



# CLF10 sc Free chlorine analyser, pH combination sensor, metric

**Product #:** AED Price: LXV45A.98.22022 Contact Hach

## CLF10 sc: Free reagentless chlorine sensor

The CLF10 sc Free Chlorine Analyser measures free chlorine continuously for real time process control. It is based on amperometric technology and is fully compatible with all of Hach's digital SC controllers. The CLF10 sc can be used in most municipal and industrial applications, and is best utilised where waste stream management is a constraint.

Hach's 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**

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#### **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.

## Specifications

Accuracy:	Free Chlorine: $\pm$ 3 % of the reference test** (DPD) at constant pH less than 7.2 ( $\pm$ 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
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 <sub>2</sub>
Mounting:	Flat, vertical surface
Operating temperature range:	0 - 45 °C
Options:	Combination pH Sensor
Parameter:	Free Chlorine
pH Monitoring Required?:	mit pH-Kombinationssensor
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)
	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
	Panel and empty panel-mounted components only
What's included?:	CL10sc Panel, 1 m Digital Extension Cable, pH Combination Sensor, Panel Manual, Chlorine Sensor Manual, pH Combination Sensor Manual
Width:	495.3 mm

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CL10sc Panel, 1 m Digital Extension Cable, pH Combination Sensor, Panel Manual, Chlorine Sensor Manual, pH Combination 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)