# CLF10 sc Free chlorine analyser, pHD sensor, metric

**Product #:** **LXV45A.98.23022**

AED Price: Contact Hach

## CLF10 sc: Free reagentless chlorine sensor

The Free Chlorine Analyser measures free chlorine continuously for real time process control. It is based on amperometric technology and is fully compatible with Hach's digital SC controllers. The analyser can be used in most municipal and industrial applications, and is best utilised where waste stream management is a constraint. The self diagnostics alerts you when the process has changed or the instument needs servicing.

Diagnostic features include the Cal Watch algorithm for warning of pH and chlorine calibration deviation and a non-contacting sample flow sensor for notification of insufficient sample flow. All warnings are easy to configure.

**Disinfection under control**
Hach's self diagnostics alerts you when the process has changed or when the instument needs servicing. Diagnostic features include the Cal Watch algorithm for warning of pH and chlorine calibration deviation and a non-contacting sample flow sensor for notification of insufficient sample flow. All warnings are easy to configure.

**Minimal operation costs**
The amperometric sensors monitor chlorine concentration continuously without reagents. There is no need to replace reagents nor to manage disposal. This saves time and keeps operation costs at a low level.

**Plug and play**
The sensors are designed for all Hach digital SC controllers so you only need one controller for all measurements. They are easy to operate, no matter if measuring turbidity or chlorine. Hach SC controllers have no complicated wiring or setup procedures. Just plug in any Hach digital sensor and it’s ready to use without software configuration.

**Real-time process control**
Continuous readings indicate when treatment conditions have changed allowing CLT10 sc and CLF10 sc a real-time control of disinfection processes.

**EPA compliant according to Method 334.0**
In accordance with the US EPA Method 334.0, the sensors can be used for reporting chlorine residual measurements.

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## Specifications

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| Accuracy: | Free Chlorine: ± 3 % of the reference test** (DPD) at constant pH less than 7.2 (±0.2 pH unit) |
| Cable connection: | 5 pin, M12 connector |
| Cable length: | 1 m (between gateway and sc controller) |
| Calibration method: | 1-point or 2-point (zero and slope) calibration |
| Certifications: | CE/ETL, EMC |
| Connection drain line: | 1/2 in ID |
| Connections: | 1/4 in OD |

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|---|---|
| Controller: | Panel only |
| Controller compatibility: | SC controller platforms |
| Detection limit: | 30 ppb (0.03 ppm) |
| Dimensions: | Sensor Only: 195 |
| Fitting: | Metric |
| Flow rate: | 30 - 50 L/h, optimal is 40 L/hour |
| Interferences: | Free Chlorine: Monochloramine, chlorine dioxide, ozone, and chalk deposits. Total Chlorine: Chlorine dioxide, ozone and chalk deposits |
| Length: | Sensor: 195 mm |
| Material: | Panel: Corrosion-resistant, fully-submersible (stainless steel, PVC, silicon rubber and polycarbonate) |
| Measurement method: | Reagentless, electrochemical, three-electrode amperometric system |
| Measuring range: | 0 - 20 ppm $Cl_2$ |
| Mounting: | Flat, vertical surface |
| Operating temperature range: | 0 - 45 °C |
| Options: | pHD Differential Sensor |
| Parameter: | Free Chlorine |
| pH Monitoring Required?: | mit pHD-Differenzsensor |
| pH Range: | 4 - 9 |
| Power requirements (Voltage): | None |
| Pressure range: | 0.5 bar, no pressure impulses and/or vibrations |
| Repeatability: | 30 ppb or 3%, whichever is greater |
| Response time: | Total Chlorine: 100 s or less for 90% change (T90)<br><br>at a stable temperature and pH |
| Sample temperature: | 5 - 45 °C |
| Storage conditions: | -20 °C - 60 °C dry |
| Temperature compensation: | Internal temperature compensation in the sensor |
| Warranty: | 24 months |
| Weight: | Approximately 5.5 kg<br><br>Panel and empty panel-mounted components only |
| What's included?: | CL10sc Panel, 1 m Digital Extension Cable, pHD Differential Sensor, Panel Manual, Chlorine Sensor Manual, pHD Sensor Manual |
| Width: | 495.3 mm |

## What's included?

CL10sc Panel, 1 m Digital Extension Cable, pHD Differential Sensor, Panel Manual, Chlorine Sensor Manual, pHD Sensor Manual

## Required Accessories

- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 100-240 VAC, without power cord (Item LXV525.99A11551)
- SC4500 Controller, Prognosys, 5x mA Output, 1 digital Sensor, 100-240 VAC, without power cord (Item LXV525.99A11501)
- SC4500 Controller, Prognosys, 5x mA Output, 2 digital Sensors, 24 VDC, without plug (Item LXV525.99Z11551)