Signet 2630 Amperometric Chlorine Electrode





The Signet 2630 Amperometric Chlorine electrode is designed to measure free chlorine in drinking water and post wastewater treatment applications. The electrode is available with a measurement range of 0 to 5 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 to the Signet 2650 electronics and Signet 8630-3P Transmitter.

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 interconnect to the Signet 2650 Amperometric

The Signet 2630 Amperometric Chlorine 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:

- Water Distribution
- **Ground Water**
- **Surface Water**
- **HVAC Applications (cooling water)**
- **Boiler Feed Water**
- **Gray Water Dechlorination**
- Food and Beverage
- **RO Membrane Protection**
- **Swimming Pools**
- Aquariums
- **Water Parks**

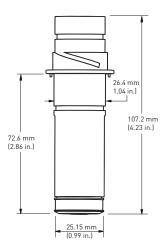
U.S. Patent No: 6,666,701

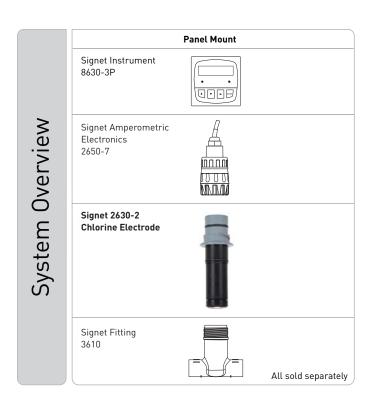
Specifications

General			
Polarization Source	Signet 2650 Amperometric E	lectronics	
Compatibility	3-3610-1 Flow Cell, Clear PV		
oompanis,	3-3610-2 Flow Cell, Clear PV		
		complete with all components and connections	
Mounting	Signet DryLoc connection		
Materials	CPVC		
Free Chlorine			
Membrane Material	PVDF		
0-ring Material	FPM		
Working Electrode	Gold		
Counter Reference Electrode	Silver halide		
Wetted Material			
	PVC, PVDF, FPM		
Performance			
Electrode			
Repeatability	±0.08 ppm (mg/l) or 3% of selected range whichever is less		
Slope	10 to 60 nA/ppm (mg/l)		
Response Time, T90	< 2 minutes		
System (including electronics and i	nstrument)		
Accuracy	< ±3% of electrode signal after calibration		
Resolution	±0.5% of electrode range		
Sensor Conditioning			
New, first start-up	4 hours maximum before cal	ibration	
Subsequent start-ups	2 hours maximum		
Temperature Element	PT1000, Class B		
Operational Ranges and Limits			
Free Chlorine Range	0 to 5 ppm (mg/l)		
Free Chlorine pH Operating Range	5.0 to 9.0 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 Su	rface		
Minimum	15 cm/s (0.49 ft/s)		
Maximum	30 cm/s (0.98 ft/s)		
Interferences	ClO ₂ , ozone, bromine		
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	
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Standards and Approvals			
Standards and Approvals	CE		
Standards and Approvals	CE China RoHS		

Dimensions

3-2630-2





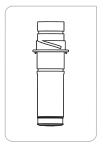
Application Tips

 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 free chlorine measurement. Typical flow rate should be 30.24 - 45.36 lph (8 - 12 gph).

Ordering Information



Mfr. Part No.	Code	Description
3-2630-2	159 001 662	Free Chlorine electrode, 0 to 5 ppm (mg/l)
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Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2630.391	159 001 674	Electrolyte kit, 30 ml bottle with syringe and needle
3-2630.392	159 001 675	Replacement membrane (1)
3-2630.396	159 001 676	Electrolyte replacement kit - 30 ml electrolyte bottles (2), needles (2) and membranes (2) with syringe
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