

Ultra Low Range CL17sc Colorimetric Chlorine Analyser

Applications

- Drinking water
- Wastewater
- Food and beverage
- Pharmaceutical
- Power
- Semiconductor
- Field use



Total chlorine confidence. From the global leader in chlorine analysis.

Meet your unique water cycle needs with the new Ultra Low Range CL17sc online total chlorine analyser from Hach®. Whether treating utility water, product water, or wastewater discharge, you'll have the direct chlorine measurements you need to optimise your process. You'll be able to protect valuable assets and report to regulatory agencies with confidence.

Monitor and Optimise your Dechlorination process

Chlorine breakthroughs can adversely affect your process, product, or equipment. You'll be able to mitigate issues and optimise your process with the Hach Ultra Low Range CL17sc analyser, which has the lowest limit of detection at less than 8 ppb. It's time to accurately measure your total residual chlorine and take control of your dechlorination process.

Depend on direct measurements

Online residual chlorine measurement options for ultra-low range have been either inadequate or inefficient – until now. The Ultra Low Range CL17sc gives you direct total chlorine results, eliminating the need for ORP or amperometric measurement. The Ultra Low Range CL17sc uses colorimetric DPD Standard Method 4500-Cl G and consistently maintains accuracy without loss of sensitivity in your new target range.

Protect your assets

Understand the true impact of chlorine exposure. The Ultra Low Range CL17sc allows for process control across your water cycle, including visibility into GAC exhaustion or channeling and dechlorinating agent dosage. It is the only instrument with a cumulative chlorine counter, which helps you forecast your RO membrane efficiency and its useful life.

Connect with Claros

When the new Ultra Low Range CL17sc analyser is connected to Claros, Hach's Water Intelligence system, it provides real-time visibility into your processes so you can optimise and automate your chlorination/dechlorination. You'll have peace of mind and more time to focus on high-value tasks.

Technical Data*

| | | | |
|------------------------------------|---|-------------------------------------|--|
| Measuring range | 0.008 - 5 mg/L Cl ₂ | Reagent consumption | 0.5 L of buffer solution and 0.5 L of indicator solution in 31 days |
| Accuracy | ± 5% or ± 0.01 mg/L (whichever is greater) from 0 - 4 mg/L; ± 10% from 4 - 5 mg/L | Certifications | CE compliant with: EN 61326-1, CISPR 11, EN 50581 |
| Detection limit | 0.008 mg/L Cl ₂ at 25 °C | | ACMA RCM |
| Cycle time | 2.5 minutes | | South Korea KC Certificate |
| Inlet pressure | 0.3 - 5.2 bar supplied to Y-strainer 0.1 - 0.3 bar supplied to analyser | | North America: FCC Supplier's Declaration of Conformance, IEC/EN 60529, ICES-003 |
| Inlet | ¼-inch OD polyethylene tube, quick-disconnect fitting | Light source | LED, measurement at 510 nm, 1 cm light pathlength |
| Drain | ½-inch ID flexible hose | Enclosure waterproof rating | IP66 |
| Air purge | Optional with 3/8-inch quick-connect fitting and tubing; 0.003 m ³ /min at 1.38 bar maximum | Mounting | Wall mount |
| Sample requirements | Y-strainer filtration with 40-mesh screen or higher | Power requirements (Voltage) | 12 VDC, 400 mA maximum (supplied by the controller) |
| Flow rate | 60 - 200 mL/min through the instrument | Dimensions (H x W x D) | 342 mm x 329 mm x 177 mm |
| Sample temperature | 5 - 40 °C | Weight | 4.1 kg |
| Operating temperature range | 5 - 40 °C | | |
| Operating humidity | 0 - 90% relative humidity, non-condensing | | |
| Interferences | Other oxidising agents such as bromide, chlorine dioxide, permanganate, and ozone will cause a positive interference. Hardness must not exceed 1,000 mg/L CaCO ₃ . | | |

**Subject to change without notice.*

Principle of Operation

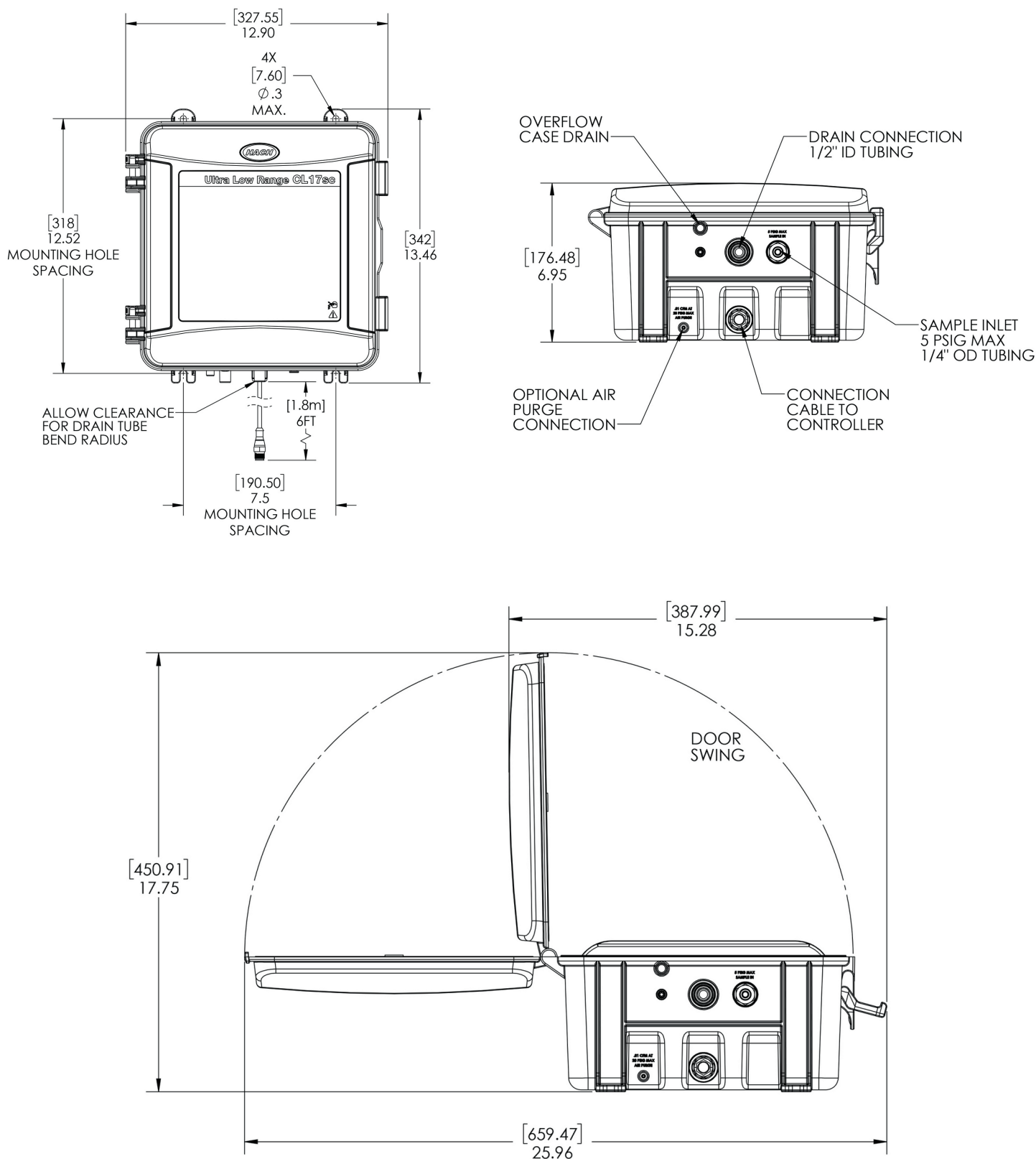
The Ultra Low Range CL17sc Colorimetric Chlorine Analyser has three operating components:

- 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 colour 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 colour. A colorimeter then measures the light transmitted through the sample. The measured colour 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 Ultra Low Range 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 analyser receives power from connection to a Hach SC controller. (The analyser’s cable is approximately 1.8 m in length.)



Order Information

Hach Ultra Low Range CL17sc Colorimetric Chlorine Analysers 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.

Ultra Low Range CL17sc Colorimetric Chlorine Analysers

- 9790400** Ultra Low Range CL17sc Colorimetric Chlorine Analyser with Standpipe Installation Kit
- 9790500** Ultra Low Range CL17sc Colorimetric Chlorine Analyser with Pressure Regulator Installation Kit

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

- 9791100** Ultra Low Range Total Chlorine Reagents Set
- 8575000** CL17sc Tubing Kit (pre-assembled)
- 8573100** CL17sc Cell Cleaning Kit

Enable the Benefits of Smart Monitoring

This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

Hach Service Protects Your Investment

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 maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.