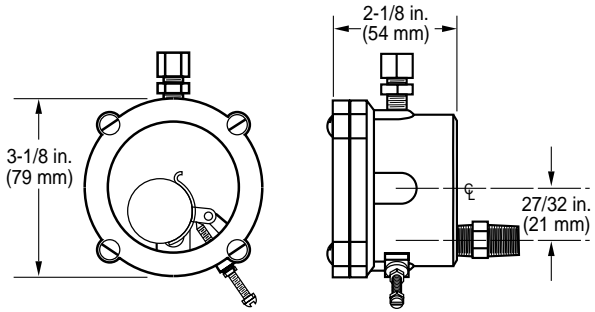
L100 and L100W

Shipping Dimensions:

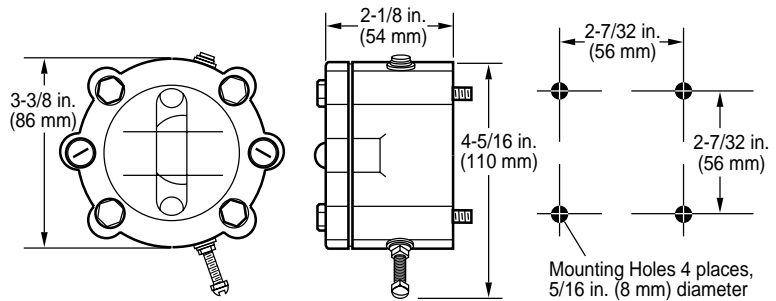
- L100: 5-1/4 x 5-1/4 x 5-1/2 in. (133 x 133 x 140 mm)
- L100W: 4-3/4 x 4-3/4 x 3-1/4 in. (121 x 121 x 83 mm)

Shipping Weight:

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



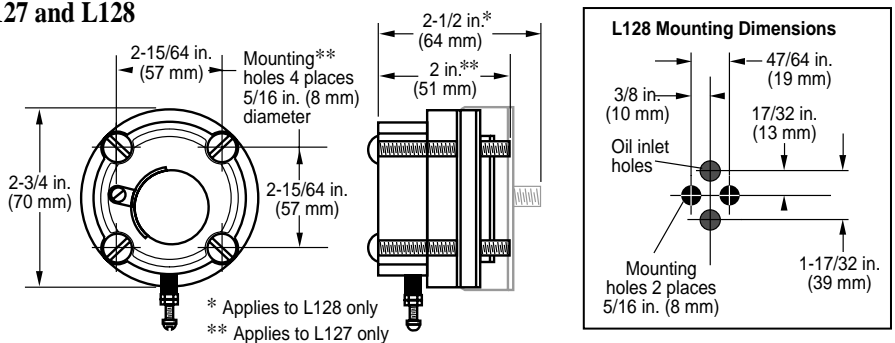
L120



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)



FWMurphy

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



CONTROL SYSTEMS & SERVICES DIVISION

P.O. Box 1819; Rosenberg, Texas 77471; USA
(281) 342-0297 fax (281) 341-6006
e-mail sales@fwmurphy.com

MURPHY DE MEXICO, S.A. DE C.V.

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

FRANK W. MURPHY, LTD.

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

For Service in French:

Pour service en français:
+44 1722 410697 fax +44 1722 410088
e-mail france@fwmurphy.co.uk
www.fwmurphy.co.uk/francais.htm

MURPHY SWITCH OF CALIFORNIA

41343 12th Street West
Palmdale, California 93551-1442; USA
(661) 272-4700 fax (661) 947-7570
e-mail sales@murphyswitch.com
www.murphyswitch.com

MACQUARRIE CORPORATION

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