

# Analog conductivity sensor

## Condumax CLS12

Conductive conductivity sensor for high temperature applications in the power & energy industry



More information and current pricing:

[www.endress.com/CLS12](http://www.endress.com/CLS12)

### Benefits:

- Reliable and accurate measuring values at low conductivities
- Optimized for high pressures and temperatures up to 160°C (320°F)
- Easy cleaning thanks to stainless steel body and removable outer electrode
- Robust design for high durability
- Quality certificate stating the individual cell constant

### Specs at a glance

- **Measurement range**  $k=0.01$ : 0 to 20  $\mu\text{S}/\text{cm}$   $k=0.1$ : 0 to 200  $\mu\text{S}/\text{cm}$
- **Process temperature** -30 to 160 °C (-22 to 320 °F)
- **Process pressure** Max. 40 bar up to 100 °C (max. 580 psi up to 212 °F) without CLA 751 flow chamber Max. 12 bar up to 150 °C (max. 174 psi up to 302 °F) with CLA 751 flow chamber

**Field of application:** Condumax CLS12 is a robust conductivity sensor for steam/water cycles in power plants. It is optimized for low conductivities (even under high temperatures and pressures) to protect your processes from deposits and corrosion. Low maintenance and simple to commission (large connection compartment), this is the ideal sensor for tough environments.

### Features and specifications

## Conductivity

### Measuring principle

Conductive

### Application

Power plant, condensate, boiler feed water

### Characteristic

2-electrode conductivity cell for high temperature applications in pure and ultrapure water

### Measurement range

k=0.01: 0 to 20  $\mu\text{S}/\text{cm}$

k= 0.1: 0 to 200  $\mu\text{S}/\text{cm}$

### Measuring principle

Conductive conductivity cell with polished stainless steel electrodes

### Design

Large coaxially arranged electrodes for a fast media flow through the cell

### Material

Electodes: stainless steel 1.4571

Sealing: PEEK / EPDM

### Dimension

Electrode diameter: 25 mm (0.98 inch)

Immersion depth: 50 to 115 mm (1.97 to 4.53 inch)

### Process temperature

-30 to 160  $^{\circ}\text{C}$  (-22 to 320  $^{\circ}\text{F}$ )

### Process pressure

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Max. 12 bar up to 150  $^{\circ}\text{C}$  (max. 174 psi up to 302  $^{\circ}\text{F}$ ) with CLA 751 flow chamber

### Temperature sensor

Integrated Pt100

## Conductivity

### **Ex certification**

ATEX

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### **Connection**

Process connection : G1" and NPT1" Fixed cable on transmitter

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### **Ingres protection**

IP67

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### **Additional certifications**

Calibration certification with cellconstant

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