MODEL FX-CLT AMPEROMETRIC TOTAL CHLORINE ANALYZER

The Foxcroft FX-CLT amperometric reagentless total chlorine residual analyzer provides continuous online measurements in clean filtered water without costly reagents or moving parts and their associated maintenance.

The membrane covered 3-electrode sensor measures the sum of free and combined chlorine, including chloramines and organically bound chlorine.

No zero point calibration is required, which simplifies calibration and eliminates the need for a dechlorinated process water source.

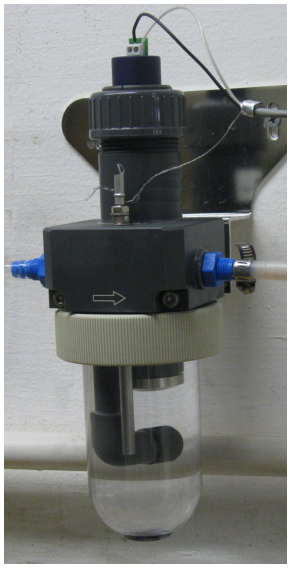
The 4.3" full color glass LCD touch screen is rated for a minimum 1 million touches on one point and is used for calibration and configuration. It displays residual in mg/L (PPM), high / low chlorine alarm indication, flow status or alarm; and processor status.

The feature packed electronics platform provides expansion capability that can grow with your needs. Options such as (8) sensor inputs, PID/compound loop control or enhanced communications can be added without replacing the original instrument when these options are available.

Designed for 24/7 operation, the system can also be used at well sites or booster stations that only operate several hours each day because the sensor can tolerate zero chlorine water for up to 24 hours. A settling time of up to 2 hours is required upon re-start.

Reagentless operation is economical and allows the sample to be recycled back into the process, if regulations allow, to conserve water or for installations without a drain.

Applications include clean filtered water in drinking water treatment, wastewater treatment, reclaimed water, food and beverage process water. It is not recommended to measure the absence of chlorine or ppb concentrations in dechlorinated final effluent discharge.



Standard Product Features:

- Online amperometric test method is approved for drinking water compliance monitoring using EPA Method 334.0
- Calibrate & configure via 4.3" full color LCD touch screen display
- No zero point calibration
- Microprocessor based RoHs compliant electronics
- Automatic temperature display and compensation
- (1) 4-20mA output, up to (4) optionally, overvoltage protected
- Digital RS485 serial port
- High and low alarms, configurable levels and delay; no flow alarm
- (3) 1-amp single pole form C relay outputs for high/low chlorine & flow alarms, up to (8) relays available optionally

Foxcroft Equipment & Service Co. Inc. • 2101 Creek Road Glenmoore, PA 19343
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MODEL FX-CLT AMPEROMETRIC TOTAL CHLORINE ANALYZER

SPECIFICATIONS: Nos. 3013XX Series Amperometric Total Chlorine Sensor

Measurement Type:	Amperometric, membrane covered 3-electrode potentiostatic sensor
Recommended Applications:	Measures Total chlorine (sum of free & combined chlorine, including chloramines and organically bound chlorine) in filtered clean drinking water or wastewater, reclaimed water, food & beverage process water. NOT RECOMMENDED TO VERIFY THE ABSENCE OF CHLORINE.
Sample Quality:	Filtered drinking water or swimming pool quality water; iron and manganese levels within US EPA MCL
	No surfactants such as those found in cleaning agents, detergents
	No hydrophobic substances such as oils or grease
Measuring Range:	0-0.5, 0-2.0, 0-5, 0-10, 0- 20 mg / l (ppm)
Resolution:	0.01mg /l (PPM)
Accuracy:	+/- 2% of full scale
Reproducibility:	Within 5%
Sensor Response Time T_{90}:	Approx. 2 min.
Sensor Acclimation Time:	2 Hours
pH Operating Range	4 - 12 pH, pH must be stable within + / - 0.05pH unit
pH Dependence	Linear 5% loss per each unit of pH increase, starting at pH 7
Interfering / Disruptive Substances:	Chlorine dioxide, ozone
Sample Flow Requirements:	Continuous flow, no air bubbles,15cm/sec (0.492 ft/sec), 30L/hr (8 GPH) in flow cell
Sample Temperature:	+5 to +45°C
Temperature Compensation:	Automatic integrated temperature compensation
Operating Pressure:	Unpressurized operation (atmospheric pressure) with no fluctuation
External pH Buffer or Reagent Addition:	None
Zero Point Calibration:	Not required
Sensor Construction:	PVC. Gold working electrode, silver/silver halide reference electrode, stainless steel counter electrode.
Dimensions & Weight:	Diameter: 25 mm, length: 220 mm, Approx. 125 g
Membrane, Cap & Electrolyte:	Hydrophilic (moisture attracting/absorbing) microporous membrane. PVC cap filled with 8 ml of liquid electrolyte containing alkali chlorides.
Cap & Electrolyte Replacement:	Frequency dependent on water quality. Generally change cap yearly, electrolyte 3-6 months.
Verify Measurement Signal	Once per week or per regulations
Sensor Storage:	Unlimited if stored frost free, dry, without electrolyte between +5 to +45°C
Electrolyte Storage:	One year in original bottle, shielded from sunlight between +5 to +25°C
USED Membrane Caps:	USED membrane caps cannot be stored and re-used
Warranty:	One year from date of factory shipment

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MODEL FX-CLT AMPEROMETRIC TOTAL CHLORINE ANALYZER

SPECIFICATIONS: FX-CL-T Amperometric Total Chlorine Residual Analyzer

Measurement Type:	Amperometric, membrane covered 3-electrode potentiostatic sensor
Electronics:	Digital mircoprocessor based, 12VDC, settings retained in non-volatile memory
Power Supply:	Switching 100-264 Volts AC, 50/60 Hz., output: 24VDC 2.2A
Power Input:	6A Fused, IEC 320-C14 connector, SPST switch, 2 meter detachable cord with IEC 60320 C13 & NEMA 5-15P connectors
Power Consumption:	Less than 3 watts
Touch Screen Display:	Resistive 4.3" LCD, LED backlight, screen resolution 480 x 272, durability rated at minimum 1 million touches on any one point
Temperature Compensation:	Automatic integrated temperature compensation (in sensors)
Signal Output:	4-20mA DC, 750 Ohm maximum load, (1) standard, up to (4) optional, diode protected against voltage input
Sensor Input:	Up to (8) available optionally, signal wire diode protected against overvoltage, power wire auto-reset fuse protected against overvoltage
Communication:	RS485 serial port
Relay Contacts:	(3) SPDT (Form C) contacts, rating 1, amp dry closure. Up to (8) optionally
Alarms:	High & low disinfectant, configurable levels and delay. Low flow alarm if flow meter with optical flow switch option selected
Electronics Enclosure:	Wall mount NEMA 4X, UV resistant fiberglass electronics enclosure
Enclosure Dimensions:	12.5" H x 11" W x 6" Deep approximate, plus mounting tabs
Dimensions, Measuring Flow Cell & Mtg. Bracket	9.45" (240 mm) High x 5.9" (150 mm) Wide x 4.72" (120mm) Deep.
Measuring Flow Cell Connection:	Hose barb for 3/8"OD x 1/4" ID flexible PVC clear tubing
Flow Meter Connection:	Inlet 1/8" FNPT, Outlet hose barb 1/4" ID tubing
Standard Sample & Waste Tubing:	3/8" OD x 1/4" ID flexible PVC. Sample 3-ft long, Waste 5-ft long included
Warranty:	One year from date of factory shipment

Ordering Information

Total Chlorine Residual Analyzer part no. FX-CL-T

3-Electrode Sensor:	Range	Part No.	Range	Part No.
	0-0.5 mg/l	301300	0-10 mg/l	301303
	0-2 mg/l	301301	0-20 mg/l	301304
	0-5 mg/l	301302		

Flow cell, single sensor, with wall mount bracket:	Part no. 303500
Flow meter without optical flow switch (shown):	Part no. 303550
Flow meter with optical flow switch:	Part no. 303551
Additional tubing, sample & waste, per foot:	Part no. 303526
Membrane cap:	Part no. 303220
Electrolyte Total chlorine, 100 ml bottle:	Part no. 303320

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