

## 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

<b>Measurement principle</b>	Membrane-covered, amperometric 2-electrode system
<b>Measuring method</b>	Amperometry

### AUXILIARY POWER

<b>Electrical connection</b>	8-pin M12 plug
<b>Power supply</b>	12...24 V

### INPUT PARAMETERS

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

### OUTPUT SIZES

<b>Output signal</b>	RS-485, Modbus RTU
<b>Accuracy</b>	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 %
<b>Data interface</b>	RS-485, Modbus RTU

### PERFORMANCE CHARACTERISTICS

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

### AMBIENT CONDITIONS

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

### PROCESS CONDITIONS

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

### STRUCTURAL DESIGN

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