



CLF10 sc Free chlorine sensor with grab sample (on panel)

Product #: AED Price: LXV45A.98.21022 Contact Hach

CLF10 sc: Free reagentless chlorine sensor

The CLF10 sc Free Chlorine Sensor 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 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

Free Chlorine: ± 10 % of the reference test (DPD) at stable pH less than 8.5 (± 0.5 pH unit from the pH at calibration)
5 pin, M12 connector
1 m (between gateway and SC controller)
1-point or 2-point (zero and slope) calibration
CE/ETL, EMC

Connection drain line:	1/2 : ID
	1/2 in ID
Connections:	1/4 in OD
Controller:	Panel only
Controller compatibility:	SC controller platforms
Detection limit:	30 ppb (0.03 ppm)
Diameter:	25 mm
Dimensions:	Sensor Only: 195
Dimensions (H x W x D):	483 mm x 495 mm x 151 mm
Fitting:	Metric
Flow rate:	30 - 50 L/h, optimal is 40 L/hour
Includes:	Free chlorine sensor, chlorine sensor block, SC gateway, stainless steel panel and pH flow cell for grab samples
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 - 50 °C (assured temperature compensation up to 45 °C)
Parameter:	Free Chlorine
pH Range:	4 - 9
Power requirements (Voltage):	$12 \text{ V DC} \pm 10\%$, 100 mA maximum (supplied by SC controller)
Pressure range:	0.5 bar, no pressure impulses and/or vibrations
Repeatability:	30 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 (12 lbs)
	Panel and empty panel-mounted components only
What's included?:	Free chlorine sensor, chlorine sensor block, SC Gateway, stainless steel panel and pH flow cell for grab samples
Width:	495.3 mm

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