

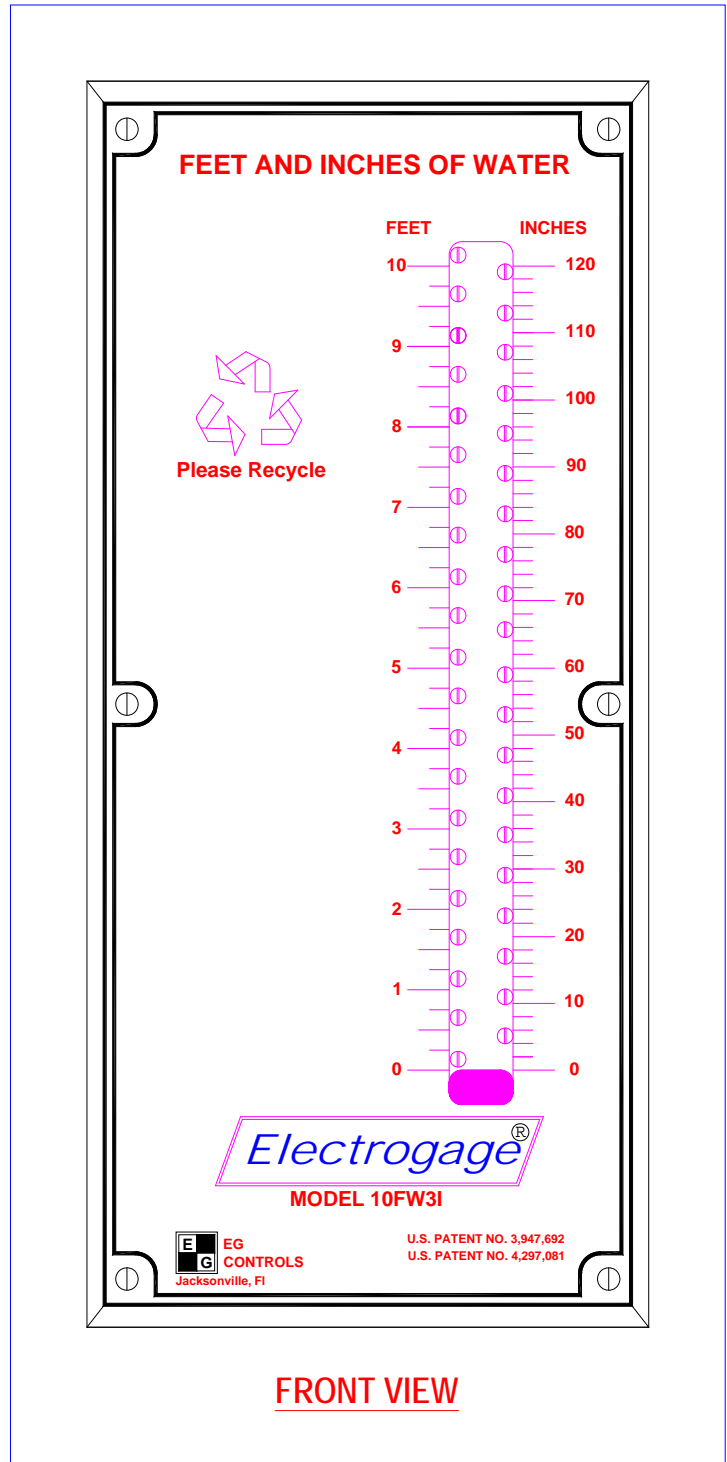
Product Overview

The Electrogage is designed for use with purge, bubbler systems but can be used in any system where the liquid level is to be displayed and electrically controlled. As the liquid level increases above the bottom of the bubbler tube, the pressure increases in the purge system. The Electrogage senses this pressure and shows it clearly on its wide, easy to read indicating column.

The Electrogage is a combination of two well known and time proven principles: a well type manometer and electrical conductivity. When pressure is applied to the well side of a manometer, it causes the mercury in the indicator column to rise in direct proportion to the amount of pressure applied. As the mercury rises and falls, it makes and breaks a series of contacts built into the indicating column. The number of contacts it touches will be proportional to the pressure applied. The electrical conductivity of the mercury is used to complete each contact circuit. These contacts are then used by the control circuitry to control an almost unlimited number of pumps, valves, alarms and other components.

The Electrogage has one common contact which maintains electrical connection with the mercury at all times. A series of 41 control contacts located in the indicating column are precisely located to produce an electrical output for every 3" of water pressure applied to the instrument.* Each contact is clearly labeled to show the level at which it will be activated. The control contacts can be used to directly energize conventional electromechanical relays or PLC inputs, as desired, without any other interface devices needed.

*All stated measurements refer to a 10' Electrogage. The gage can also be scaled to other levels.



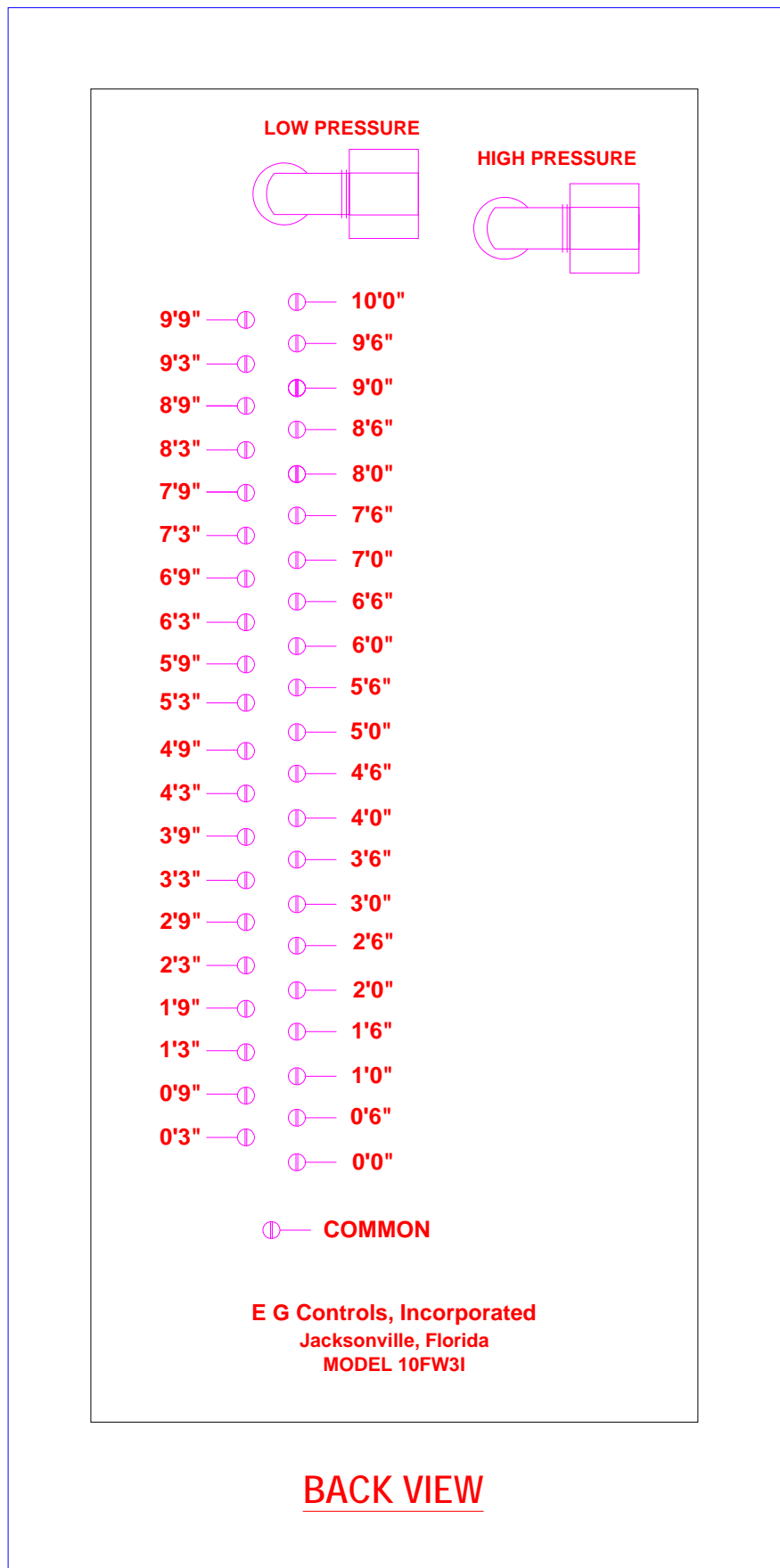
Level control adjustments are simple and straightforward using the clearly labeled terminals. Select the control contact for the level desired and wire to it. This will produce an electrical output at that precise liquid level. No other adjustments or calibration are needed on the gage.

Liquid manometers are considered a primary standard and are frequently used in laboratories to measure other instruments. The Electrogage is precision machined from a solid block of acrylic to a tolerance that guarantees accuracy better than plus/minus ½ % of full scale. Repeat accuracy is 100% with zero dead band when making and breaking electrical contacts. The Electrogage is carefully calibrated at the factory by the critical fill method. The mercury is then sealed with microporous filters that pass air and gases but not mercury. The Electrogage is always accurate and cannot get out of calibration since it has no moving parts, such as gears, levers, cams, springs, bearings or diaphragms. Only the liquid level mercury column moves.

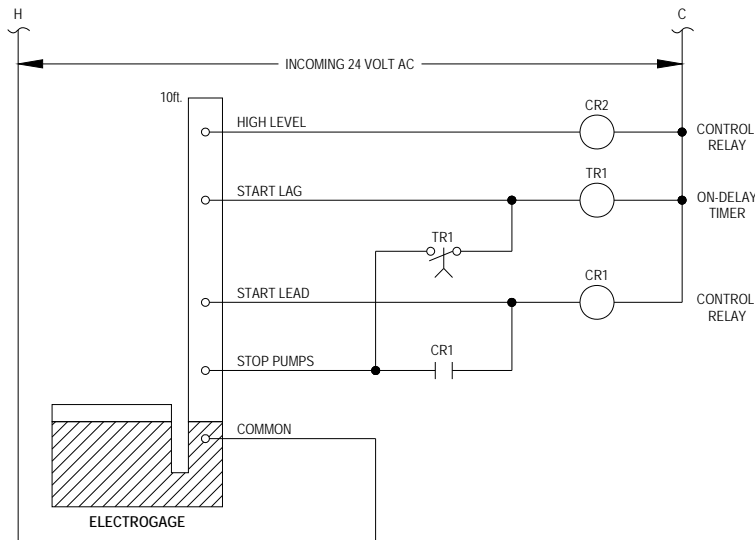
The Electrogage is made of high quality, corrosion resistant materials and is designed to be impact resistant. Designed to be mounted on a vertical surface, the Electrogage can be remotely located up to 1000 feet from the liquid being measured without affecting accuracy.

To keep the Electrogage in optimal condition, filters should be replaced, as follows:

- The 2 inline filters attached to the compressors (part #FIL-10A) should be replaced every 6-8 months. These filters may begin to discolor to indicate that replacement is needed.
- The charcoal type filter attached to the Electrogage (part #FIL-2P) should be replaced every 18-24 months.



Wiring Diagram



TYPICAL SCHEMATIC DIAGRAM

Technical Specifications

Dimensions:	12"H x 5.5" W x 1.5"D
Control Circuit Wiring:	16 gauge minimum, type MTW or THW, rated for 300 volts.
Air Compressor Recommendation:	Minimum of .6 SCFH with a maximum air pressure of 5.5 PSIG (152 inches of water column)
Accuracy:	+/- 1/2% of full scale with 100% repeat accuracy
Pressure Range:	Maximum 15 psi
Contact Rating:	5 VA, 24 VAC Maximum
Range:	0 - 10' water Consult factory for other ranges.

Suggested Text for Spec Writers

"The wet well level shall be monitored and maintained by a well-type manometer with mercury media that makes and breaks a series of electrical contacts as the mercury rises and falls in direct proportion to the change of the liquid level in the wet well. Level indication shall be vertical in movement.

The liquid level indicator/controller shall have a viewing window which shall display the mercury column, and shall be calibrated in both feet and inches of water, indicating the liquid level in the wet well. The unit shall be mounted on the inner door.

Accuracy: Accuracy shall be + or - 1/2% of full scale with 100% repeat accuracy and zero dead band when making and breaking electrical contacts.

Range: Indicated full scale range shall be zero to ten feet with front scale graduated in feet (0 to 10 feet) and inches (0 to 120 inches).

Control Points: The vertical, linear mercury column shall have a total of 40 control points providing an electrical output for every three (3) inches of water level, and shall be individually labeled as to the level at which they are activated. With the tool provided, liquid level set-points may be changed at the control panel without shutting off power to the panel. The liquid level indicator/controller shall be manufactured from corrosion resistant material, i.e. stainless steel, acrylic, nylon, etc. The liquid level indicator/controller shall be manufactured by EG Controls, Inc., Jacksonville, Florida, Model 10FW31, or approved equal."

Manufacturer Information

The ElectroGage is exclusively available from:



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 Jacksonville, Florida 32256
 Telephone: 904-292-0110 Fax: 904-292-0119
 Email: sales@egcontrols.com
 Visit our website at www.egcontrols.com