## **CL17sc Colorimetric Chlorine Analyzer**



#### **Applications**

- Drinking Water
- Wastewater
- Food and Beverage
- Pharmaceutical
- Power
- Semiconductor
- Field Use





#### **The Next Standard in Chlorine Analysis**

Built on a legacy of reliability in online chlorine analysis, the advanced design of the CL17sc reduces routine maintenance touch time and provides powerful diagnostic features and enhanced connectivity. The result is less hassle, minimized risk of data loss, and even more reliable information to empower your decision making.

#### **Maintenance made easy**

The CL17sc reduces your routine maintenance touch time with programmable alerts, simplified tubing replacement, and step-by-step maintenance instructions.

### Peace of mind through comprehensive diagnostics

With upgraded features like a flow meter, colorimeter window, multi-color status light, and predictive diagnostic software, you know your instrument is operating as intended.

#### **Expanded connectivity. Increased flexibility.**

By pairing the CL17sc with Hach's SC controller platform, your options increase significantly: internal data logging; external analog and digital communication alternatives; and multiparameter instrument flexibility.

The CL17sc is compliant with US EPA regulation 40 CFR 141.74. Both Method 4500-CL G and Method 334.0 can be used for measuring residual chlorine in drinking water.



#### **Technical Data\***

Range 0 - 10 mg/L free or total residual

chlorine

**Accuracy**  $\pm$  5% or  $\pm$  0.04 mg/L (whichever is

greater) from 0 - 5 mg/L Cl<sub>2</sub> ± 10% from 5 - 10 mg/L Cl<sub>2</sub>

**Lower Limit of** 0.03 mg/L

Detection (LOD)

**Cycle Time** 2.5 minutes

**Inlet Pressure** 0.3 - 5.2 bar (4.5 - 75 psig)

supplied to Y-strainer

0.1 - 0.3 bar (1.5 - 5 psig) supplied to analyzer

Inlet ¼-inch OD polyethylene tube,

quick-disconnect fitting

**Drain** ½-inch ID flexible hose

**Air Purge** Optional with 3/8-inch quick-connect

fitting and tubing; 0.003 m<sup>3</sup>/min at 1.38 bar (20 psig) maximum

**Sample** Y-strainer filtration with 40-mesh

**Requirements** screen or higher

Sample Flow Rate 60 - 200 mL/min through the

instrument

**Sample Temperature** 5 - 40 °C (41 - 104 °F) **Operating** 5 - 40 °C (41 - 104 °F)

Temperature Range

**Operating Humidity** 0 - 90% relative humidity,

non-condensing

**Interferences** Other oxidizing agents such as bromide, chlorine dioxide,

permanganate, and ozone will cause a positive interference. Hardness must not exceed 1,000 mg/L CaCO<sub>3</sub>.

**Reagent** 0.5 L of buffer solution and 0.5 L of **Consumption** indicator solution in 31 days

**Certifications** CE compliant with: EN 61326-1,

CISPR 11, EN 50581

ACMA RCM

South Korea KC Certificate

North America: FCC Supplier's Declaration of Conformance, IEC/EN 60529, ICES-003

**Light Source** LED, measurement at 510 nm,

1 cm light pathlength

12 VDC, 400 mA maximum

(supplied by the controller)

342 mm x 329 mm x 177 mm

Enclosure Rating IP66 per IEC 60529

Mounting Wall mount

Power Requirements

(Voltage)

Dimensions (H x W x D)

**Weight** 4.1 kg (9.0 lbs.)

\*Subject to change without notice.

#### **Principle of Operation**

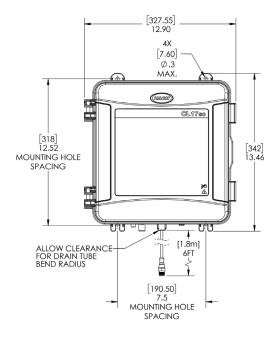
The CL17sc Colorimetric Chlorine Analyzer has three operating components:

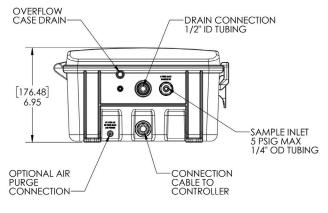
- A linear peristaltic pump to precisely control the volume of incoming samples and reagents
- A colorimeter
- Indicator and buffer solutions

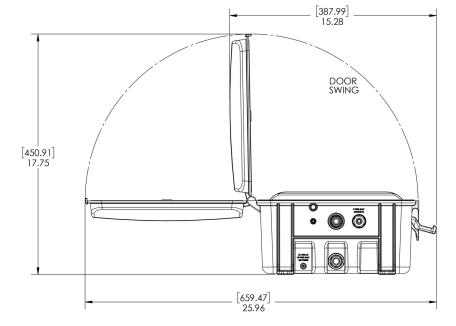
A zero reference point is established at the beginning of the cycle by measuring blank absorbance. (This compensates for the sample's color intensity and turbidity before the chlorine measurement is made.) Indicator and buffer solutions are then added to the sample while a magnetic stirrer mixes the solution and the sample changes color. A colorimeter then measures the light transmitted through the sample. The measured color intensity is compared to a reference standard. Finally, the sample cell is flushed with new sample so that the cycle can repeat every 2.5 minutes.

#### **Dimensions**

The CL17sc is designed to be wall-mounted with four ¼-inch screws. Adequate clearance must be left for plumbing and controller connection. The sample inlet connection is a ¼-inch quick-connect fitting and the drain connection is ½-inch ID flexible hose. The analyzer receives power from connection to a Hach SC controller. (The analyzer's cable is approximately 6.5 ft. in length.)







# DOC053.53.35300.Aug19

#### **Order Information**

Hach CL17sc Colorimetric Chlorine Analyzers are shipped with an installation kit, user manual, and one month of reagents where noted. The user selects a standpipe installation kit or a pressure regulator installation kit at the time of purchase. Hach SC controllers are required for operation and are sold separately.

#### **CL17sc Colorimetric Chlorine Analyzers**

8572700 CL17sc Colorimetric Chlorine Analyzer with Standpipe Installation Kit and Reagents for Free Chlorine
 8572800 CL17sc Colorimetric Chlorine Analyzer with Standpipe Installation Kit and Reagents for Total Chlorine
 8572900 CL17sc Colorimetric Chlorine Analyzer with Pressure Regulator Installation Kit and Reagents for Free Chlorine
 8573000 CL17sc Colorimetric Chlorine Analyzer with Pressure Regulator Installation Kit and Reagents for Total Chlorine

8572300 CL17sc Colorimetric Chlorine Analyzer with Standpipe Installation Kit, w/o Reagents

8572400 CL17sc Colorimetric Chlorine Analyzer with Pressure Regulator Installation Kit, w/o Reagents

#### **Accessories**

8565700

8568200 CL17sc Calibration Verification Kit
8573200 CL17sc Calibration Verification Refill Kit
8560500 CL17sc Standpipe Installation Kit

CL17sc Pressure Regulator Installation Kit

#### **Reagents and Consumables**

**8560400** CL17sc Tubing Kit (pre-assembled)

8573100 CL17sc Cell Cleaning Kit

2556900 Set includes: CL17 DPD Indicator, CL17 Free Chlorine Indicator Solution, and CL17 Free Chlorine Buffer Solution.
 2557000 Set includes: CL17 DPD Indicator, CL17 Total Chlorine Indicator Solution, and CL17 Total Chlorine Buffer Solution.







With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximize instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

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Printed in U.S.A.

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