CHEMICAL SUPPORT SYSTEMS

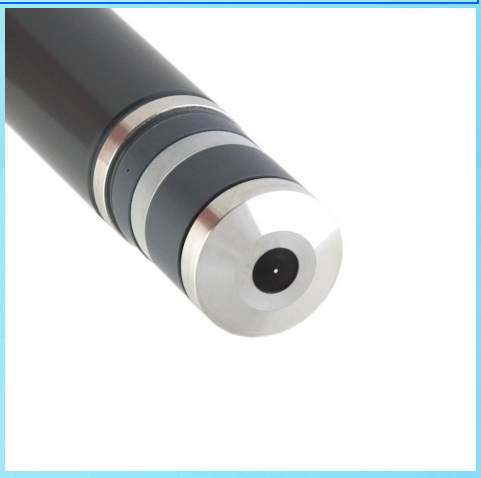
DESIGN / ENGINEER / MANUFACTURE / INSTALL

# Chlorine Dioxide monitor

Our Chlorine Dioxide monitors utilise the very latest and best Chlorine Dioxide Sensor available in the world today. It is a membraned device which is insensitive to chlorine, uses no reagents. Is extremely stable, has reduced maintenance and reduced whole life costs.

- Amperometric sensors – continuous online $ClO_2$ analyzer
- No chemical reagents – lower cost of ownership
- Stable and reliable – excellent process control
- Suitable for all potable and process waters
- No interference from residual chlorine
- Tolerant of water containing detergents
- Chlorite sensors also available

To be used in combination with CSS Analyser



The membraned amperometric chlorine dioxide sensor is a two electrode sensor which operates at an elevated applied potenial which in turn eliminates zero drift. It's unique design means no reagents or buffers are required at all and calibration is a simple one point (no zero required) operation.

Anywhere you have a requirement to measure residual $ClO_2$ is a suitable application for the Chlorine Dioxide sensor. With its reduced maintenance, reduced calibration and reduced spares requirements the $ClO_2$ analyzers are the most cost-effective available

Can be installed in a variety of auxiliary flow cells and self-cleaning devices.

## Specification

Chlorine Dioxide Sensor Probe

**Application**

All kinds of water treatment (e.g. bottle washing machine, CIP-plants)

**Type**

Membrane covered, amperometric 2-electrode system

**Measurand**

Chlorine Dioxide

**Sensor ranges**

0-0.50mg/l; 0-2mg/l; 0-5mg/l; 0-10mg/l; 0-20mg/l

**Resolution**

0.01mg/l

**Repeatability**

<1%

**Working Temperature**

>3 up to 50°C

**Temperature compensation**

Automatic, by an integral temperature sensors(temp changes<5°C)

**Max. allowed working pressure**

1.0 bar, no pressure impulses and/or vibrations

**Flow rate**

Approx 0.5 l/min (min 0.2 l/min)

**pH range**

pH1 to pH11

**Run-in time**

First start up approx 1 hr

**Response time**

$T_{90}$ approx 1.5mins

**Zero point adjusment**

Not necessary

**Calibration**

Manual using a suitable $ClO_2$ test kit, every 1 week to 3 months, application dependent

**Interferences**

$Cl_2$ does not interference, $O_3$ is measured with a sensitivity 25 times higher than $ClO_2$, 1% Sulfuric acid or 1% nitric acid in the water have no influence to the measuring behaviour

**Dimensions**

Diameter approx 25mm, Length approx 175mm (4-pole screw connector) approx 220mm (4-20mA, 2-pole terminal)

**Storage**

Frost Protected, dry and without electrolyte no limit. Used membrane caps cannot be stored

**Maintenance**

Change of membrane cap – yearly (dependent on water quality)
Electrolyte – every 3 to 6 months

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