



LevelStar

Installation, Operation and Maintenance

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Specialists in Liquid Level Indication

Principles of Operation

The LED Flag Indicator is installed in conjunction with the Magnicator II magnetic level gage. It is a highly visible local liquid level display. The LED's are switched with magnetic switches that activate or de-activate in correspondence to the location of the float in the Magnicator II gage.

The LED Flag Indicator runs continuously. The operating life of the LED's is 100,000 hours under normal conditions.

Storage and Handling

The Jerguson LED Flag Indicator meets or exceeds all applicable specifications when they are shipped from the factory. All units should be inspected upon receipt to ensure that no damage has been incurred during transit. If damage has occurred, a claim should be filed with the carrier immediately. Units should be stored in an area protected from the elements and corrosive fumes, in a secure manner where they can neither fall, nor be struck by other objects. Care should be taken to protect the window and the end connections from damage. Avoid placing any objects directly on the product at any time.

Components

There are three main components that make up the LED Flag Indicator, the light strip, the power supply, and the cable connecting these two main pieces. The cable may have more than one piece depending on the required distance between the light strip and the power supply.

Installation

CAUTION: All lights are tagged with the service conditions for that particular unit. This information is located on the power supply housing. The ratings should be reviewed prior to installation and again prior to start-up, to ensure proper operation in the installed environment. Should there be any doubt as to the applicability of a unit for the installed environment, consult the factory before placing the unit into service.

Note: All installation steps should be performed by a qualified technician and should be executed in accordance with all applicable national and local codes.



The light and power supply should be checked to ensure that they contain no foreign matter, and that the end connections are clean, undamaged, and in line with existing conduit.

Step by step instructions:

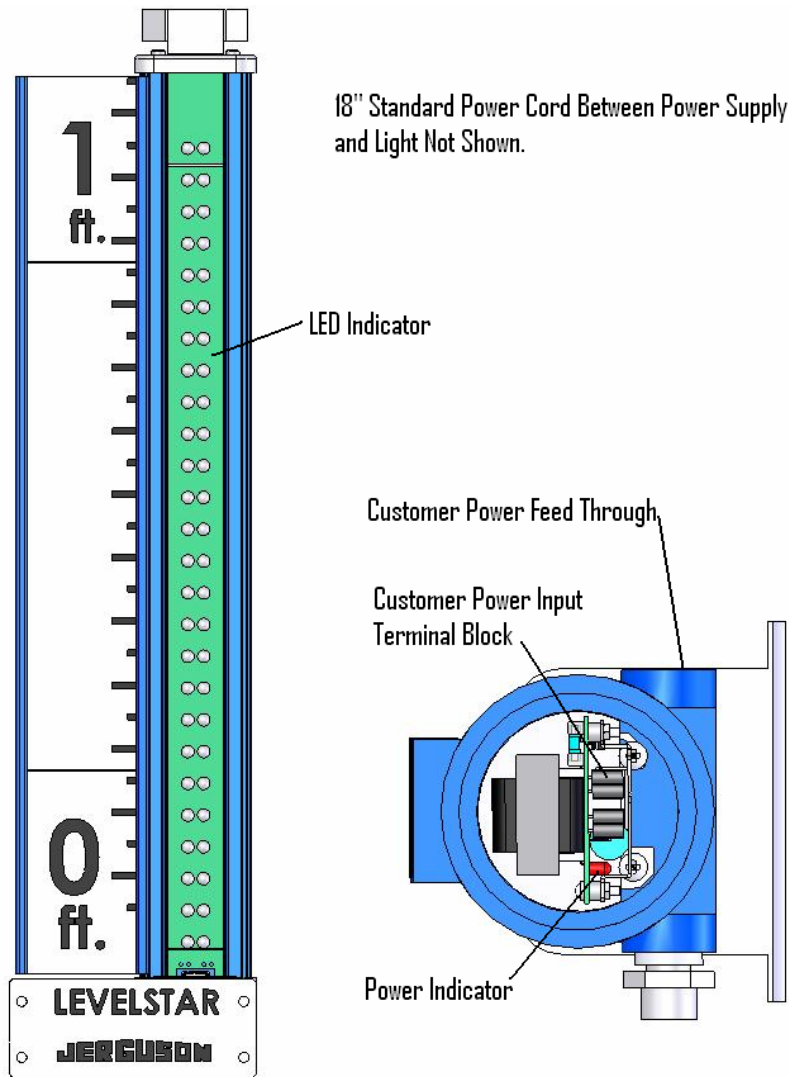
- 1) Place the light strip onto the Magnicator level gage. Note the "0" or minimum value on the scale (it will be the first set of lights on the light strip).
- 2) Secure the light strip at the top and bottom with the supplied stainless steel hose clamps. Secure the stainless steel "c" clamps in the middle of the light strip for additional support.
- 3) Mount the power supply enclosure in a secure location. Standard location is on the Mag Gage column below the lower process connection. Extension power cords between the power supply and indicator are available to remote mount the power supply. The power supply enclosure can be mounted up to 72 feet from the light strip. See page 3 for extension part numbers.
- 4) Remove the cover on the power supply. Connect the supply voltage to the terminal block noted "AC IN". Replace cover on enclosure before applying AC power to the circuit. **NOTE: Do not connect power with the blue power cord connected to the indicator.**
- 5) If the indicator is supplied with 2 power supplies, repeat steps 5 for the second power supply. See page 4 for pictorial.
- 6) After AC has been turned on, connect blue cord(s) between power supply(s) and Indicator. Most or all of the lights should come up red. LED's that remain green indicate the location of the float. If other LED's remain green, they can be reset with a strong magnet from the side of the Indicator extrusion. Clark-Reliance recommends McMaster Carr part# 5862K38 Neodymium disc or equivalent.

SPECIFICATIONS

Power Supply: 120 or 240 VAC @ 50-60 Hz
Power Consumption: 400mA @120 VAC 200mA @ 240 VAC
Est. Life: 100,000 Hours (continuous)
Agency Approvals: FM Ordinary Locations
CFM Ordinary Locations
Wire Size: Min 18 AWG / Max 12 AWG
Max dist. from
power supply to light: 72 ft (22m)
Ambient Temperature: -40 F (-40 C) to 150 F (65 C)



Figure 1: LevelStar with Single Power Supply



Spare Parts

Item	Part Number	Description
1	S23373-120	120 VAC Power Supply Board / Bracket Sub-Assembly
2	S23373-240	120 VAC Power Supply Board / Bracket Sub-Assembly
3	S23241-120	120 VAC Power Supply with NEMA 4X Enclosure
4	S23241-240	240 VAC Power Supply with NEMA 4X Enclosure
5	E-F-2AG-P375	Fuse
6	V20601	2.5 ft Power Extension Cord
7	V20601-6.5	6.5 ft Power Extension Cord
8	V20601-16	16 ft Power Extension Cord
9	V20601-32	32 ft Power Extension Cord



Figure 2: LevelStar with 2 Power Supplies (over 10 ft)

