Signet 2630 Amperometric Chlorine Electrode

The Signet 2630 Amperometric Chlorine electrode is designed to measure free chlorine in fresh water treatment applications. The electrode is available with a measurement range of 0.02 to 2 ppm, 0.05 to 5 ppm or 0.1 to 20 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 Electronics.

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**

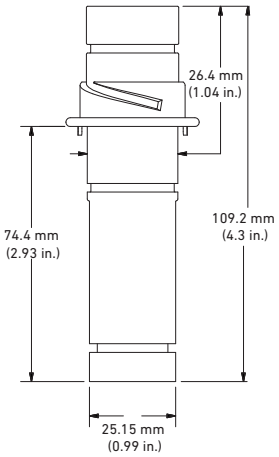
U.S. Patent No.: 6,666,701

Specifications

General				
Polarization Source		Signet 2650 Amperometric Electronics		
Compatibility		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		
Free Chlorine				
	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	15 to 85 nA/ppm (mg/l)		
	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, Class B		
Operational Ranges and Limits				
	Free Chlorine Range	0.02 to 2 ppm (mg/l)	0.05 to 5 ppm (mg/l)	0.1 to 20 ppm (mg/l)
	Free Chlorine pH Operating Range	5.0 to 8.2 pH		
Maximum Media 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)		
Interferences		ClO_2, ozone, bromine		
Chemical Compatibility		< 50% ethanol/water, < 50% glycerol/water		
Environmental				
System Temperature		-10 °C to 60 °C	-4 °F to 140 °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

3-2630-X



System Overview

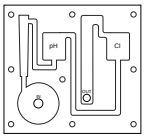
Panel Mount

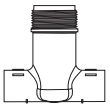
Signet Instrument
8630-3P

Signet Amperometric
Electronics
2650-7

Signet 2630-X
Chlorine Electrode

Signet Flow Cell
Signet Fitting
3610





All sold separately

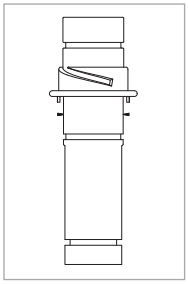
Application Tips

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

Ordering Information



Mfr. Part No.	Code	Description
3-2630-1	**159 001 746**	Free Chlorine electrode, 0.02 to 2 ppm (mg/l)
3-2630-2	**159 001 662**	Free Chlorine electrode, 0.05 to 5 ppm (mg/l)
3-2630-3	**159 001 747**	Free Chlorine electrode, 0.1 to 20 ppm (mg/l)

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
3-2630.391	**159 001 674**	Electrolyte kit, 30 ml (2) bottles with syringe and needle
3-2630.394	**159 310 164**	Free Chlorine replacement PTFE membrane (1)
3-2630.398	**159 310 166**	Free Chlorine sensor maintenance kit - (2) electrolyte and (2) PTFE membranes, (2) silicone bands, polishing papers
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
3-2600.510	**159 500 422**	Silicone band, Chlorine sensor

3-2630.099 Rev K (02/16)

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