

# Digital conductivity sensor Memosens CLS15E

## Memosens 2.0 contacting conductivity sensor for standard applications in pure and ultrapure water



More information and current pricing:

[www.endress.com/CLS15E](http://www.endress.com/CLS15E)

### Benefits:

- Designed for low maintenance and a long operating life, the sensor offers best value for money.
- The sensor is sterilizable and autoclavable, allowing for installation in sterile plants.
- Thanks to its electrode geometry, Memosens CLS15E provides reliable and accurate measured values at low conductivities.
- A quality certificate stating the individual cell constant enables perfect adjustment of the measuring point.
- IIoT ready: Memosens 2.0 offers extended storage of calibration and process data, enabling better trend identification and providing a future-proof basis for predictive maintenance and enhanced IIoT services.
- Non-contact inductive signal transmission ensures maximum process safety.

### Specs at a glance

- **Measuring range**  $k=0,01$ : 0.04 to 20  $\mu\text{S}/\text{cm}$   $k=0,1$ : 0.10 to 200  $\mu\text{S}/\text{cm}$
- **Process temperature** Threaded with fixed cable: -20 to 100 °C (-4 to 212 °F) Threaded with plug-in head: -20 to 120 °C (-4 to 248 °F) Sterilization: max. 140 °C (284 °F) for 30 minutes
- **Process pressure** 13 bar at 20 °C (188 psi at 68 °F) absolute 2 bar at 120 °C (14 psi at 248 °F) absolute

**Field of application:** Memosens CLS15E is perfectly suited for conductivity measurement in applications with low measuring ranges such as boiler feedwater and chip cleaning. The contacting conductivity

sensor performs reliably and accurately even in hazardous areas. CLS15E features Memosens 2.0 digital technology, offering extended storage of calibration, adjustment and process data. It facilitates predictive maintenance and provides the perfect basis for IIoT services.

## Features and specifications

### Conductivity

#### Measuring principle

Conductive

#### Application

Measurement in pure and ultrapure water range  
Monitoring of ion exchangers  
Reverse osmosis  
Distillation and chip cleaning

#### Characteristic

Digital 2-electrode conductivity sensor

#### Measuring range

k=0,01: 0.04 to 20  $\mu\text{S}/\text{cm}$   
k=0,1: 0.10 to 200  $\mu\text{S}/\text{cm}$

#### Measuring principle

Conductive conductivity cell with electropolished stainless steel electrodes

#### Design

2-electrode conductivity cell with coaxially arranged electrodes, electropolished

#### Material

Electrode: stainless steel 1.4435  
Electrode shaft: PES

#### Dimension

Electrode diameter: 16 mm (0.63 inch)  
Electrode length: appr. 55 mm (2.17 inch)

## Conductivity

### Process temperature

Threaded with fixed cable:

-20 to 100 °C (-4 to 212 °F)

Threaded with plug-in head:

-20 to 120 °C (-4 to 248 °F)

Sterilization: max. 140 °C (284 °F) for 30 minutes

### Process pressure

13 bar at 20 °C (188 psi at 68 °F) absolute

2 bar at 120 °C (14 psi at 248 °F) absolute

### Temperature sensor

Pt1000

### Ex certification

ATEX, NEPSI, CSA, IECEX, INMETRO, EAC Ex

### Connection

Process: 1/2" and 3/4" NPT, Clamp 1 1/2"

Sensor connection: Inductive, digital connection head with Memosens 2.0 technology

### Ingress protection

IP68

### Additional certifications

Calibration certification of the cell constant and temperature, material certification 3.1

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