



## *Instruction Manual*

# **160- Series**



# **Sensaras**

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USA  
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## **General.**

The 160- Series is an ideal solution for detecting liquid in compact spaces. With integrated electronics it is a direct replacement for Float Switches, Capacitance and Optical Detectors. The PLS 160- detects liquid irrespective of change in density color, dielectric constant or viscosity. The PLS 160- does not require calibration or periodic maintenance. The sensor is constructed in 316 SS and is available in lengths of up to 99". With ¼", ½" and ¾" NPT process connections. Sensaras can provide the PLS 1600 in a variety of engineered plastics to obtain the ideal corrosion resistance in process vessels.

## **Installation.**

Prior to installation a preliminary operation check is recommended. Inspect the unit for visual damage and report to the company if any is found.

Verify the power source with that of the model. **See wiring diagram.**

Check the output wires and condition. Connect the power source to the Red and Black wires.

Turn on power.

Check the output wires insure that nothing has changed.

Fill a container with water and dip the probe to the actuation point.

The output should switch (see wiring diagram).

Remove the probe from the liquid the output should switch back.

The system is functioning correctly.

Disconnect the power source from the sensor and proceed to final installation.

(Should the sensor not function correctly please notify the factory immediately)

## **Final Installation.**

Install the sensor into the matching process connection as purchase order determined.

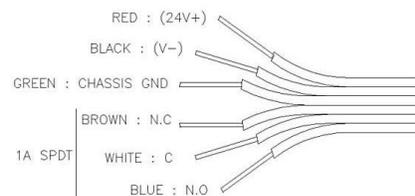
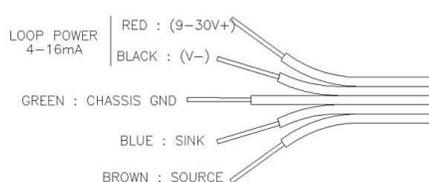
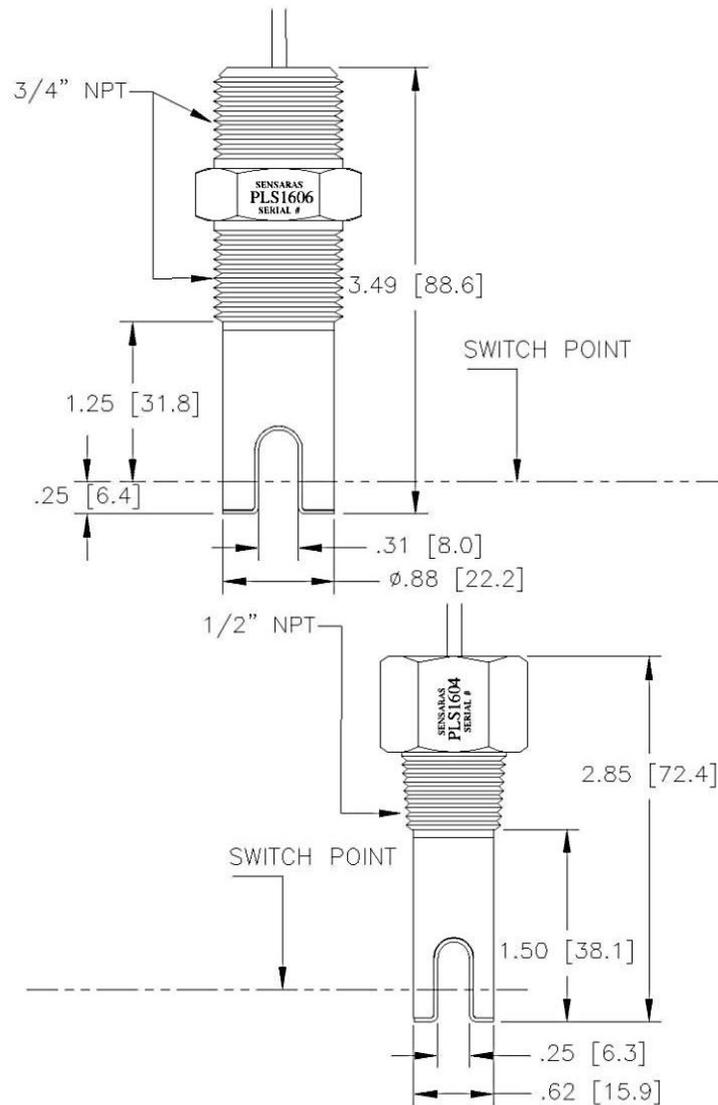
Use pipe compound or tape on threaded connections as required for a good seal. Do not over tighten.

Run power and output wires to electronic enclosure, follow National Electrical Codes required.

## Maintenance.

The sensors have no moving parts but can become clogged by liquids that tend to coat the surface. Periodically clean the sensor if used in such liquids.

## The Electronic Wiring Diagram and Mechanical Dimensions.



## **Warranty:**

Sensaras LLC, products are warranted to be free from defects in material and workmanship for a period of 12 months from the date of shipment of the original Purchaser and Order. This warranty applies to the general purchaser and to components installed, serviced and operated according to the instruction manual. Sensaras will repair or replace at its option.

Claims are to be made in the warranty period. It does not apply to any component that has been damaged due to improper installation, exposed to unusual atmospheric conditions, misuse, misapplied or damage due to neglect, damage, abuse, altering or repairing.

- The Sensaras products must be maintained and installed in strict accordance with the National Electrical Code and the applicable.
- The Sensaras Product Instruction Bulletin that covers installation, operation and proper maintenance. Failure to observe this information may result in serious injury or damages.
- Please adhere to the pressure and temperature limitations shown in drawings data sheets and specifications. These limitations must not be exceeded. These pressures and temperatures take into consideration possible system surge pressures / temperatures and their frequencies.
- Selection of materials for compatibility with the media is critical to the life and operation of the Sensaras products.
- Ambient temperature changes do affect switch set points, since the gravity of a liquid can vary with temperature.
- Our sensors have been designed to resist shock and vibration. However, shock and vibration should be minimized.
- Filter liquid media containing particulate and/or debris to ensure the proper operation of our products.
- Our sensors must not be field-repaired.
- Physical damage sustained by product may render it unserviceable.

## **Material Returns:**

Returns are accepted on stock items up to 30 days from date of order. You must contact our Returns Department for a Return Material Authorization (RMA) # Return the goods - freight prepaid - in the original container and include original packing slip.

C. O. D. returns are not accepted. Sensaras reserves the right to apply restocking charges.

Telephone: 1-631-524-5775.

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