

# Digital free chlorine sensor Memosens CCS51D

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



More information and current pricing:

[www.jp.endress.com/CCS51D](http://www.jp.endress.com/CCS51D)

## Benefits:

- The right sensor version for every application: From trace measurement up to free chlorine concentrations of 200 mg/l.
- 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.
- Increased process safety: precise and long-term stable measurement ensures consistent process monitoring and allows for individually adapted disinfectant dosing.
- The low-maintenance, amperometric sensor reduces the cost of ownership of the measuring point, particularly compared to colorimetric measuring systems.
- More process up-time thanks to fast sensor exchange: pre-calibrate the sensor in your lab and then swap it into your process with plug & play.
- Connection to the Liquiline multiparameter transmitter allows for easy combination with other relevant parameters of liquid analysis such as pH and ORP.

## Specs at a glance

- **Measurement 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 CCS51D is a robust, low-maintenance sensor for free chlorine. It provides high-precision measurement with long-term stability in drinking water, pool and process water and ensures consistent disinfection monitoring even at low water volumes. The free chlorine sensor features extremely fast response times guaranteeing efficient process control and safe processes. Thanks to Memosens digital technology, CCS51D combines maximum process and data integrity with simple operation.

## 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

#### Measurement 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

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### Dimension

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

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### Process temperature

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

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### Process pressure

Max. 1 bar (max. 14.5 psi)

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### Temperature sensor

10k NTC integrated (Memosens)

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### Connection

Inductive, digital connection head with Memosens

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