Electrical conductivity probes

EC

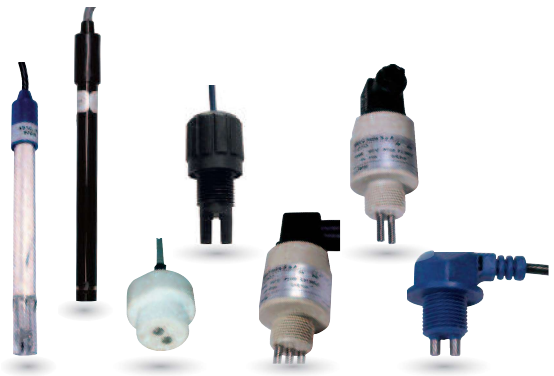
Electrical conductivity is important for the characterization of liquids in different kinds of processes

Electrical conductivity is determined by a resistivity measurement when an alternating voltage is applied to a measurement cell that consists of two or four electrodes. To compensate for the geometry of the conductivity cell a cell constant is used. This constant is either known or determined by means of conductivity standards.

Electrical conductivity is the reciprocal of electrical resistivity, and measures a material's ability to conduct an electric current. For the measurement of the conductivity of a solution it's common to use µS/cm or mS/cm.

2-Pole Sensor Features:

- With or without temperature sensor built-in
- Accurate measurement of solutions with extremely low or high ionic strength



With temperature sensor PT100

CTK100

Very low conductivity concentration unit suitable for **reverse osmosis.**

Technical features

Measuring range 0.04 – 20 µS	
Process temperature 0 – 130° C	
Pressure range (relative to ambient) 0 – 16Bar	
Cell constant 0.01 cm^{-1} or K = 100	
Body material SS 316L ; **Electrodes material** SS 316L	
Cable 5 m ; **Mechanical connection** ½" Gas M	

CTK10PT

Low conductivity concentration unit suitable for **reverse osmosis and fish farming.**

Technical features

Measuring range 0.01 – 500 µS	
Process temperature 0 – 70° C	
Pressure range (relative to ambient) 0 – 7.5 Bar	
Cell constant 0.1 cm^{-1} or K = 10	
Body material Epoxy ; **Electrodes material** Platinum	
Cable 6 m ; **Mechanical connection** 12 mm	

CTK1GR

Standard conductivity concentration unit suitable for **drinking water, process industry, boilers, waste water treatment and brine water.**

Technical features

Measuring range 1 – 20000 µS
Process temperature 0 – 60° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 1 cm^{-1} or K = 1
Body material PVC ; **Electrodes material** Graphite
Cable 5 or 10 m ; **Mechanical connection** ½" Gas M

CTK0.1PT

Low conductivity concentration unit suitable for **waste water and brine water.**

Technical features

Measuring range 100 – 200000 µS
Process temperature 0 – 70° C
Pressure range (relative to ambient) 0 – 7.5 Bar
Cell constant 10 cm^{-1} or K=0,1
Body material Epoxy ; **Electrodes material** Platinum
Cable 6 m ; **Mechanical connection** 12 mm

CTK1SS

Standard conductivity concentration unit suitable for **waste water, drinking water, cooling water treatment, reverse osmosis and irrigation.**

Technical features

Measuring range 5 – 5000 µS
Process temperature 0 – 100° C
Pressure range (relative to ambient) 0 – 2 Bar
Cell constant 1 cm^{-1} or K = 1
Body material PTFE ; **Electrodes material** SS316L
Cable 5 or 10 m ; **Mechanical connection** 1" Gas M

CTK1G

Standard conductivity concentration unit suitable for **waste water, drinking water, cooling water treatment and irrigation.**

Technical features

Measuring range 5 – 20000 µS
Process temperature 0 – 70° C
Pressure range (relative to ambient) 0 – 7.5 Bar
Cell constant 1 cm^{-1} or K = 1
Body material Epoxy ; **Electrodes material** Graphite
Cable 6 m ; **Mechanical connection** PG 13,5 mm

CTK1

Standard conductivity concentration unit suitable for **waste water, drinking water, cooling water treatment and irrigation.**

Technical features

Measuring range 5 – 5000 µS
Process temperature 0 – 80° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 1 cm^{-1} or K = 1
Body material PP ; **Electrodes material** SS316L
Cable not included ; **Mechanical connection** ¾" Gas M

CTK5

Medium conductivity concentration unit suitable for **drinking water, cooling water treatment and irrigation.**

Technical features

Measuring range 0.5 – 2000 µS
Process temperature 0 – 80° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 0.2 cm^{-1} or K = 5
Body material PP ; **Electrodes material** SS316L
Cable not included ; **Mechanical connection** ¾" Gas M

CTK10

Low conductivity concentration unit suitable for **reverse osmosis and fish farming.**

Technical features

Measuring range 0.01 – 500 µS
Process temperature 0 – 80° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 0.1 cm^{-1} or K = 10
Body material PP ; **Electrodes material** SS316L
Cable not included ; **Mechanical connection** ¾" Gas M

Without temperature sensor

CK1PT

Standard conductivity concentration unit suitable for **waste water, drinking water, cooling water treatment, reverse osmosis and irrigation.**

Technical features

Measuring range 1 – 20000 µS
Process temperature 0 – 120° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 1 cm^{-1} or K = 1
Body material Glass ; **Electrodes material** Platinum
Cable 6 m ; **Mechanical connection** 12 mm

CK1

Standard conductivity concentration unit suitable for **waste water, drinking water, cooling water treatment, reverse osmosis and irrigation.**

Technical features

Measuring range 5 – 5000 µS
Process temperature 0 – 60° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 1 cm^{-1} or K = 1
Body material PVC ; **Electrodes material** SS316L
Cable 5 m ; **Mechanical connection** ½" Gas M

CK5

Medium conductivity concentration unit suitable for **drinking water, cooling water treatment and irrigation.**

Technical features

Measuring range 1 – 2000 µS
Process temperature 0 – 60° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 0.2 cm^{-1} or K = 5
Body material PVC ; **Electrodes material** SS316L
Cable 5 m ; **Mechanical connection** ½" Gas M

CK10

Low conductivity concentration unit suitable for **reverse osmosis and fish farming.**

Technical features

Measuring range 1 – 500 µS
Process temperature 0 – 60° C
Pressure range (relative to ambient) 0 – 6 Bar
Cell constant 0.1 cm^{-1} or K = 10
Body material PVC ; **Electrodes material** SS316L
Cable 5 m ; **Mechanical connection** ½" Gas M

Inductive conductivity probes

EC

The inductive sensor has been engineered to produce a low cost sensor, without sacrificing performance or quality

The result has been obtained by molding the sensor using polypropylene reinforced with fibreglass. The sensor provides all of the benefits that inductive conductivity measurement provides.

S411 IND

High conductivity concentration unit suitable for **waste water, ammonia, brine, CIP (cleaning in place) and cooling water treatment.**

Technical features

Measuring range 1000 µS – 1 S
Process temperature -5 – 60° C
Pressure range (relative to ambient) 0 – 6.5 Bar
Body material PVC
PT1000 temperature sensor integrated
Cable 5 m ; **Mechanical connection** ½" Gas M