

Chlorine Dioxide Sensor Digital

90S220000 . 90S020000



The chlorine dioxide sensor from the eCHEM sensors product range is an electrochemical sensor for measuring the chlorine dioxide concentration in water. The range of application of the sensor covers almost all water qualities and treatments (e.g. bottle washing machine, CIP system, rinser). It can also be used in seawater. Thanks to a special membrane system, the sensor is particularly resistant to chemicals and surfactants.

Benefits

- Surfactants are partially tolerated
- Abrasive particles are tolerated
- Higher temperatures are possible

Applications

- All types of water treatment

Accessories

- Cable: Extension cables of 0.3 m, 2 m, 10 m, 25 m
- Controller: TriBox3, TriBox Mini, HS100
- Fittings: FlowCell

Chlorine Dioxide

Technical Specifications

Measurement technology	Membrane-covered, amperometric 2-electrode system	
Measurement principle	Amperometry	
Parameters	Chlorine Dioxide	
Measurement range	0...2 mg/L, 0...20 mg/L	
Accuracy	Measuring range 2 mg/L: at 0.4 mg/L & 1.6 mg/L < 1 % Measuring range 20 mg/L: at 1.5 mg/L < 0.1 %	
Response time	T90: approx. 1 min	
Running-in period	Approx. 2 h prior to initial operation	
Drift	Approx. -1% per month	
Temperature compensation	Automatic through integrated temperature sensor; Temperature jumps must be avoided	
Housing material	Micro-porous hydrophilic membrane, UPVC, stainless steel 1.4571	
Dimensions (L x Ø)	Approx. 205 mm x approx. 25 mm	~ 8.1" x 1"
Interface	RS-485, Modbus RTU	
Power supply	9...30 VDC, max. 56 mA	
Connection	8-pin M12 plug	
Maintenance interval	typically once a week measuring signal check, membrane cap change & electrolyte change depending on application	
System compatibility	Modbus RTU	
Warranty	1 year (EU & US: 2 years) on electronics; wear parts are excluded from the warranty	
Process pressure	1 bar, no pressure shocks or vibrations, operation with retaining ring	~ 14.5 psig
Calibration method	Determination of chlorine with DPD-1 method	
Process temperature	0...+50 °C (no ice crystals in the test water)	~ +32 °F... +122 °F
Flow rate	Approx. 15..30 L/h in FLC-3, minimum flow dependence exists	
pH range	pH 1 ... pH 12, reduced pH dependence	
Conductivity	10 µS/cm...50 mS/cm (sea water)	
Cross influences	Cl ₂ does not interfere; O ₃ : factor 25	