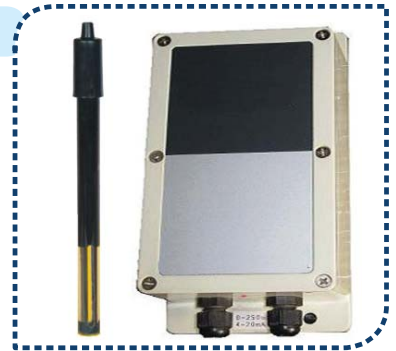


## TDS TRANSMITTER WITHOUT DISPLAY

### Special Features :

- Low Cost OEM Series
- Wide Temperature Range
- Precision Indication of TDS with Current Output
- Compact Version
- Automatic Temperature Compensation
- Weatherproof IP 65 Enclosure in fireproof ABS



### Applications :

TDS691 Conductivity Transmitter is one easy to use wall mounting transmitter for continuous monitoring. Available without the LCD display, the transmitter can transmit the TDS value of your solution with a very high accuracy with added option of self calibration. With Internal temperature compensation, TDS691 delivers fast and high accuracy. Precision TDS transmitter immediately detects changes in the Concentration of the total amount of dissolved solids in the solution. With a 230V AC power supply, This instrument features 2 wire electrodes making it easier in the world to facilitate the replacement of used electrodes

### Performance Specifications :

TDS Range	: 0~10000 ppm
Max Calibrated Range	: 0 ~ 5000 ppm (Other Ranges Available On Demand)
Accuracy	: $\pm 1\%$ of F.S
Operating Temp. (Transmitter)	: - 0°C to 80°C
Storage Temp. (Transmitter)	: - 30°C to 85°C
Operating Temp. (Sensor)	: 0°C to 65°C
Storage Temp. (Sensor)	: - 30°C to 85°C
Max Pressure (Sensor)	: 100 psig
Power Supply	: 230V AC
Electrode Connection	: 2 Wire Electrodes
Electrode Type	: mV
Output	: 4-20 mA,(linear as per Calibrated Range)
Enclosure	: ABS Moulded Housing
Mounting (Transmitter)	: Wall Mounting
Process Connection	: 1/2" NPT (m)
Calibration	: Internal Span and Zero using Potentiometers
Agency Approval	: CE
Calibration Protocol	: COML

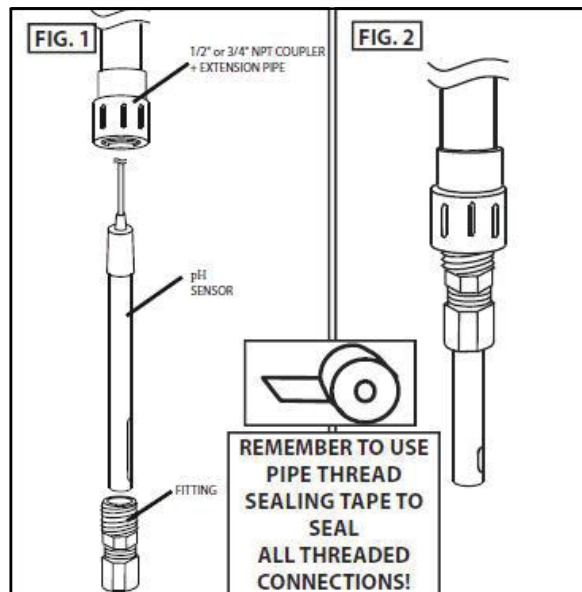
## TDS TRANSMITTER WITHOUT DISPLAY

### ⚙ Mechanical Installation :

**Submersion Installation.** The CS150 or CS200 electrode can be submersed and mounted in a tank for conductivity measurement using gland and nut fitting FC50P (1/2" NPT) or FC75P (3/4" NPT). The FC50P or FC75 must first be inverted so the nut is pointed downwards. Loosen the nut by turning clockwise (remember that fitting is inverted). Slip electrode through hole in nut until desired depth is reached. Tighten nut (hand-tight) by turning counterclockwise. The maximum pressure unit is 100 psig.

Refer to FIG 1 and FIG 2.

**In-Line Installation.** Mounting in-line is also possible using FC50P or FC75P fittings. For in-line mounting it is suggested that the sensor be mounted through the side of the tee as shown in FIG 3 and FIG 4. The sensor must also be mounted such that the opening/slot in the body is pointed upward so as to allow any air bubbles to rise out of the sensor and escape with the flow. **Electrode Removal.** Simply reverse installation procedures above.



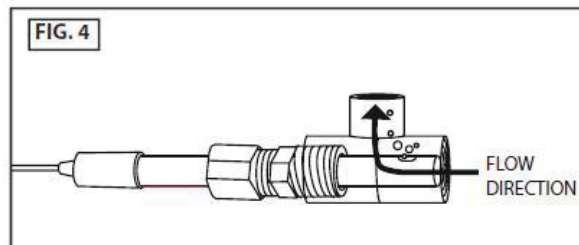
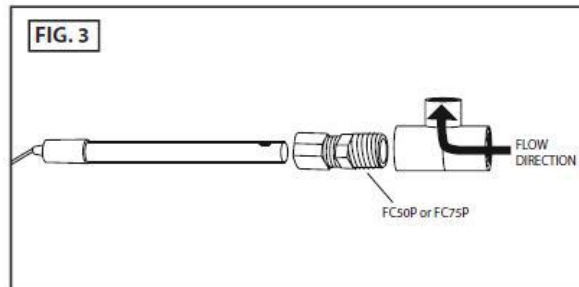
### ⚙ Electrical Installation :

**Installation for Electrodes without Temperature Sensor Included:** The S150 or S200 does not include temperature sensors. Each is supplied with two connections (red and black) and optional ground. Refer to FIG 5. These wires are for conductivity connection and have no unique polarity. Connect to any pH controller or transmitter per the manufacturer's wiring instructions at the connections marked "conductivity" or "cell".

## TDS TRANSMITTER WITHOUT DISPLAY

### ⚙️ Electrical Installation :

Installation for Electrodes with Temperature Sensor Included: Electrodes with part number S150TC-\_\_ or S200TC-\_\_ include a temperature sensor to provide a temperature signal so that your water quality instrument can perform temperature compensation (correct conductivity value to 25°C or 20°C depending on instrument manufacturer). The temperature wires are green and white. See FIG 6 for wiring details. These temperature wires can be connected to the instrument's temperature input in any order since the output is a resistance signal (Ohms). Please note that some meters require a three or four wire temperature signal input. In these cases, place a jumper wire (for three-wire type) or two jumper wires (for four-wire type) from the original lead to open temper



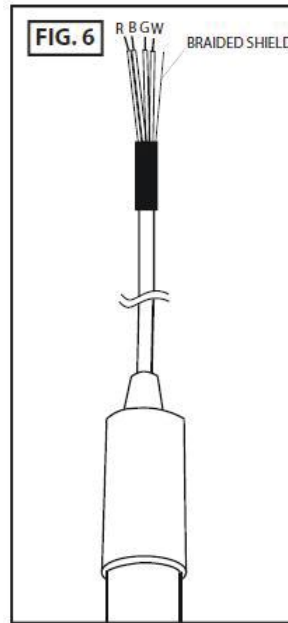
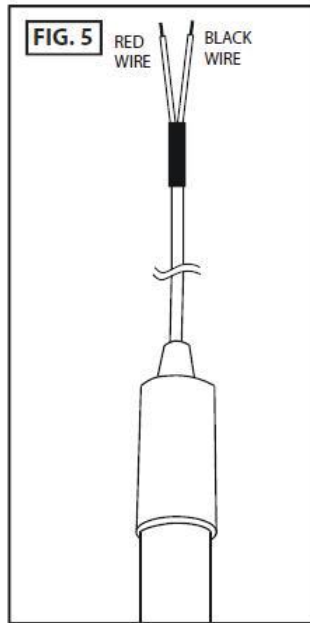
### ⚙️ Callibration :

Calibrate sensor according to meter/controller of the manufacturer's instructions using known certified conductivity standards. Contact Omicron @ [www.omicron-sensing.com](http://www.omicron-sensing.com) for a complete selection of calibration standards. To be sure, calibrate in a large beaker or bucket stirring sample with electrode. Avoid bubbles as much as possible as bubbles cause erroneous readings.

### ⚙️ Care & Cleaning :

Cleaning. S150 and S150TC electrodes have a glass / abs measuring surface. Clean surfaces with gentle detergent or 5% HCl in cup or beaker. Do not sand or abrade the surface as abrasion changes the surface area and will cause erroneous readings. S200 and S200TC electrodes have a platinum black coated platinum measuring surface. Do not touch platinum black surface since it will remove platinum black coating which cannot be replaced. Clean with 5%HCl or detergent

## TDS TRANSMITTER WITHOUT DISPLAY



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