

# Free chlorine sensor CS4

- Treatments of Fresh water and sea-water
- Surfactants: partial tolerance
- Low incidence of pH changes
- Temperature: 45 °C max.
- Pressure: 3 bar max.



Complete measuring system  
(assembly sold separately)

## APPLICATIONS

Water treatment (for water equivalent to drinkable quality) and sea water

## TECHNICAL FEATURES

Measured parameter	Free chlorine
Chlorination additives	Inorganic compounds, such as NaOCl - Ca(OCl) <sub>2</sub> - gaseous chlorine, chlorine by electrolysis Surfactants: partial tolerance
Measuring system	Closed cell with 3 electrodes and electrolyte
Supply voltage	12 ... 30 V DC (Load 500 to 900 Ω)
Output signal	4 ... 20 mA, screw connectors (2 x 1 mm <sup>2</sup> ) No galvanic insulation
Operating temperature	1 to 45 °C Automatic temperature compensation
Operating pressure	3 bar max. (No vibrations, no pulsating flow)
Flow rate	About 30 l/h
pH operating range	4 to 9 pH - low incidence of pH changes
Conductivity	For sea water up to 50 mS/cm
Zero adjustment	Not necessary (from factory)
Slope calibration	Only 1 point with BAMOPHAR 194 according to directive DPD-1
Interferences	Incidence of ClO <sub>2</sub> and O <sub>3</sub> on measuring signal High level of combined chlorine may have an incidence on measuring signal
Materials	PVC-U and AISI 316 Ti
Dimensions	O.D. 25 mm, length 220 mm (4-20 mA)

**CE Conformy:** The instrument meets the legal requirements of the current European Directives.

## CODE NUMBERS AND REFERENCES

Code	Reference	Measuring range	Resolution
193 026	CS4.MA2	0.001...2 mg/l	0.001 mg/l
193 027	CS4.MA5	0.01...5 mg/l	0.01 mg/l
193 028	CS4.MA10	0.01...10mg/l	0.01 mg/l
193 029	CS4.MA20	0.01...20 mg/l	0.01 mg/l
193 030	CS4.MA200	0.5...200 mg/l	0.1 mg/l
<b>Spare parts</b>			
193 915	M48.4E	Diaphragm for CS4 (excepted sea water)	
193 xxx	M48.4S	Diaphragm for CS4 on sea water	
193 952	ECS2.1	Electrolyte for CS4 sensor (100 ml)	

### Precautions

Flow rate must be constant and a measuring cell with flow controller is necessary (data-sheet 193-95).

In order to install easily a complete system, we propose assemblies designed for specific applications (on request).

# BAMO MESURES

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**CS4**

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