

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

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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