

# On-line Acid, Alkali and Salt Concentration Meter Electromagnetic Conductivity Transmitter T6038

# **Function**

Industrial online conductivity meteris a microprocessor-based water quality online monitoring control instrument, the salinometer measures and supervises the salinity (salt content) by conductivity measurement in fresh water. The measured value is displayed as percent and by comparing the measured value to a user defined alarmset point value, relay outputs are available to indicate if salinity is above or below the alarm set point value.







# Typical Use

This instrument is widely used in power plants, petrochemical industry, metallurgical electronics, mining industry, paper industry, medicine, food and beverage, water treatment, modern agricultural planting and other industries. It is suitable for softening water, raw water, steam condensate water, seawater distillation and deionized water, etc. It can continuously monitor and control the Acid, Alkali, Salt Concentration and temperature of aqueous solutions.

# **Mains Supply**

85~265VAC±10%,50±1Hz, power ≤3W; 9~36VDC, power consumption≤3W;

# MeasuringRange

HCL: 0~18%, 22%~36%; NaOH: 0~16%; NaCL: 0~10%; CaCL2: 0~22%; Conductivity: 0~2000ms/cm (Optional)

#### BROCHURE

# **On-line Acid, Alkali and Salt Concentration Meter**

### **Electromagnetic Conductivity Transmitter**

### **T6038**

### **Features**

1. Large display, standard 485 communication, with online and offline alarm, 144\*144\*118mm meter size, 138\*138mm hole size, 4.3 inch large screen display.

2. The data curve recording function is installed, the machine replaces the manual meter reading, and the query range is arbitrarily specified, so that the data is no longer lost.

3. It can be matched with our high-quality stainless steel, PBT quadrupole conductivity electrode, and the measurement range covers 0.00us/cm-2000ms/cm; NaOH: 0 - 16%; CaCL<sub>2</sub>: 0 - 22%; NaCL: 0 - 10%; HCL: 0~18%, 22%~36% to meet your measurement requirements for various working conditions.

4. Built-in conductivity/resistivity/salinity/total dissolved solids measurement functions, one machine with multiple functions, meeting the requirements of various measurement standards.

5. The design of the whole machine is waterproof and dustproof, and the back cover of the connection terminal is added to extend the service life in harsh environments.

6. Panel/wall/pipe installation, three options are available to meet various industrial site installation requirements.



Measurement mode



#### Calibration mode



Trend chart

	2019-01-09 12:53:17
٩	Configure
K	Calibration
_م_	Set points
᠆᠕ᠰ	Output
Ð	History
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Setting mode

### BROCHURE

### **Electrical connections**

Electrical connection The connection between the instrument and the sensor: the power supply, output signal, relay alarm contact and the connection between the sensor and the instrument are all inside the instrument. The length of the lead wire for the fixed electrode is usually 5-10 meters, and the corresponding label or color on the sensor Insert the wire into the corresponding terminal inside the instrument and tighten it.

# Instrument installation method



# **Technical specifications**

Conductivity	0 ~ 2000ms/cm
HCL	0~18%, 22 ~ 36%
NaOH	0~16%
NaCL	0~10%
CaCL <sub>2</sub>	0~22%
Temperature	-10~150°C
Resolution	±0.3°C
Temperature compensation	Automatic or manual
Current output	2 Rd 4~20mA
Communication output	RS 485 Modbus RTU
Other function	Data recording, curve display, data uploading
Relay control contact	3 Groups: 5A 240VAC,5A 28VDC or 120VAC
Optional power supply	85~265VAC,9~36VDC, Power: ≤3W
The work environment	In addition to the earth's magnetic field around no
	strong magnetic field interference
The environmental temperature	-10~60°C
Relative humidity	No more than 90%
Protection grade	IP65
The instrument weight	0.8kg
Instrument dimensions	144*144*118mm
Mounting hole dimensions	138*138mm
Installation	Embedded, wall - mounted, pipeline

### 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



# CS3790 Electromagnetic Conductivity Sensor



Model No.	CS3790
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.