

Analog chlorine dioxide sensor CCS50

Sensor for water, process water and utilities in all industries



More information and current pricing:

www.at.endress.com/CCS50

Benefits:

- Fast response time ($t_{90} < 15$ s) provides an accurate process view and enables prompt reaction to process changes as well as efficient process control.
- Increased process safety: precise and long-term stable measurement ensures consistent process monitoring and allows for individually adapted disinfectant dosing.
- Flexible installation: sensor can be installed in the CCA151 and CCA250 flow assemblies or in immersion assemblies. Measurement virtually flow independent at flow velocities above 5 l/h (CCA151), 30 l/h (CCA250) or above 15 cm/s (immersion).
- The low-maintenance, amperometric sensor reduces the cost of ownership of the measuring point, particularly compared to colorimetric measuring systems.
- Connection to the Liquisys chlorine transmitter ensures continuity for the installed base of analog chlorine dioxide measuring points.

Specs at a glance

- **Measurement range** Trace: 0 to 5 mg/l ClO₂ Standard: 0 to 20 mg/l ClO₂
- **Process temperature** 0 to 55 °C (32 to 130°F), non-freezing
- **Process pressure** Max.1 bar (max. 14.5 psi)
- **Measuring method** Closed, membrane covered measuring cell
Reduction of chlor dioxide at the cathode

Field of application: CCS50 is a robust, low-maintenance sensor for chlorine dioxide measurement. It provides stable and fast measured values in water, process water and utilities. The sensor ensures efficient disinfection even at minimum water volumes and helps to achieve highest water quality and safety, to avoid overdosing of chlorine dioxide or to ensure the absence of ClO₂ in beverage plants and reverse osmosis.

CCS50 ensures continuity for the installed base of analog chlorine dioxide measuring points.

Features and specifications

Disinfection

Measuring principle

Chlorine dioxide

Application

Guarantees reliable disinfection in drinking water

Prevents the growth of biofilms and pathogens in cooling water

Ensures food quality

Ensures the absence or presence of chlorine dioxide in Utilities

Characteristic

Amperometric measurement of dissolved chlorine dioxide

Measurement range

Trace: 0 to 5 mg/l ClO₂

Standard: 0 to 20 mg/l ClO₂

Measuring method

Closed, membrane covered measuring cell

Reduction of chlor dioxide at the cathode

Design

Closed amperometric 2-electrode measuring cell with PVDF membrane

Material

Sensor shaft: POM

Membrane: PVDF

Membrane cap: PVDF

Sealing ring: FKM

Dimension

Diameter: 25 mm (0.98 inch)

Length: 126 mm (4.96 inch)

Disinfection

Process temperature

0 to 55 °C (32 to 130°F), non-freezing

Process pressure

Max.1 bar (max. 14.5 psi)

Temperature sensor

10k NTC

Connection

Analog with fixed cable

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