Signet 2632 Amperometric Chlorine Dioxide Electrode

The Signet 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 to 2 ppm. This electrode requires the Signet 2650 Amperometric Electronics module to communicate with the Signet 8630-3P Chlorine Transmitter.

Utilizing smart-sensor technology, this electrode has a unique embedded memory chip and can communicate a wide variety of information via the Signet 2650 electronics to the Signet 8630-3P Transmitter. The 8630 displayed information includes electrode type, factory calibration data, service time, chlorine range, high and low pH (with optional Signet pH electrode), temperature values and more.

Signet's patented DryLoc® connector provides quick assembly and a secure connection. Gold-plated contacts and an O-ring seal ensure a waterproof and reliable connection to the Signet 2650 Amperometric Electronics.

The Signet 2632 Amperometric Chlorine Dioxide Electrode has an integrated temperature element for automatic temperature compensation.

Features

- **Embedded memory chip accessible via the Signet 8630 transmitter**
- **Quick assembly with Signet's patented DryLoc® connector**
- **Integrated temperature element for automatic temperature compensation**
- **Separate drive electronics (Signet 2650), for easy electrode replacement without running new cable**

Applications

Residual Chlorine Monitoring:

- **Cooling Towers**
- **Ground Water**
- **Fruit and Vegetable Washing**
- **Water Distribution**
- **Wastewater Odor Control**
- **Poultry and Meat Processing**
- **UPW Treatment**
- **Hospital and Healthcare Facilities**

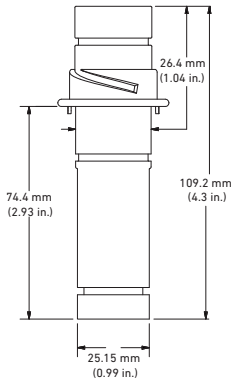
U.S. Patent No: 6,666,701

Specifications

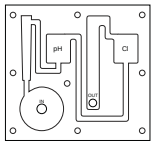
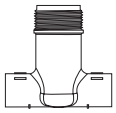
General			
Polarization Source		Signet 2650 Amperometric Electronics	
Compatible Flow Cells		3-3610-1 Flow Cell, Clear PVC 1/2" Tee	
		3-3610-2 Flow Cell, Clear PVC 1/2" Tee, Barb Conn	
		3-4630.392 Acrylic flow cell complete with all components and connections	
Mounting		Signet DryLoc connection	
Materials		CPVC	
Chlorine Dioxide			
	Membrane Material	PTFE	
	O-ring Material	FPM	
	Working Electrode	Gold	
	Counter Reference Electrode	Silver halide	
Wetted Material			
		PVC, PTFE, FPM, 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		0 °C to 45 °C	32 °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)	
Chemical Compatibility		< 50% ethanol/water, < 50% glycerol/water	
Environmental			
Operating Temperature		0 °C to 45 °C	32 °F to 113 °F
Storage Temperature		-10 °C to 60 °C	-4 °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	
Signet Instrument 8630-3P	
Signet Amperometric Electronics 2650-7	
Signet 2632-1 Chlorine Dioxide Electrode	
Signet Flow Cell Signet Fitting 3610	 

All sold separately

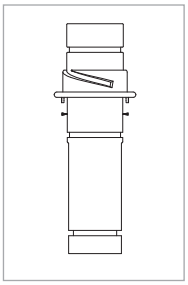
Application Tips

- 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
3-2632.391	**159 310 160**	Chlorine Dioxide electrolyte, 30 mL (2) bottles
3-2632.398	**159 310 165**	Chlorine Dioxide maintenance kit - (2) electrolyte, (2) PTFE membranes, (2) Silicone Bands, and Polishing Paper
3-2630.394	**159 310 164**	Free Chlorine and Chlorine Dioxide Replacement PTFE membrane (1)

3-2632.099 Rev B (02/16)

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