

Analog conductivity sensor

Condumax CLS12

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



More information and current pricing:

www.es.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

Max. 40 bar up to 100 $^{\circ}\text{C}$ (max. 580 psi up to 212 $^{\circ}\text{F}$) without CLA 751 flow chamber

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

Connection

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

Ingres protection

IP67

Additional certifications

Calibration certification with cellconstant

More information www.es.endress.com/CLS12