

Chlorine Dioxide

90S220000 · 90S020000



The application areas of this sensor extend to almost all water qualities. It is resistant to chemicals and detergents thanks to a special membrane system. The chlorine dioxide sensor is also resistant to chlorine. Ozone is measured with a 25 times higher sensitivity than chlorine dioxide. The measuring cell can be used in the pH range from pH >1 up to the limit of stability of chlorine dioxide in alkaline solutions. Precipitation, such as lime, can block the membrane!

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

Technical Specifications

OPERATION AND SYSTEM CONFIGURATION

Measurement principle	Membrane-covered, amperometric 2-electrode system
Measuring method	Amperometry

AUXILIARY POWER

Electrical connection	8-pin M12 plug
Power supply	12...24 V

INPUT PARAMETERS

Measured variables	Chlorine Dioxide
Measuring ranges	2 mg/L, 20 mg/L
Cable specification	-
Temperature compensation	Automatic through integrated temperature sensor, temperature changes <5 °C/h

OUTPUT SIZES

Output signal	RS-485, Modbus RTU
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 %
Data interface	RS-485, Modbus RTU

PERFORMANCE CHARACTERISTICS

Response time	T90: approx. 1 min
Running-in period	Approx. 1 h at initial operation
Cross influences	Cl ₂ : does not interfere, O ₃ : is measured with 25 higher sensitivity than ClO ₂
Calibration method	On Controller by means of analytical determination
Maintenance interval	Regular monitoring of the measurement signal at least once a week.

AMBIENT CONDITIONS

Storage temperature	Sensor: Frost free, dry and without electrolyte
Compressive strength	1.0 bar, no pressure shocks or vibrations

PROCESS CONDITIONS

Process temperature	+5...+50 °C
Process pressure	1.0 bar, no pressure shocks or vibrations
pH range	pH 2...11

STRUCTURAL DESIGN

Dimensions (Ø x L)	25 mm x 205 mm
Materials	PVC-U, stainless steel 1.4571