

# Digital free bromine sensor Memosens CCS55D

## Memosens sensor for seawater and process water



More information and current pricing:

[www.ca.endress.com/CCS55D](http://www.ca.endress.com/CCS55D)

### Benefits:

- The right sensor version for every application: From trace measurement up to free bromine concentrations of 200 mg/l.
- Fast response time ( $t_{90} < 20$  s) provides an accurate process view and enables prompt reaction to process changes as well as efficient process control. No inactivation in bromine-free media ensures fast measurement after addition of bromine.
- Increased process safety: precise and long-term stable measurement ensures consistent process monitoring and allows for individually adapted disinfectant dosing.
- Safe disinfection in seawater applications since disinfection with chlorine forms bromine compounds when used in seawater. Chlorine monitoring would lead to measurement errors underestimating the disinfection effect.
- 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 ... 5 mg/l HOBr Standard: 0 ... 20 mg/l HOBr High: 0 ... 200 mg/l HOBr
- **Process temperature** +0...55 °C (32 ... 130°F), non-freezing
- **Process pressure** Max. 1 bar (max. 14.5 psi)

**Field of application:** Memosens CCS55D is a low-maintenance sensor for free bromine. It provides high-precision, stable measurement in seawater

for desalination plants, process or cooling water, swimming pools and fish farming industry. The free bromine sensor ensures safe disinfection with bromine even at low water volumes. It features fast response times guaranteeing efficient process control. Thanks to Memosens digital technology, CCS55D combines maximum process and data integrity with simple operation.

## Features and specifications

### Disinfection

#### Measuring principle

Free bromine

#### Application

Seawater - to ensure reliable disinfection

Process water - wide range of application due to large measuring range

Pool water - efficient dosing thanks to precise measurement

#### Characteristic

Amperometric measurement of dissolved free bromine

#### Measurement range

Trace: 0 ... 5 mg/l HOBr

Standard: 0 ... 20 mg/l HOBr

High: 0 ... 200 mg/l HOBr

#### Measuring principle

Closed, membrane covered measuring cell

Reduction of free bromine at the working electrode

#### Design

Closed amperometric 2-electrode measuring cell with PET membrane

#### Material

Sensor shaft: POM

Membrane: PET

Membrane cap: PVDF

## Disinfection

### Dimension

Diameter: 25 mm (0.98 in)

Length: 161 mm (6.34 in)

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### Process temperature

+0...55 °C (32 ... 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 technology

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