

DULCOTEST sensors for chlorine dioxide

Reliable online measurement of chlorine dioxide – with DULCOTEST sensors.



Chlorine dioxide measurement with DULCOTEST sensors offers precise, reliable, application-specific measured values in real time for all oxidation and disinfection tasks.

Technical Details

Sensor type CDE 2-mA

- Measuring ranges 0.01...10 mg/l
- Temperature 5...45 °C
- Pressure max. 1.0 bar
- pH range 4.0...11.0
- Response time 120 s

Sensor type CDP 1-mA

- Measuring ranges 0.02...2.00 mg/l
- Temperature 10...45 °C
- Pressure max. 3.0 bar
- pH range 5.5...10.5
- Response time 60 s

Sensor type CDR 1-mA

- Measuring ranges 0.01...10.0 mg/l
- Temperature 1...55 °C
- Pressure max. 3.0 bar
- pH range 1.0...10.0
- Response time 180 s



DULCOTEST sensors for chlorine dioxide

Reliable online measurement of chlorine dioxide – with DULCOTEST sensors.

Chlorine Dioxide Sensor CDE 2-mA

Standard sensor for the measurement of chlorine dioxide without cross-sensitivity by free chlorine. For operation on controllers with 4-20 mA input

Your Benefits

- Measured variable: Chlorine dioxide, no cross-sensitivity towards free chlorine
- Diaphragm-covered sensor minimises faults caused by changing flow or ingredients in the water

Field of Application

- Drinking water

Measured variable	Chlorine dioxide (ClO ₂)
Reference method	DPD1
pH-range	4.0...11.0
Cross sensitivity	Ozone
Temperature	5...45 °C
Max. pressure	1.0 bar
Flow	DGMa, DLG III: 60...80 l/h BAMa: 5...100 l/h (depending on design)
Supply voltage	16...24 V DC (2-wire)
Output signal	4-20 mA ≈ measuring range, temperature-compensated, uncalibrated, not electrically isolated
Response time sensor t ₉₀	120 s
Selectivity	Chlorine dioxide selective towards free chlorine, chlorite and chlorate
Process integration	Bypass: open sample water outlet
Sensor fitting	BAMa, DGMa, DLG III
Controllers	D1C
Typical applications	Untaminated drinking water (surfactant-free).
Resistance to	Salts, acids, alkalis. Not surfactants
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CDE 2-mA-0.5 ppm	0.01...0.5 mg/l	792930
CDE 2-mA-2 ppm	0.02...2.0 mg/l	792929
CDE 2-mA-10 ppm	0.10...10.0 mg/l	792928

Chlorine dioxide sensors complete with 100 ml of electrolyte

Note: a mounting kit (order no. 815079) is required for initial fitting of the chlorine dioxide sensors in the in-line probe housing DLG III.

DULCOTEST sensors for chlorine dioxide

Reliable online measurement of chlorine dioxide – with DULCOTEST sensors.

Chlorine Dioxide Sensor CDP 1-mA

Sensor for the measurement of chlorine dioxide with a fast response time, for example in bottle-washing systems. For operation on controllers with 4-20 mA input

Your Benefits

- Measured variable: Chlorine dioxide without interference caused by surfactants
- Diaphragm-covered sensor minimises faults caused by changing flow or ingredients in the water
- Fast response time through open-pored diaphragm and external temperature measurement

Field of Application

- Bottle washing system

Measured variable	Chlorine dioxide (ClO ₂)
Reference method	DPD1
pH-range	5.5...10.5
Cross sensitivity	Ozone, chlorine
Temperature	10...45 °C
Max. pressure	3.0 bar
Flow	DGMa, DLG III: 40...60 l/h BAMa: 5...100 l/h (depending on design)
Supply voltage	16...24 V DC (2-wire)
Output signal	4-20 mA ≈ measuring range, not temperature-compensated, uncalibrated, not electrically isolated
Temperature measurement	Separate temperature measurement needed for compensation
Response time sensor t ₉₀	60 s
Selectivity	Chlorine dioxide as against chlorite and chlorate
Process integration	Bypass: open sample water outlet
Sensor fitting	We would recommend installing the sensor together with a Pt 100 temperature sensor in fittings BAMa, DGMa, DLG III
Controllers	D1C and DAC with automatic temperature correction only
Typical applications	Process water containing surfactants (bottle washing machines).
Resistance to	Surfactants, slight films of dirt
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CDP 1-mA-2 ppm	0.02...2.0 mg/l	1002149

Chlorine dioxide sensors complete with 100 ml of electrolyte

Note: a mounting kit (order no. 815079) is required for initial fitting of the chlorine dioxide sensors in the in-line probe housing DLG III.

DULCOTEST sensors for chlorine dioxide

Reliable online measurement of chlorine dioxide – with DULCOTEST sensors.

Chlorine Dioxide Sensor CDR 1-mA

Sensor for the measurement of chlorine dioxide for all kinds of water, including hot and contaminated water. Without cross-sensitivity by free chlorine. For operation on controllers with 4-20 mA input

Your Benefits

- Measured variable: Chlorine dioxide, without cross-sensitivity towards free chlorine
- Diaphragm-covered sensor minimises faults caused by changing flow or ingredients in the water
- Resistance to films of dirt by pore-free diaphragm
- Operating temperature up to 60 °C (short term) by appropriate sensor materials

Field of Application

- Hot water

Measured variable	Chlorine dioxide (ClO ₂)
Reference method	DPD1
pH-range	1.0...10.0
Cross sensitivity	Ozone
Temperature	1...55 °C
Max. pressure	3.0 bar
Flow	DGMa, DLG III: 30...60 l/h BAMa: 5...100 l/h (depending on design)
Supply voltage	16...24 V DC
Output signal	4-20 mA temperature-compensated, uncalibrated, not electrically isolated
Response time sensor t ₉₀	3 min.
Selectivity	Chlorite
Process integration	Bypass: open sample water outlet
Sensor fitting	BAMa, DGMa, DLG III
Controllers	D1C
Typical applications	Contaminated industrial, process water, containing surfactants, cooling water, irrigation water, slightly contaminated waste water, warm water.
Resistance to	Surfactants, slight films of dirt, water-soluble chemicals, solids/dirt, biofilms
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CDR 1-mA-0.5 ppm	0.01...0.5 mg/l	1033762
CDR 1-mA-2 ppm	0.02...2.0 mg/l	1033393
CDR 1-mA-10 ppm	0.10...10.0 mg/l	1033404

Note: a mounting kit (order no. 815079) is required for initial fitting of the chlorine dioxide sensors in the in-line probe housing DLG III.

DULCOTEST sensors for chlorine dioxide

Reliable online measurement of chlorine dioxide – with DULCOTEST sensors.

Chlorine Dioxide Sensor CDR 1-CAN

Sensor for the measurement of chlorine dioxide for all kinds of water, including hot and contaminated water. Without cross-sensitivity by free chlorine. For operation on controllers with 4-20 mA input

Your Benefits

- Measured variable: Chlorine dioxide, without cross sensitivity to free chlorine
- Diaphragm-covered sensor minimises faults caused by changing flow or ingredients in the water
- Resistance to films of dirt by pore-free diaphragm
- Operating temperature up to 60 °C (short term) by appropriate sensor materials
- Operation on the CAN-bus with all the associated benefits

Measured variable	Chlorine dioxide (ClO ₂)
Reference method	DPD1
pH-range	1.0...10.0
Cross sensitivity	Ozone
Temperature	5...45 °C
Max. pressure	1.0 bar
Flow	DGMa, DLG III: 30...100 l/h BAMa: 5...60 l/h (depending on design)
Supply voltage	Via CAN-interface (11 – 30 V)
Output signal	Uncalibrated, temperature compensated, electrically isolated
Response time sensor t ₉₀	3 min.
Selectivity	Chlorite
Process integration	Bypass: open sample water outlet
Sensor fitting	BAMa, DGMa, DLG III
Controllers	DULCOMARIN
Typical applications	Contaminated industrial, process water, containing surfactants, cooling water, irrigation water, slightly contaminated waste water.
Resistance to	Surfactants, water-soluble pollutants, solids/dirt, biofilms
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CDR 1-CAN-10 ppm	0.01...10.0 mg/l	1041155

Complete with 100 ml of electrolyte, connecting cable - CAN M12 5-pin 0.5 m, T-distributor M12 5-pin CAN