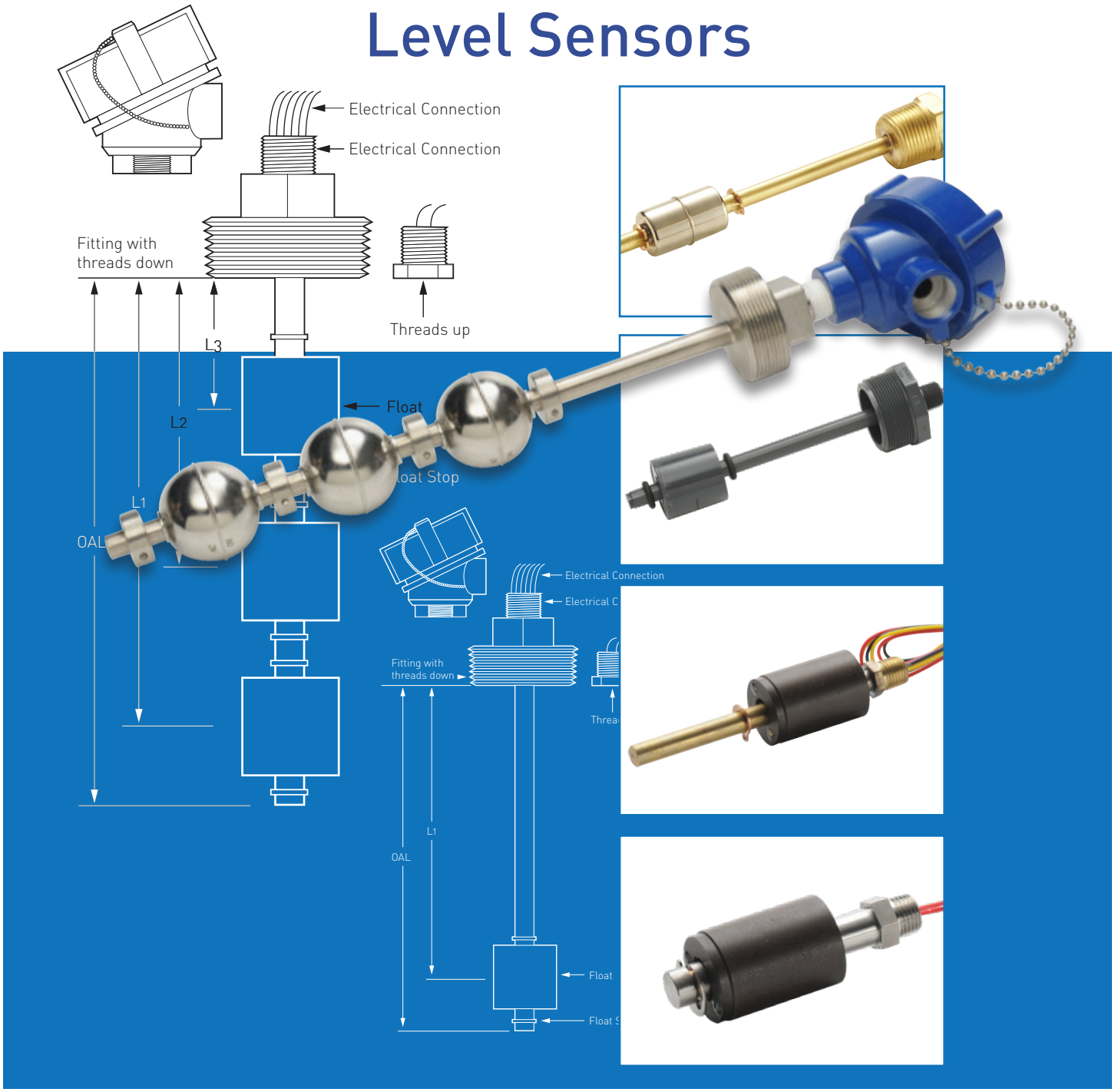
Rochester Sensors

The Ultimate Guide to Float Level Sensors:

# Installation Guide to Continuous Level Sensors



## 4 20 mA continuous level float sensors

### Installation

When initially installing the continuous level sensor, mount the sensor into the tank with the matching fitting. When threading metal threads into a metal coupling, pipe sealant or Teflon tape is recommended. After the sensor is mounted in the tank, add the conduit. Use only appropriate conduit hubs that are specified to maintain the desired UL/CSA rating. For more information see the “Liquid Level Float Sensor Installation Guide” section.

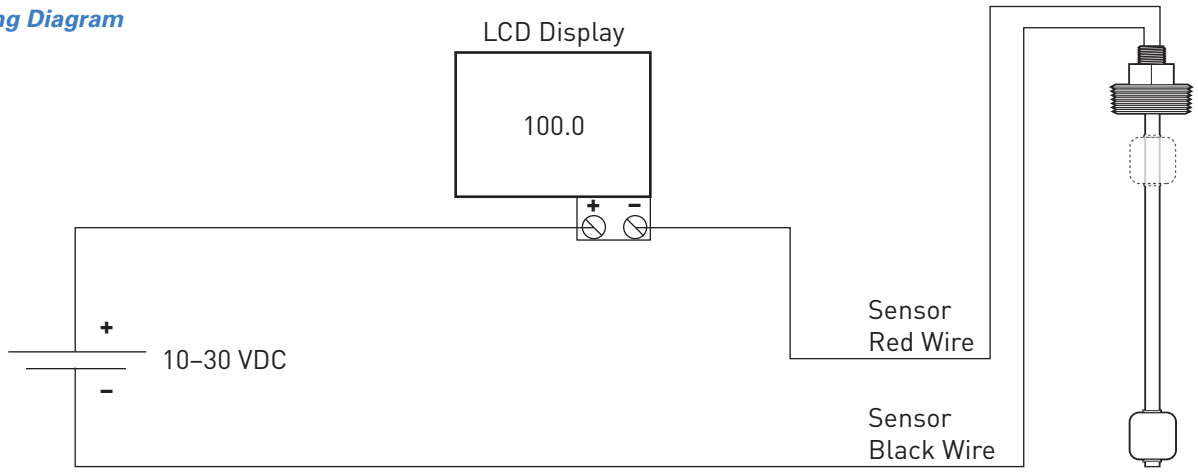
This sensor should be wired by qualified, licensed technicians (CL wiring diagram). The 4-20mA loop powered sensor has two wires exiting the housing of the sensor. The red wire connects to signal (or + VDC), the black wire connects to - VDC.  To protect the sensor, we suggest the power supply be wired with a fast blow fuse rated between 30mA and 100mA.

### Operation

The 4-20mA sensor operates on a loop power or a separate power supply of 10-30 VDC. The sensor will provide a linear output between 4-20mA across the measuring range. When the float is at the bottom of the measuring range (furthest away from the fitting) the signal output will be 4mA. As the float moves closer to the fitting, the mA output will increase until it reaches the top of the measuring range, providing a 20mA signal. The mA signal will change every 1/4" of float movement. The mA value will change with every 1/4" of float movement. The value of mA change per 1/4" of float movement equals 4 divided by total measuring range in inches.

Our loop powered 4-20mA sensors are reliable and easy to install. These sensors will arrive at your plant, ready to install into your equipment. No calibration is needed. Simply install into your tank and connect the two wires — that’s it. These sensors are tough. They are used in demanding applications with years of reliable, accurate performance. There is no drift and they never need calibration.

*CL Wiring Diagram*



## 0-5VDC continuous level float sensors

### Installation

When initially installing, mount the sensor into the tank with the matching fitting. When threading metal threads into a metal coupling, pipe sealant or Teflon tape is recommended. After the sensor is mounted in the tank, add the conduit. Use only appropriate conduit hubs that are specified to maintain the desired UL/CSA rating. For more information see the "Liquid Level Float Sensor Installation Guide" section.

This sensor should be wired by qualified, licensed technicians (0-5 VDC CL sensor wiring diagram). The 0-5vdc continuous level sensor has three wires exiting the sensor. The red wire connects to the + of your meter or controller, the white wire connects to + VDC, the black wire connects to - VDC and the - of your meter or controller. To protect the sensor, we suggest the power supply be wired with a fast blow fuse rated between 30mA and 100mA.

### Operation

The 0-5 VDC sensor operates on a power supply of 10-30 VDC. The sensor will provide a linear output between 0 and 5 VDC across the measuring range. When the float is at the bottom of the measuring range (furthest away from the fitting) the signal output will be 0 VDC. As the float moves closer to the fitting, the VDC output will increase until it reaches the top of the measuring range, providing a 5 VDC output. The VDC signal will change every 1/4" of float movement. The VDC value will change with every 1/4" of float movement. The value of VDC change per 1/4" of float movement equals 1.25 divided by total measuring range in inches.

Our 0-5 VDC sensors are reliable and easy to install. These sensors arrive at your plant, ready to install into your equipment. No calibration is needed. Simply install into your tank and connect the two wires — that's it. These sensors are tough. They are used in demanding applications with years of reliable, accurate performance. There is no drift and they never need calibration.

*0-5 VDC CL sensor wiring dia*