MODEL FX-CL-D AMPEROMETRIC CHLORINE DIOXIDE ANALYZER

The Foxcroft FX-CL-D amperometric reagentless chlorine dioxide analyzer is available for continuous online measurements in clean filtered drinking water as well as for CIP (clean in place) processes or chlorine dioxide production. It operates without costly reagents and their associated maintenance.

No zero point calibration is required. The analyzer has no moving parts and requires little maintenance other than periodic electrolyte and membrane cap replacement.

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

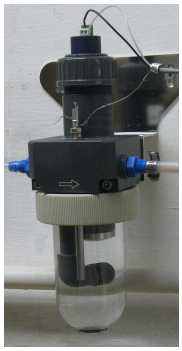
The feature packed electronics platform provides expansion capability that can grow with your needs. Options such as (8) sensor inputs, PID/compound loop control or enhanced communications can be added without replacing the original instrument when these options are available.

The drinking water probe is an amperometric membrane covered 2-electrode type for ranges 0-0.5, 0-2, 0-10 mg/L. The chlorine dioxide probe for CIP and CLO2 production is an amperometric membrane covered 2-electrode type impervious to detergents, chemicals, and chlorine for ranges 0-2, 0-5 & 0-10 mg/L.

Applications include clean filtered water in drinking water treatment, wastewater treatment, reclaimed water, cooling water, food and beverage process water, chlorine dioxide production, clean in place washing.

Standard Product Features:

- Calibrate & configure via 4.3" full color LCD touch screen display
- No zero point calibration
- Microprocessor based electronics are factory expandable to accept additional sensors and features such as PID control
- Automatic temperature display and compensation
- (1) 4-20mA output, up to (4) available optionally
- Digital RS485 serial port
- High and low alarms with fully configurable levels and delay; no flow alarm
- (3) 1-amp single pole form C relay outputs for high/low CLO2 & flow alarms, up to (8) relays available optionally
- All settings retained in non-volatile memory



Chemical resistant probe above, flow meter with optical switch and flow cell

MODEL FX-CL-D AMPEROMETRIC CHLORINE DIOXIDE ANALYZER

SPECIFICATIONS: 3014XX Series Chlorine Dioxide Drinking Water Sensor

Measurement Type:	Amperometric, membrane covered 2-electrode potentiostatic sensor
Recommended Applications:	Measure CLO2 concentration in drinking water, swimming pool quality water, filtered process water without cleaning agents (surfactants). NOT RECOMMENDED TO VERIFY THE ABSENCE OF CHLORINE DIOXIDE.
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, 0-10 mg/L (PPM)
Resolution:	0.001 mg/l, for measurement range 0 to 0.5 mg/l; 0.01 mg/l, for measurement range 0 to 2.0 mg/l
Accuracy:	+/- 2% of full scale
Reproducibility:	Within 5%
Sensor Response Time T_{90}:	Approx. 15 seconds
Sensor Settling Time:	1 Hour
pH Operating Range	1 - 11 pH
pH Dependence	Measurement not pH dependent
Interfering / Disruptive Substances:	Chlorine, 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 shaft & cover. Gold working electrode, combination reference & counter electrode silver with silver halide coating.
Dimensions & Weight:	Diameter: 25 mm, length: 220 mm, Approx. 125 g
Membrane, Cap & Electrolyte:	Membrane: hydrophobic (moisture repellent) microporous PTFE. PVC cap filled with liquid electrolyte containing alkali chlorides.
Cap & Electrolyte Replacement:	Frequency dependent on water quality. Generally change cap yearly, electrolyte 3-6 months. Electrolyte capacity 8 ml.
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

MODEL FX-CL-D AMPEROMETRIC CHLORINE DIOXIDE ANALYZER

SPECIFICATIONS: No. 301451 Chlorine Dioxide Chemical Resistant Sensor

Measurement Type:	Amperometric, membrane covered 2-electrode potentiostatic sensor
Recommended Applications:	Measure CLO2 concentration in CIP (clean in place) process water, water with detergents (surfactants) and chemicals, CLO2 production, or drinking water and swimming pool quality water. NOT RECOMMENDED TO VERIFY THE ABSENCE OF CHLORINE DIOXIDE.
Sample Quality:	Filtered process, drinking or swimming pool quality water. Impervious to chemicals and detergents (surfactants) No hydrophobic substances such as oils or grease
Measuring Range:	0-2, 0-5, 0-10 mg/L (PPM)
Resolution:	0.001 mg/l, for measurement range 0 to 0.5 mg/l; 0.01 mg/l, for measurement range 0 to 2.0 mg/l
Accuracy:	+/- 2% of full scale
Reproducibility:	Within 5%
Sensor Response Time T_{90}:	Approx. 1.5 minutes
Sensor Acclimation Time:	1 Hour
pH Operating Range	1 - 11 pH
pH Dependence	Measurement not pH dependent
Interfering / Disruptive Substances:	Ozone, chlorine is not disruptive
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 +50°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, combination reference & counter electrode silver with silver halide coating.
Dimensions & Weight:	Diameter: 25 mm, length: 220 mm, Approx. 125 g
Membrane, Cap & Electrolyte:	Membrane: non-porous, resistant to chemicals, detergents (tensides). PVC cap with stainless steel membrane holder, filled with 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:	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

MODEL FX-CL-D AMPEROMETRIC CHLORINE DIOXIDE ANALYZER

SPECIFICATIONS: FX-CL-D Amperometric Chlorine Dioxide Residual Analyzer

Measurement Type:	Amperometric, membrane covered 2 electrode potentiostatic sensor
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

Chlorine Dioxide Analyzer part no, FX-CL-D

Drinking Water Sensor	Range	Part No.		Chemical Resistant Sensor	Range	Part No.
	0-0.5 mg/l	301400			0-2 mg/l	301451
	0-2 mg/l	301401			0-5 mg/l	301452
	0-10 mg/l	301403			0-10 mg/l	301453

Flow cell, single sensor, with wall mount bracket:	Part no. 303500
Flow meter without optical flow switch:	Part no. 303550
Flow meter with optical flow switch:	Part no. 303551
Additional tubing, sample & waste, per foot:	Part no. 303526
Membrane cap, drinking water sensor:	Part no. 303230
Membrane cap, chemical resistant sensor:	Part no. 303231
Electrolyte for chlorine dioxide sensors, 100 ml bottle:	Part no. 303330

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