



Great Lakes  
Replacement

### Features

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- Low Maintenance - Reduced cleaning requirements
- No electrode corrosion - Toroid is fully encapsulated
- One Wetted Material - Easier chemical compatibility
- Wide Measuring range
- Automatic Temperature Compensation

### Description

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The AquaMetrix ES series toroidal conductivity sensors are used in processes where conventional contacting sensors may become fouled or corroded.

Each sensor comes standard with a PT1000 RTD temperature device, which provides automatic temperature compensation to 25°C (77°F).

The AquaMetrix ES sensors can be mounted in flow through applications or submersion mounted in tanks or open vessels.

#### Operating Principle:

Toroidal conductivity sensors are made up of two-wire wound toroids encapsulated in a potting compound and encased in a plastic body. One toroid acts as a transmitter and the other as a receiver. An electric current is induced between the toroids through the process solution. This current is directly proportional to the conductivity of the process solution.

#### Notes:

*These sensors are made to interface with a third party analyzer. We recommend the Knick Eco Stratos.*

### Applications

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- Plating
- High purity water applications
- Pharmaceutical Applications
- Reverse Osmosis systems
- Fume Scrubbers
- Boilers
- Cooling Towers
- Textile Manufacturing
- Food and Beverage

## Model ES-1 Series Electrodeless Conductivity Sensors

### Technical Data

#### Wetted Materials

Talc reinforced blocked-copolymer Polypropylene, UV protected

#### Measuring Range

0-200  $\mu$ S to 0-2 S; Exact ranges and measurement accuracy are determined by the instruments, and values below 500  $\mu$ S are subject to increased error percentages due to zero offset and noise.

#### Temperature Compensation

Pt 1000 RTD, Class B

#### Operating Temperature Range

-10 to 105°C (sensor only, not mounting hardware)

#### Pressure/Temperature Limits

105 psi at 105°C

#### Maximum Flow Rate

10 ft (3 m)/sec

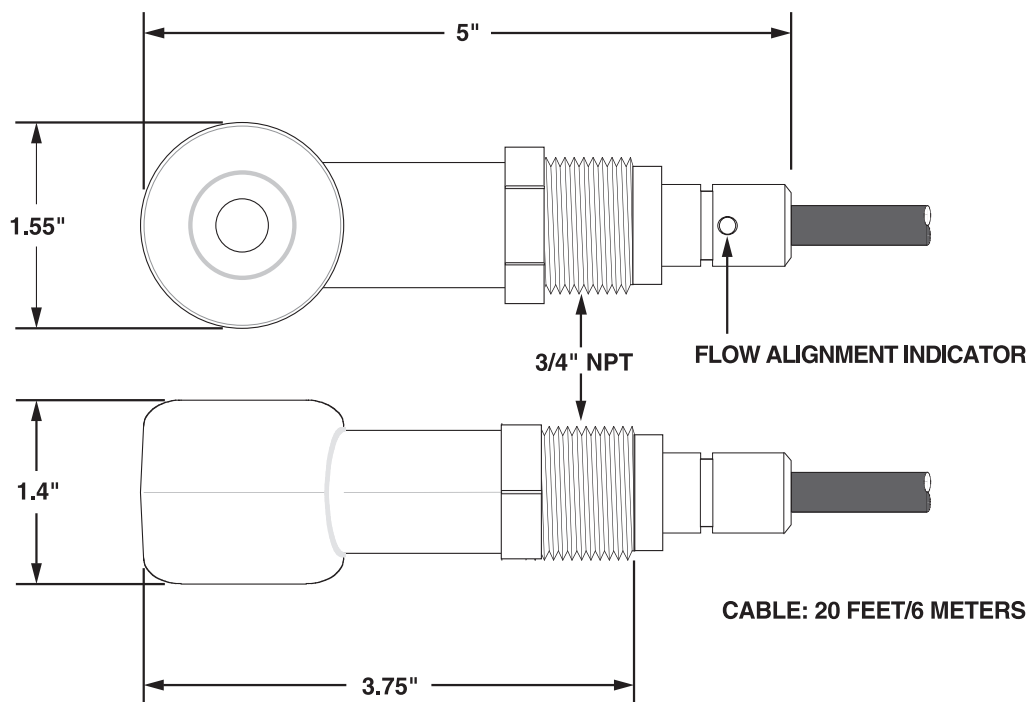
#### Sensor Cable

3 shielded pairs plus 2 isolated shields with enhanced PVC jacket rated to 105°C continuous; 20 ft (6 m) long, stripped and tinned instrument connection ends, matched to color code of GLI Models E33, E53, E63 and all other instruments that work with GLI Model 3700 electrodeless sensors

#### Process Connection

3/4" MNPT at cable end of sensor

### Dimensions



### Order Information

ES-1-A Polypropylene body with convertible style, 3/4" NPT thread fitting

### Related Products

C42-ES-XXX Interconnect extension cable- specify length

ES-5 series of 4-20 mA direct output toroidal probe