

# Signet 2632 Amperometric Chlorine Dioxide Electrode **+GF+**



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:

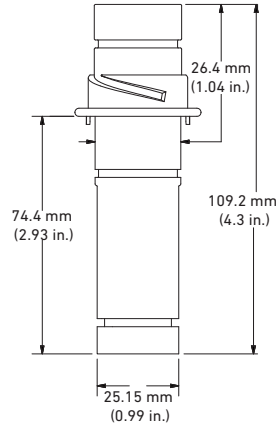
- **Cooling Towers**
- **Ground Water**
- **Fruit and Vegetable Washing**
- **Water Distribution**
- **Wastewater Odor Control**
- **Poultry and Meat Processing**
- **UPW Treatment**
- **Hospital and Healthcare Facilities**

# 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	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	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

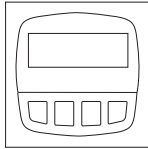
## 3-2632-1



# System Overview

## Panel Mount

Signet Instrument  
8630-3P



Signet Amperometric Electronics  
2650-7

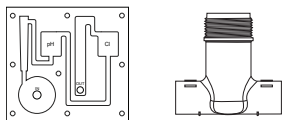


**Signet 2632-1**  
**Chlorine Dioxide Electrode**



All sold separately

Signet Flow Cell  
Signet Fitting  
3610



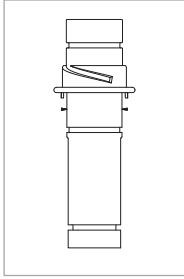
## Application Tips

- The sensors should not be used in water containing surfactants, oils, organic chlorine or stabilizers such as cyanuric acid.

## Ordering Notes

- 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	<b>159 001 767</b>	Chlorine Dioxide Electrode, 0.02 to 2 ppm (mg/l)

## Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2632.391	<b>159 310 160</b>	Chlorine Dioxide Electrolyte, 30 mL (2) bottles
3-2632.398	<b>159 310 165</b>	Chlorine Dioxide Maintenance Kit - (2) electrolyte, (2) PTFE membranes, (2) silicone bands, and polishing paper
3-2630.394	<b>159 310 164</b>	Free Chlorine and Chlorine Dioxide replacement PTFE membrane (1)