CS3790 Electromagnetic Conductivity Sensor



Introduction:

Electrodeless conductivity sensor generates current in the closed loop of the solution, and then measures the current to measure the conductivity of the solution. The conductivity sensor drives the coil A, which induces alternating current in the solution; coil B detects the induced current, which is proportional to the conductivity of the solution. The conductivity sensor processes this signal and displays the corresponding reading.

Problems such as polarization, grease and contamination do not affect the performance of the electrodeless conductivity sensor. CS3790 series conductivity sensor automatic temperature compensation, can be applied to the conductivity of up to 2000mS/cm, temperature range between $-20 \sim 130^{\circ}$ C solutions.

The CS3790 series of electrodeless conductivity sensors are available in four different water resistant materials for a wide range of applications. Electromagnetic conductivity sensor can be used in metal surface treatment and mining, chemical and refining, food and beverage, pulp and paper, textile manufacturing, water treatment, wastewater treatment and other conductivity measurement.

Features

- Selection of solid material, no pollution
- Low maintenance
- A variety of conductivity sensor installation methods, including sanitary installation
- Optional materials: Polypropylene, PVDF, PEEK or PFA Teflon
- Standard integrated cable

Technical specifications

Model No.	C83790
Measuring Mode	Electromagnetic
Housing Material	PFA
Waterproof Rating	IP68
Measuring Range	0~2000mS/cm
Accuracy	±0.01%F.S
Pressure Range	≤1.6Mpa (Maximum flow rate 3m/s)
Temperature Compensation	PT1000
Temperature Range	-20°C-130°C(Limited by the sensor body material and installation hardware only)
Calibration	Standard solution calibrate and field calibration
Connection Methods	9 core cable
Cable Length	Standard 10m cable, can be extended
Application	Metal surface treatment and mining, chemical and refining, food and beverage, pulp and paper, textile manufacturing, water treatment, wastewater treatment and other conductivity measurement.