

# 1.1 Amperometric Sensors DULCOTEST®

## 1.1.5 DULCOTEST® Sensors for Total Chlorine

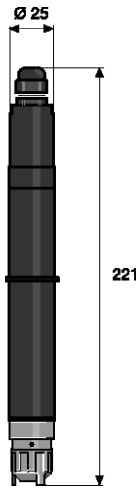
### Sensor for Total Chlorine CTE 1-mA

Sensor for total chlorine, including, for example, free chlorine, chloramines etc. even with high pH values in different kinds of water. For use on controllers with mA input

#### Your benefits

- Measured variable: Total chlorine, chlorine compounds, in which chlorine acts as an oxidising agent, e.g. free chlorine (HOCl and OCl<sup>-</sup>), chloramines etc.
- Diaphragm-covered sensor (encapsulated) prevents faults caused by changing flow or ingredients in the water
- Hydrophilic diaphragm guarantees permeability for different water-soluble oxidising agents towards the measuring electrodes
- The special reaction system of the electrolyte allows components containing oxidising chlorine to be determined and used at a high pH of up to 9.5

<b>Measured variable</b>	Total chlorine
<b>Reference method</b>	DPD4
<b>pH range</b>	5.5 ... 9.5
<b>Temperature</b>	5 ... 45 °C
<b>Max. pressure</b>	3.0 bar
<b>Intake flow</b>	30...60 l/h (in DGM or DLG III)
<b>Supply voltage</b>	16...24 V DC (two-wire technology)
<b>Output signal</b>	4...20 mA ≈ measuring range, temperature-compensated, uncalibrated, not electrically isolated
<b>Selectivity</b>	Non-selective, cross-sensitive towards many oxidation agents
<b>Disinfection process</b>	Chlorine gas, hypochlorite, electrolysis with diaphragm, monochloramine
<b>Installation</b>	Bypass: open sample water outlet
<b>Sensor fitting</b>	DGM, DLG III
<b>Measuring and control equipment</b>	D1C, DAC, AEGIS II
<b>Typical applications</b>	CTE 1-mA-0.5 ppm: Potable water; CTE 1-mA-2/5/10 ppm: Potable, industrial, process, waste water. In swimming pools combined with CLE 3.1 to detect combined chlorine.
<b>Resistance to</b>	surfactants
<b>Measuring principle, technology</b>	Amperometric, 2 electrodes, membrane-covered



pk\_6\_040

	Measuring range	Order no.
CTE 1-mA-0.5 ppm	0.01...0.5 mg/l	740686
CTE 1-mA-2 ppm	0.02...2.0 mg/l	740685
CTE 1-mA-5 ppm	0.05...5.0 mg/l	1003203
CTE 1-mA-10 ppm	0.10...10.0 mg/l	740684

Chlorine sensors complete with 50 ml of electrolyte

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