

Digital free chlorine sensor Memosens CCS51E

Memosens sensor for drinking water, pool and process water as well as utilities in all industries



More information and current pricing:

www.endress.com/CCS51E

Benefits:

- The low-maintenance, amperometric sensor reduces the cost of ownership of the measuring point, particularly compared to colorimetric measuring systems.
- Increased process up-time: pre-calibration of the sensor allows for real plug & play and faster polarization time thanks to Memosens 2.0 technology.
- Fast response time ($t_{90} < 25$ s) provides an accurate process view and enables prompt reaction to process changes as well as efficient process control.
- High process safety and efficient dosing: precise and long-term stable measurement ensures consistent process monitoring and permits individually adapted disinfectant dosing.
- Suitable sensor versions for every measurement range: From trace measurement up to free chlorine concentrations of 200 mg/l.
- Connection to the Liquiline multiparameter transmitter facilitates easy combination with other parameters of liquid analysis such as pH and ORP.

Specs at a glance

- **Measuring range** Trace: 0 to 5 mg/l HOCl Standard: 0 to 20 mg/l HOCl High: 0 to 200 mg/l HOCl
- **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 free chlorine at the cathode

Field of application: Memosens CCS51E ensures precise and consistent disinfection monitoring in drinking water, pool and process water and in utilities. This sensor for determining free chlorine features extremely fast response times even at low water volumes. This guarantees efficient process control and safe processes. Thanks to Memosens 2.0 technology, CCS51E combines maximum process and data integrity with simple operation. This provides the perfect basis for predictive maintenance and IIoT connectivity.

Features and specifications

Disinfection

Measuring principle

Free chlorine

Application

Ensuring reliable disinfection in drinking water

Process water

Dosing disinfectant efficiently in pool water

Detect the absence or presence of free chlorine in Utilities

Guarantee food safety and provide hygienic packaging and bottling

Characteristic

Amperometric measurement of dissolved free chlorine

Measuring range

Trace: 0 to 5 mg/l HOCl

Standard: 0 to 20 mg/l HOCl

High: 0 to 200 mg/l HOCl

Measuring method

Closed, membrane covered measuring cell

Reduction of free chlorine at the cathode

Design

Closed amperometric 2-electrode measuring cell with PVDF membrane

Disinfection

Material

Sensor shaft: POM
Membrane: PVDF
Membrane cap: PVDF
Sealing ring: FKM

Dimension

Diameter: 25 mm (0.98 inch)
Length: 161 mm (6.34 inch)

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 integrated (Memosens)

Connection

Inductive, digital connection head with Memosens

More information www.endress.com/CCS51E