



# CLT10 sc Total Chlorine Sensor, SC200 Controller and Stainless Steel Panel with pHD differential Sensor

Product #: 2981500

**OBSOLETE ITEM** 

This item is no longer available.

### Hach's answer to reagentless amperometric chlorine measurement.

The CLT10 sc analyzer uses Hach's exclusive self diagnostics to alert users when the process has changed or the instrument needs servicing. Diagnostic features include the Cal Watch algorithm for warning of pH and chlorine calibration deviation and a non-contacting flow sensor for notification of insufficient sample flow. Total chlorine measurement with an amperometric analyzer, such as the CLT10 sc, does not require reagents, eliminating the need for routine reagent replacement and waste stream management. The CLT10sc total chlorine analyzer allows for real-time control of disinfection processes by providing continuous readings that indicate when treatment conditions have changed. Product includes total chlorine sensor, chlorine sensor block, SC200 controller, sc Gateway, stainless steel panel, pH flow cell and pHD sensor.

#### **Exclusive Self Diagnostics**

The CLF10 sc and CLT10 sc analyzers leverage Hach's exclusive self diagnostics to alert users whether the process has changed or the instrument needs servicing. Diagnostic features include the Cal Watch algorithm for warning of pH and chlorine calibration deviation and a non-contacting flow sensor for notification of insufficient sample flow.

#### No Reagent Replacement, No Waste Stream

Chlorine measurement with an amperometric analyzer, such as the CLF10 sc or CLT10 sc, does not require reagents, eliminating the need for routine reagent replacement and waste stream management.

#### **Real-Time Process Control**

The CLF10 sc and CLT10 sc analyzers allow for real-time control of disinfection processes by providing continuous readings that indicate when treatment conditions have changed.

#### Compatible with Hach's "Plug and Play" Digital Controllers

The CLF10 sc and CLT10 sc analyzers can be used with any Hach sc digital controller. Whether you're measuring turbidity or chlorine, you only need to learn one controller for all your water analysis measurement points. 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.

#### **EPA Compliant According to Method 334.0**

In accordance with EPA Method 334.0, the CLF10 sc and CLT10 sc analyzers can be used for reporting chlorine residual measurements. Additionally, Hach has created a suite of laboratory products and methods to help with startup and quality control procedures required in Method 334.0. (See page 4 for a partial listing of accessories.)

#### **Specifications**

Accuracy: Free Chlorine: ± 3 % of the reference test\*\* (DPD) at constant pH less than 7.2 (±0.2 pH unit)

Accuracy 2: Free Chlorine:  $\pm$  10 % of the reference test\*\* (DPD) at stable pH less than 8.5 ( $\pm$ 0.5 pH unit from

the pH at calibration)

Accuracy 3: Total Chlorine: ± 10 % of the reference test\*\* (DPD) at stable pH less than 8.5 (±0.5 pH unit from

the pH at calibration)

Accuracy 4: Total Chlorine: ± 20 % of the reference test\*\* (DPD) at stable pH greater than 8.5

Cable Connection: 5 pin, M12 connector 1 m (between gateway and sc controller) Cable Length: Calibration Method: 1-point or 2-point (zero and slope) calibration Certifications: CE compliant for conducted and radiated emissions: - CISPR 11 (Class A limits) - EMC Immunity EN 61326-1 (Industrial limits) Additional certifications when connected to an sc controller Connection Drain Line: pH Flow Cell Outlet: 1/2-inch ID Connection Sample Line: 1/4 inch OD Controller: Single Digital Controller Compatibility: SC200, SC1000, SC4500. All controllers sold separately Controller Options: Single Input CLT10sc Total Chlorine Sensor, SC200 Controller and Stainless Steel Panel with pHD differential Description: Sensor Sensor Only: 195 Dimensions: **USA** Fitting: USA Fitting Type: Interferences: Free chlorine: monochloramine, chlorine dioxide, ozone, and chalk deposits. Total chlorine: chlorine dioxide, ozone and chalk deposits Length: Sensor: 195 mm Lower Limit of Detection (LOD): 30 ppb (0.03 ppm) Material: Corrosion-resistant materials, fully-submersible (stainless steel, PEEK, PVC, silicon rubber and polycarbonate) Reagentless, electrochemical, three-electrode amperometric system Measurement method: Panel or Wall Mounting Mounting: 0 - 45 °C Operating temperature range: SC200 Controller, Stainleess Steel Panel, and pHD Differential Sensor Options: Parameter: **Total Chlorine** pH Monitoring Required?: with pHD Differentinal 4 - 9 pH Range: Power requirements (Voltage): 110 - 230 VAC Pressure Range: 0.5 bar, no pressure impulses and/or vibrations Range: 0 - 20 ppm Cl. 30 ppb or 3%, whichever is greater Repeatability: Response time: Free Chlorine: 140 s or less for 90% change (T90) at a stable temperature and pH Response Time: Total Chlorine: 100 s or less for 90% change (T90) at a stable temperature and pH 30 - 50 L/h (7.9 - 13.2 gal/hour), Optimal is 40 L/hour (10.5 gal/hour) Sample Flow Rate: 5 - 45°C (41 - 113°F) Sample Temperature:

-20 °C to 60 °C dry

14.09 kg Approximately 5.5 kg (12 lbs)

12 months

Storage conditions:

Warranty:

Weight:

Panel and empty panel-mounted components only

What's included?:

SC200 Controller, Mounting Hardware, SC200 Basic User Manual, CL10sc Panel, 1 m digital extension cable, Panel Manual, pHD Sensor Manual, Chlorine Sensor Manual.

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