



## CL17 Chlorine Analyzer (Instrument Only)

Product #: 5440000

 **Hazardous**

**OBSOLETE ITEM**  
This item is no longer available.

Suggested replacements:  
• 8572300

Items with this mark may be considered hazardous under some shipping conditions.

If necessary, we will change your selected shipping method to accommodate these items.

**Hach has transitioned the CL17 to the newly upgraded CL17sc, which delivers improved usability and performance. Hach will continue to support the legacy CL17 with service and parts.**

Industry standard, CL17 Chlorine Analyser. Included with the CL17 analyser are an installation kit, sample conditioning kit, maintenance kit, and a user manual. No reagents are included with this instrument only version.

### Accurate, Reliable Results

The Hach CL17 Chlorine Analyser uses colorimetric DPD chemistry to monitor water continuously for free or total residual chlorine or permanganate. The CL17 is a simple, dependable and economical alternative to instruments that rely on electrodes or complex procedures. The CL17 analysis method is not affected by changes in chlorine concentration, sample pH, temperature, flow or pressure, thus offering more accuracy than other methods in today's market.

### Simple, Predictable Maintenance

Both an alarm for manual chlorine feed control and a 4 - 20 mA output for automatic control of chlorine feed pumps is available in the CL17 Analyser. When set for manual control, the instrument notifies the operator of out-of-limit chlorine levels for manual intervention in the disinfection process as needed. For automatic control of chlorine feed pumps, the CL17 can use one of two methods: 1. On-Off Control turns the feed pumps on when chlorine levels fall too low for disinfection and off when levels rise above a pre-set limit. 2. Proportional Control adjusts the amount of chlorine in proportion to the strength of the CL17's output signal.

### Factory Calibrated

Routine maintenance can typically be performed in 15 minutes per month because the sample cell and reaction chamber are easy to clean and the case provides quick access. (Difficult samples may require more frequent cleaning.) The CL17 is also equipped with self-testing diagnostics.

### EPA Compliant

**Free Residual Chlorine** - The CL17 Chlorine Analyser uses an aqueous buffered colorimetric indicator - N,N-diethylphenylenediamine (DPD) - to determine levels of chlorine. DPD turns a magenta color in response to the amount of free residual chlorine (as hypochlorous acid or hypochlorite ion). The reaction takes place at a buffered pH of 6.3 - 6.6. **Total Residual Chlorine** - To measure total residual chlorine (free residual chlorine plus mono-, di- and trichloramines) an additional reagent is used. By adding potassium iodide to the sample, chloramines in the sample oxidize iodide to iodine, which then oxidizes the DPD indicator to the magenta colour at a buffered pH of 5.1.

### Pump Control

---

## Specifications

Accessories: Installation Kit

Maintenance Kit

Accuracy:  $\pm 5\%$  or  $\pm 0.03$  mg/L (ppm) as  $\text{CL}_2$ , whichever is greater. \*For permanganate accuracy, please refer to permanganate application notes

Air purge:	0.1 cfm (0.17 m <sup>3</sup> /h) instrument quality air at max. 20 psig (ca. 1.4 bar) with 1/4-inch OD tube, quick disconnect fitting
Alarm:	Two alarms selectable for sample concentration alarm, analyzer system warning, or analyzer system shut-down alarm. Each is equipped with an SPDT relay with contacts rated for 5A resistive load at 230 V AC.
Certifications:	Europe, CE Approved with:  EN 61326-1  CISPR 11  EN 61010-1  IEC 60529   North America:  UL 61010A-1  CAN/CSA C22.2 No. 1010.1-92
Communication Capabilities:	4-20 mA Output
Cycle Time:	2.5 min
Description:	CL17 Chlorine Analyzer (Instrument Only)
Display:	LCD, 3-1/2 inch digit measurement readout and six-character alphanumeric scrolling text line
Drain:	1/2-inch ID flexible hose, hose barb
Enclosure Construction:	ABS plastic, two clear polycarbonate windows, IP62-rated with the gasketed door latched.
Includes:	CL17 Chlorine Analyser, Maintenance kit, Installation Kit, and Manual. (The power cord is ordered separately.)
Inlet:	1/4-inch OD polyethylene tube, quick-disconnect fitting
Inlet Pressure:	1 - 5 psig (0.07 to 0.34 bar), 1.5 psi is optimum
Interferences:	Other oxidizing agents such as bromide, chlorine dioxide, permanganate and ozone will cause a positive interference. Hexavalent chromium will cause a positive interference: 1 mg/L Cr <sup>6+</sup> = approximately 0.02 mg/L as Cl <sub>2</sub> . Hardness must not exceed 1,000 mg/L as CaCO <sub>3</sub> .
Light source:	Class 1 LED (light emitting diode) with a peak wavelength of 520 nm; 50,000 hours estimated minimum life
Lower Limit of Detection (LOD):	0.03 mg/L (ppm)
Mounting:	Wall mount
Operating Humidity:	Up to 90 % at 40 °C (104 °F) maximum
Operating temperature range:	5 - 40 °C (41 - 104 °F)
Parameter:	Chlorine, Free & Total
Pressure Range:	Inlet Pressure to Sample Conditioning: 1.5 - 75 psi (0.1 - 5.2 bar)
Pressure Regulator Included?:	No
Range:	0 - 5 mg/L Cl <sub>2</sub>
Recorder Outputs:	One 0/4-20 mA with an output span programmable over any portion of the 0 to 5 mg/L range. Recommended load impedance 3.6 to 500 ohms, 130 V isolation from earth ground.
Repeatability:	0.01 ppm or 3.0 % , whichever is greater
Sample Flow Rate:	200 - 500 mL per minute minimum
Sample Temperature:	5 - 40 °C (41 - 104 °F)
Warranty:	12 months
Weight:	10.49 kg

What's included?:	CL17 Chlorine Analyser, Maintenance kit, Installation Kit, and Manual. (The power cord is ordered separately.)
-------------------	--

---

## What's included?

CL17 Chlorine Analyser, Maintenance kit, Installation Kit, and Manual. (The power cord is ordered separately.)