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 Cl₂ ± 10% from 5 - 10 mg/L Cl₂

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 m³/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 CaCO₃.

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

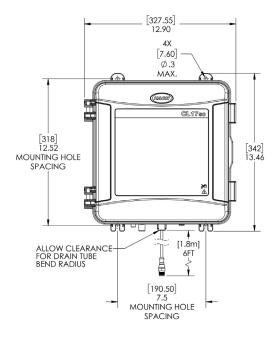
The CL17sc Colorimetric Chlorine Analyzer has three operating components:

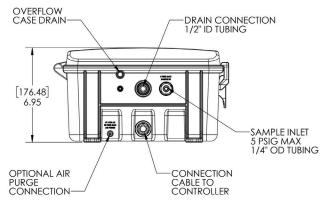
- A linear peristaltic pump to precisely control the volume of incoming samples and reagents
- A colorimeter
- Indicator and buffer solutions

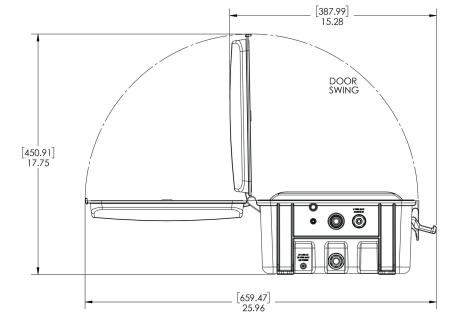
A zero reference point is established at the beginning of the cycle by measuring blank absorbance. (This compensates for the sample's color intensity and turbidity before the chlorine measurement is made.) Indicator and buffer solutions are then added to the sample while a magnetic stirrer mixes the 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.)







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 Chlorin	
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

8568200	CL17sc Calibration Verification Kit
8573200	CL17sc Calibration Verification Refill Kit
8560500	CL17sc Standpipe Installation Kit
8565700	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.

Hach World Headquarters: Loveland, Colorado USA

800-227-4224 tel **United States:** 970-669-2932 fax orders@hach.com **Outside United States:** 970-669-3050 tel 970-461-3939 fax int@hach.com

hach.com

Printed in U.S.A.

©Hach Company, 2019. All rights reserved.



