

Model 50 Inductive Conductivity Sensor

Features

- Low Maintenance
- No Electrodes Exposed to the Measured Solution
- High Chemical, Thermal and Mechanical Stability
- Compact Design
- Enclosure Rating IP67 (NEMA 6) Waterproof

Applications

- Percent Concentration of Acids, Bases and Salts
- Plating Tanks and Metal Treatment
- Cooling Tower Water
- Phase Separation
- Interface Monitoring
- Clean-in-Place (CIP)
- Sewer Monitoring in Pulp & Paper



Description

The Model 50 Inductive Conductivity Sensor is designed to measure the percent concentration of acids, bases and salts in solution. The sensor is ideally suited for processes that have the tendency to coat conventional conductivity cells. Inductive technology utilizes sealed coils that are magnetically coupled by the conductivity of the solution. There are no electrodes exposed to the measured solution thereby reducing the intervals for routine maintenance. Inductive Sensors are also referred to as Electroless or Toroidal conductivity sensors.

Specifications

Measuring Range	5 to 2,000,000 $\mu\text{S}/\text{cm}$
Cell Constant	2.0 cm^{-1}
Measured Value Deviation -20 to 100°C (-4 to 212°F)	5 $\mu\text{S}/\text{cm}$ + 0.5% of Measured Value
Measured Value Deviation >100°C (>212°F)	10 $\mu\text{S}/\text{cm}$ + 0.5% of Measured Value
Temperature Sensor	Pt100, 3 Wire
Temperature Rating	-20 to 125°C (-4 to 257°F)
Pressure Rating	20 bar (362 psi)
Process Connections	1" MNPT
Material of Construction	PEEK
O-Rings	Viton or PTFE
Enclosure Rating (Waterproof)	IP67 (NEMA 6)
Maximum Cable Length	55 meters (180 ft.)

Model 50 Inductive Conductivity Sensor

Ordering Information

Model	Description
M - 50 - A	2.0 Cell Constant (5.0 to 2,000,000 $\mu\text{S}/\text{cm}$)
Code	Description
2	1" MNPT Process Connection
Code	Description
B	PEEK Construction with Viton O-Rings
C	PEEK Construction with PTFE O-Rings
Code	Description
1	5.0 m (16.4 ft.) Fixed Cable
2	10.0 m (32.8 ft.) Fixed Cable
M - 50 - A - 2 - B - 1	Order Number Example

Dimensions

