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 poloarization 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

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