



WaterTechw² C4E

Combined Conductivity, Salinity and Temperature Sensor

PRODUCT DATASHEET

APPLICATIONS

Final Effluent Monitoring
Intake Protection
Inlet Monitoring
Potable Water Treatment
River Monitoring

MEASUREMENT PRINCIPAL

4 Electrode Probe

PARAMETERS

Conductivity
Salinity
Temperature

FEATURES

4 Electrodes (2 Graphite, 2 Platinum)
Calibration Data stored in sensor

BENEFITS

Automated Aeration Control
Low Cost of Ownership

COMPATIBLE MONITOR

7300w² Monitor

ALTERNATIVE SENSORS

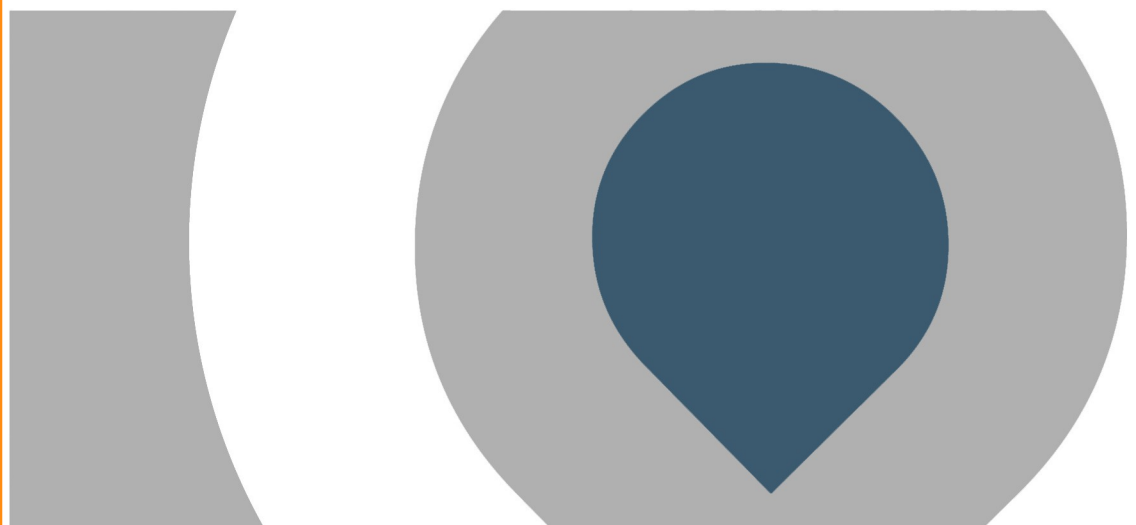
Sensors for specialist application are available on request



The WaterTechw² C4E Sensor has been designed to provide highly reliable Conductivity, Salinity and Temperature measurements. The multi-range sensor allows the same sensor to be employed in a wide variety of applications, the monitoring system being set up to provide the optimum accuracy and resolution for the intended application.

Conductivity is a broad measurement that indicates the level of dissolved minerals in the water, for process waters it is an indicator that the water purifier system is not working. In some cases it can be used to prevent problems with scaling due to hardness of tap water, especially in boiler feed water. In many applications Conductivity can be used as a measurement of Total Dissolved Solids (TDS) and is a useful general indicator of water quality.

For installation in applications where fouling is anticipated we recommend that the sensor is installed using our specially designed mounting system, with a flexible joint in the mounting shaft. The flexible joint moves the sensor in the process, reducing bio-fouling and allowing rags to fall away from the assembly. This motion is similar to that achieved by using a floating ball assembly, with the added advantage of placing the sensor below the surface of the liquid. In applications where fouling is not expected or where there is insufficient space alternative mounting arrangements are available.



Call us on +44 (0)1726 879800 www.partech.co.uk **partech** 

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Physical

Dimensions
Weight
Protection Class
Enclosure Material
Cable Entries
Cable Type
Cable Length

27 mm diameter x 177 mm long
0.35 kg (Inc 10 metres of cable)
IP68
PVC Body, Stainless Steel
Integral Cable Gland
Polyurethane Coated
10 metres standard, 100 metres maximum

Environmental Data

Storage Temperature
Location

-10 to 60°C
Indoor/Outdoor

Electrical

Power Supply

12 Volts from Monitor

Interface to Monitor

Type

RS485

Measurement

Accuracy
Resolution

Conductivity

+/- 1% FSD
0.01 to 1
(according to range)

Temperature

+/- 0.5°C
0.01°C

Measurement Principle

Conductivity: 4 Electrode (2 Graphite, 2 Platinum)
Temperature: NTC

Range
µS/cm
mS/cm

Conductivity: 0-20.0µS/cm, 0-200.0µS/cm, 0-2000.0µS/cm
0-20mS/cm, 0-200mS/cm

Response Time
Pressure Rating

Salinity: 5-60 ppt (g/Kg)
TDS - KCl 0-133,000 ppm
Temperature: 0-50°C
< 5 seconds
5 Bar

Mounting

Installation Type
Mounting Shaft
Mounting Shaft/Bracket
Options – See Docs

Dip
0.5 to 3 metres in 0.5 metre increments

223980DS, 224567DS, 132584DS, 132571DS

Order Codes

Part No Description

223969 WaterTechw² C4E Sensor
(Cable Length: 10 metres)
223970 WaterTechw² C4E Sensor
(Cable Length: 20 metres)

Publication No: 132246DS-Iss11
The company reserves the right to alter the specification without prior notice. E&OE

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