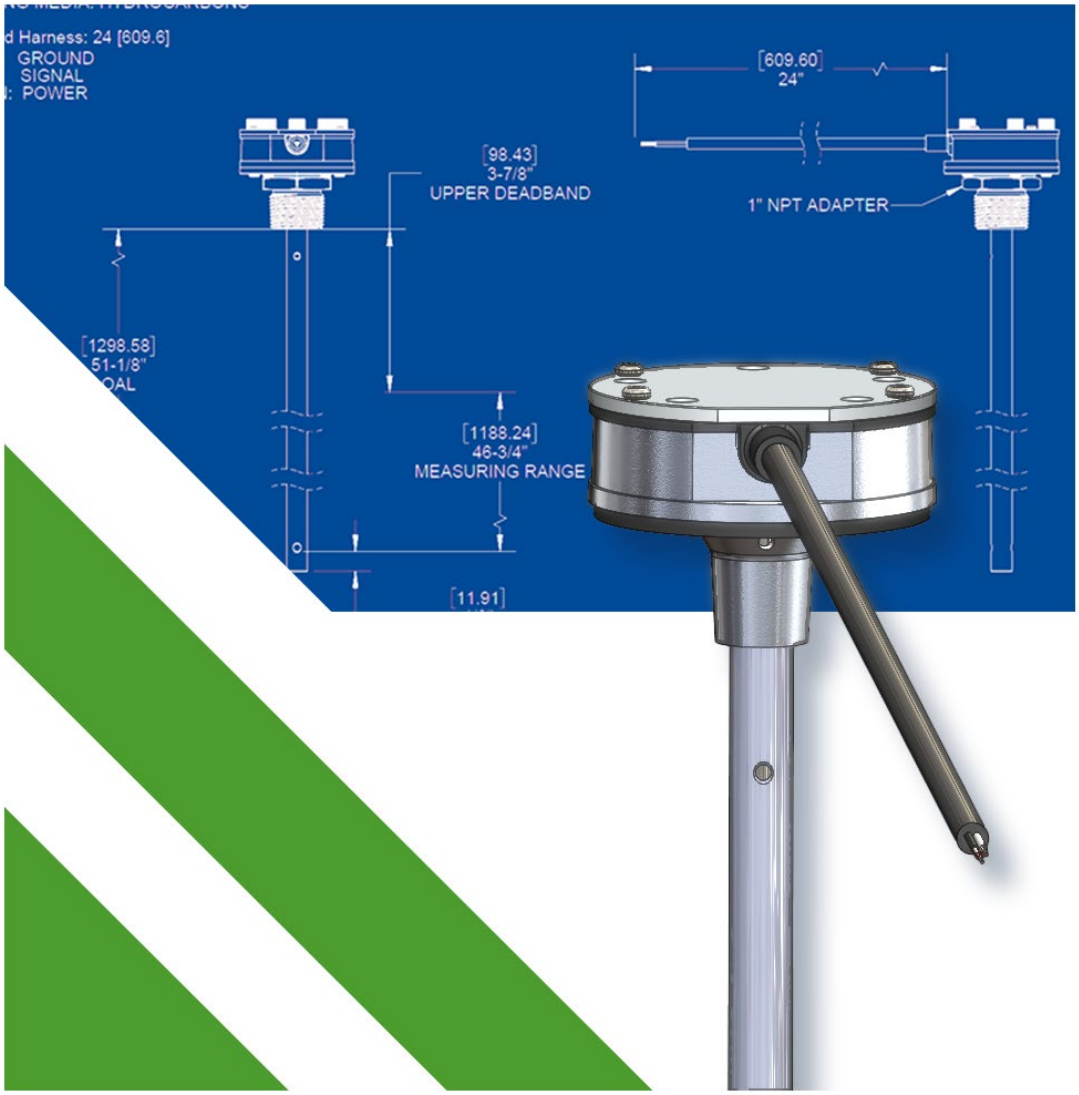
Rochester Sensors | QUICK TURN

User Guide for Guided Wave Radar II (GWRII) Sensors

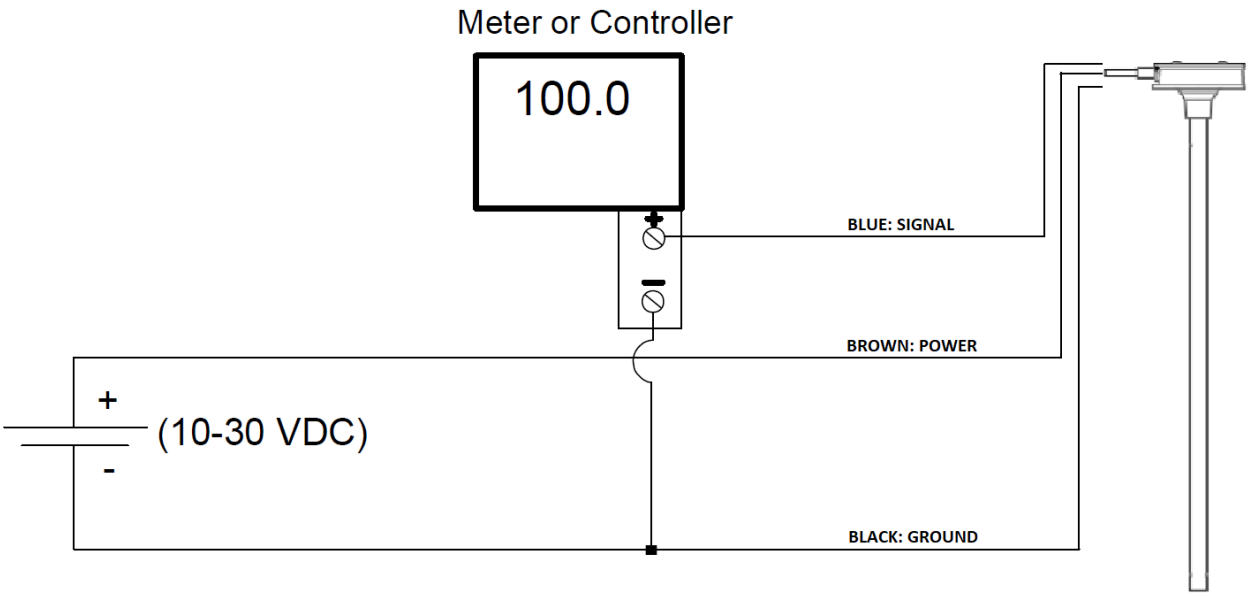


9402 INSTALLATION GUIDE

When installing the 9402, mount the sensor into the tank with the matching fitting. When installing into a metal threaded fitting or coupling, pipe sealant or appropriately rated PTFE tape is recommended to be used on the threads.

Associated apparatus must be installed in accordance with its manufacturer's control drawing. Associated apparatus must not be used in combination unless permitted by the associate's apparatus certification.

WIRING DIAGRAM



The sensor should be wired by qualified, licensed technicians only. Three wires are present exiting the GWRII sensor. The blue wire connects to the + signal input of the meter or controller. The Brown wire connects to the +VDC supply source. The black is connected to both the negative terminal of the voltage source and the – signal input of the meter or controller.

OPERATION

The 0-5 (.05-4.5 VDC) VDC and 4-20mA sensors operate on a nominal power supply of 10-30VDC (9-32 VDC limit). The sensor will output a linear signal by default over the calibrated range (other calibrations possible at the factory for special applications).

The liquid level will be indicated by the output of the sensor by the selected signal output configuration. Low value signal indicated empty; high indicates full. Values are accurate to ±3% of the full--scale measurement and will reflect changes as small as 2mm.

CALIBRATION & MAINTENANCE

No calibration is required in the field. For reliable operation, the probe should remain clean and free from excessive particulate matter that may clog the tube and impede the measurement. Excessive mechanical force may deform and damage the probe, thus reducing the sensing capabilities. When cleaning, use only appropriate non-abrasive and non-corrosive cleaning solutions (to prevent corrosion, avoid sulfuric acid and hydrochloric acid solutions).

TROUBLESHOOTING

Verify the wiring is correct and undamaged. Ensure proper power is being supplied to the sensor. If problems persist, isolate the sensor from the system and provide an independent power supply. Monitor the output with a DMM as the probe is moved in and out of the calibrated working fluid. Double check wiring and then contact RS-QT for assistance if further troubleshooting help is required.