

# Digital free bromine sensor Memosens CCS55E

## Memosens sensor for seawater applications and process water



### Benefits:

- Safe disinfection in seawater applications: Since disinfection with chlorine forms bromine compounds when used in seawater, sole chlorine monitoring would lead to measurement errors underestimating the disinfection effect.
- High availability of the measuring point: pre-calibrating the sensor and swapping it with plug & play enables a fast sensor exchange. Plus, the polarization time is faster with the new Memosens 2.0 technology.
- Efficient process control: Quick response time ( $t_{90} < 20$  s) provides an accurate process view and enables prompt reaction to changes. The sensor is not inactivated in bromine-free media - guaranteeing fast measurement after the addition of bromine.
- Increased process safety: precise and long-term stable measurement ensures consistent process monitoring and allows for individually adapted disinfectant dosing.
- Wide measurement range for different applications: From trace measurement up to free bromine concentrations of 200 mg/l.
- Easy combination with other relevant parameters of liquid analysis such as pH and ORP by easily connecting the Liquiline multiparameter transmitter.

More information and current pricing:

[www.endress.com/CCS55E](http://www.endress.com/CCS55E)

### Specs at a glance

- **Measuring 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 CCS55E is a high-precision sensor determining free bromine. Thereby, it helps ensuring disinfection in

seawater applications like desalination plants, process or cooling water, swimming pools and fish farming industry. The low-maintenance sensor features fast response times guaranteeing efficient process control. Thanks to the latest Memosens 2.0 technology, it combines simple operation with maximum data integrity.

## 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

#### Measuring 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)

### Process temperature

+0...55 °C (32 ... 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 technology

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