DULCOTEST sensors for total available chlorine

Reliable online measurement of total available chlorine – with DULCOTEST sensors.

Disinfection of swimming pool water with the application-optimised DULCOTEST sensors for total available chlorine - exact measured values and high process reliability guaranteed.

Technical Details

Total available chlorine

- CGE 3-mA
- pH: 5.5 … 9.5
- Temperature: 5 … 45 °C

DULCOTEST sensors for total available chlorine

Reliable online measurement of total available chlorine – with DULCOTEST sensors.

Sensor for total available and free chlorine CGE 3-mA

Sensor for total available chlorine, such as derivatives of chloro(iso)cyanuric acid, without disturbance when used in swimming pools where disinfection is provided by electrolysis processes. Also suitable for use as a sensor for free chlorine. For operation with controllers with 4-20 mA input

Your Benefits

- Measured variable: total available chlorine, for instance disinfectant with organic chlorine, such as derivatives of chloro(iso)cyanuric acid
- Measured variable: free chlorine without interference with the presence of cyanuric acid
- Gold electrode to prevent faults by products from electrolysis processes where the electrodes are immersed directly into the sample water (without diaphragm)
- Diaphragm-covered sensor (encapsulated) minimises faults caused by changing flow or substances in the water
- Hydrophilic diaphragm guarantees the permeability of chloro(iso)cyanuric acid derivatives towards the measuring electrodes
- The special reaction system of the electrolyte allows the total available chlorine to be determined and use at a high pH of up to 9.5

Measured variable	Free chlorine and total available chlorine: Total of organically bound chlorine (e.g. bound to cyanuric acid) and free chlorine
Reference method	DPD1
pH-range	5.5…9.5
Temperature	5…45 °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 (2-wire)
Output signal	4-20 mA ≈ measuring range, temperature-compensated, uncalibrated, not electrically isolated
Selectivity	total available chlorine and free chlorine as against combined chlorine (chloramines)
Disinfection process	Disinfectants with organic chlorine, e.g. based on cyanuric acid, chlorine gas, hypochlorite, electrolysis
Process integration	Bypass: open sample water outlet
Sensor fitting	BAMa, DGMa, DLG III
Controllers	D1C, DAC, AEGIS II
Typical applications	Swimming pool water; combined disinfection processes with chloro(iso)cyanuric acid derivatives and electrolysis. Water of a similar quality to potable water with a higher pH of up to 9.5.
Resistance to	Surfactants, cyanuric acid
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CGE 3-mA-2 ppm	0.02…2.0 mg/l	1047959
CGE 3-mA-10 ppm	0.10…10.0 mg/l	1047975

A mounting kit, order no. 815079, is required for initial fitting of the chlorine sensors in the in-line probe housing DLG III.

ProMinent Group
info@prominent.com

DULCOTEST sensors for total available chlorine

Reliable online measurement of total available chlorine – with DULCOTEST sensors.

Sensor for total available and free chlorine CGE 3-CAN-P

Sensor for total available chlorine, such as derivatives of chloro(iso)cyanuric acid when used in swimming pools. Also suitable for use as a sensor for free chlorine. For use on controllers with CAN-bus connection

Your Benefits

- Measured variable: total available chlorine, for instance disinfectant with organic chlorine, such as derivatives of chloro(iso)cyanuric acid
- Measured variable: free chlorine without interference with the presence of cyanuric acid
- Gold electrode to prevent faults by products from electrolysis processes where the electrodes are immersed directly into the sample water (without diaphragm)
- Diaphragm-covered sensor (encapsulated) minimises faults caused by changing flow or substances in the water
- Hydrophilic diaphragm guarantees the permeability of chloro(iso)cyanuric acid derivatives towards the measuring electrodes
- The special reaction system of the electrolyte allows the total available chlorine to be determined and use at a high pH of up to 9.5
- Operation on the CAN-bus with all the associated benefits

Measured variable	Free chlorine and total available chlorine: Total of organically bound chlorine (e.g. bound to cyanuric acid) and free chlorine
Reference method	DPD1
pH-range	5.5…9.5
Temperature	5…45 °C
Max. pressure	3.0 bar
Flow	DGMa, DLG III: 30...60 l/h BAMa: 5...100 l/h (depending on design)
Supply voltage	Via CAN interface (11 – 30 V DC)
Output signal	Uncalibrated, temperature compensated, electrically isolated
Selectivity	total available chlorine and free chlorine as against combined chlorine (chloramines)
Disinfection process	Disinfectants with organic chlorine, e.g. based on cyanuric acid, chlorine gas, hypochlorite, electrolysis
Process integration	Bypass: open sample water outlet
Sensor fitting	BAMa, DGMa, DLG III
Controllers	DULCOMARIN 3, DULCOMARIN II with hardware before 06.02.2014 from software version 3027 or later, with hardware after 06.02.2014 from software version 3033 or later
Typical applications	Swimming pool water, disinfection processes with chloro(iso)cyanuric acid derivatives and electrolysis. Water of a similar quality to potable water with a higher pH of up to 9.5.
Resistance to	Surfactants, cyanuric acid
Measuring principle, technology	Amperometric, 2 electrodes, diaphragm-covered

	Measuring range	Order no.
CGE 3-CAN-P-10 ppm	0.01…10.0 mg/l	1083211

A mounting kit, order no. 815079, is required for initial fitting of the chlorine sensors in the in-line probe housing DLG III.

ProMinent Group
info@prominent.com