



The 2632 Amperometric Chlorine Dioxide electrode is designed to measure chlorine dioxide residual in water treatment applications. The electrode is available with a measurement range of 0.02 to 2 ppm. This electrode requires the 2650 Amperometric Electronics to output a digital (S³L) signal to the 9950-X Chlorine Controller.

Utilizing smart-sensor technology, this electrode has a unique embedded memory chip and can communicate a wide variety of information to the 9950-X Chlorine Controller. The 9950-X can display the electrodes stored information which includes the serial number, electrode type, service time in hours, chlorine range, high and low temperatures.

The patented DryLoc[®] connector with its Gold plated contacts and O-ring seal ensure a waterproof and reliable interconnect to the 2650 electronics and allows quick assembly during system start up, while providing a easy way to service or replace the Amperometric electrode.

NOTE:

This electrode is required to be in chlorinated water at ALL times.

Features

- Embedded memory chip accessible via the GF 9950-X Chlorine Controller
- Quick assembly with the patented DryLoc[®] connector
- Integrated temperature element for automatic temperature compensation
- Separate drive electronics (2650 Electronics), for easy servicing and electrode replacement



Applications

Residual Chlorine Monitoring:

- **Water Distribution**
- **Ground Water**
- **Surface Water**
- **HVAC Applications (cooling water)**
- **Food and Beverage**

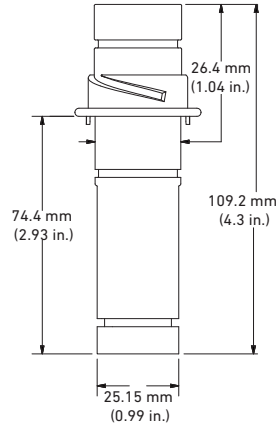
* NOTE: The 9950-X Chlorine Controller is not compatible with the standard 9950 controller.

Specifications

General		
Polarization Source	2650 Amperometric Electronics	
Compatible Flow Cells	3-4630.392 (159 001 690)	
	3-3610-1 (159 001 683)	
	3-3610-2 (159 001 684)	
Mounting	DryLoc® connection	
Materials	CPVC	
Chlorine Dioxide		
Membrane Material	PTFE	
O-ring Material	FKM	
Working Electrode	Gold	
Counter Reference Electrode	Silver halide	
Wetted Material		
	PVC, PTFE, FKM, Nylon, Silicone	
Performance		
Electrode		
Repeatability	±0.08 ppm (mg/l) or 3% of selected range, whichever is less	
Slope	40 to 200 nA/ppm (mg/l) @ 17 °C	
Response Time, T90	< 2 minutes	
System (including electronics and instrument)		
Accuracy	< ±3% of electrode signal after calibration	
Resolution	≤ 0.5% of electrode range	
Sensor Conditioning		
New, first start-up	4 hours maximum before calibration	
Subsequent start-ups	2 hours maximum	
Temperature Element	Pt1000	
Operational Ranges and Limits		
Chlorine Dioxide Range	0.02 to 2 ppm (mg/l)	
pH Operating Range	4.0 to 11.0 pH	
Operating Temperature	5 °C to 45 °C	41 °F to 113 °F
Maximum Operating Pressure		
Membrane	0.48 bar @ 25 °C (7 psi @ 77 °F)	
Flow Velocity Across Membrane Surface		
Minimum	15 cm/s (0.49 ft/s)	
Maximum	30 cm/s (0.98 ft/s)	
Sensitivity	Free Chlorine, ozone	
Chemical Compatibility	< 50% ethanol/water, < 50% glycerol/water	
Environmental		
System Temperature	-10 °C to 60 °C	14 °F to 140 °F
Storage Temperature	-10 °C to 60 °C	14 °F to 140 °F
Relative Humidity	0 to 95% indoor/outdoor non-condensing to rated ambient	
Shipping Weight		
	0.14 kg	0.30 lb
Standards and Approvals		
	CE, FCC	
	RoHS compliant, China RoHS	
	Manufactured under ISO 9001 for Quality	

Dimensions

3-2632-1



System Overview

Panel Mount

GF Instrument
9950-X Chlorine Controller



GF Amperometric Electronics
2650-7

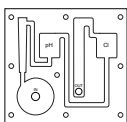


GF 2632-1
Chlorine Dioxide Electrode

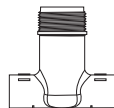


All sold separately

GF Flow Cell
GF Fitting
3610



GF Fitting
3610



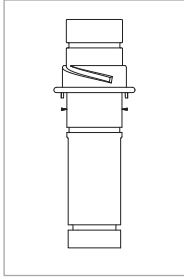
Application Tips

- Amperometric sensors require the water to be Chlorinated at ALL times.
- The sensors should not be used in water containing surfactants, oils, organic chlorine or stabilizers such as cyanuric acid.

Ordering Notes

- 1) The sensor must have a stable and constant flow of water past its membrane for accurate chlorine measurement. Typical flow rate should be 30.24 - 45.36 lph (8 - 12 gph).

Ordering Information



Mfr. Part No.	Code	Description
3-2632-1	159 001 767	Chlorine Dioxide Electrode, 0.02 to 2 ppm (mg/l)

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2632.398	159 310 165	Chlorine Dioxide Sensor Maintenance Kit - (2) electrolyte and (2) PTFE membranes, (2) silicone bands, polishing papers
3-2632.391	159 310 160	Chlorine Dioxide Electrolyte Solution, 30 ml (2) bottles with syringe and needle
3-2630.394	159 310 164	Free Chlorine and Chlorine Dioxide replacement PTFE membrane (1)
3-2600.510	159 500 422	Silicone Band, Chlorine Electrode
3-3610-1	159 001 683	Flow Cell, Clear PVC 1/2" Tee
3-3610-2	159 001 684	Flow Cell, Clear PVC 1/2" Tee, Barb Conn