

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



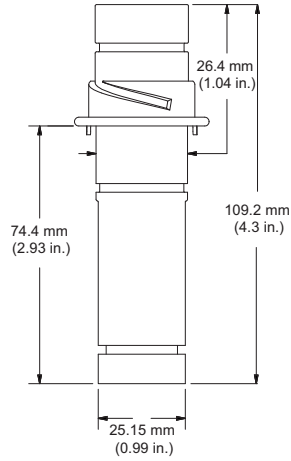
Tel: +44 (0) 1706 869777
E-mail: sales@desal.co.uk
Web: www.desal.co.uk

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 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	

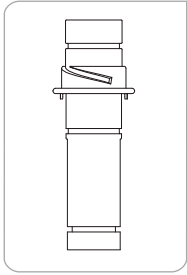
Application Tips

- The sensors should not be used in water containing surfactants, oils, organic chlorine

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	159 001 767	Chlorine Dioxide electrode, 0 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
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) (sensors sold after Nov 1, 2012)