

1.1.1.

DOSASens Chlorine sensor CC1

Chlorine sensor with membrane-covered, amperometric 3-electrode system. For the measurement of free chlorine on the basis of iso-cyanuric acid, also in seawater, with reduced pH dependence.

Product description:

- Measurand(s): NaClO (sodium hypochlorite), Ca(ClO)₂ (calcium hypochlorite), Cl₂ (chlorine gas), electrolytically generated chlorine, and organic combined chlorine based on iso-cyanuric acid (tested up to an isocyanuric acid concentration of 500 mg/l)
- In the presence of isocyanuric acid, the sensor measures the total bound organic chlorine (within the isocyanuric acid) and the free chlorine already released from it
- Calibration: at the controller, via analytical chlorine determination by DPD 1 method, observe the isocyanuric acid concentration when determining the free chlorine
- Interferences:
 - ClO₂ is 100 % detected
 - O₃ is detected
- pH range: 4 – 12, greatly reduced pH dependence
- Pressure range:
 - Operation without circlip: 0 ... 0.5 bar (no pressure surges and/or vibrations)
 - Operation with circlip: 0 ... 1.0 bar (no pressure surges and/or vibrations)
- Temperature range: 0 – 45 °C, (no ice crystals in test water allowed)
- Integrated automatic temperature compensation
- Response time: T₉₀ approx. 2 min.
- Absence of the disinfectant: max. 24 h
- Flow rate: approx. 30 l/h, low flow dependence
- Shaft length: standard 190 mm, and up to 220 mm in length (mA-Version)
- Connection: 5-pin M12 screwed plug (mV-, mA-, Modbus RTU-version), 2-pole terminal (mA-Version)
- Material: PVC-U, PEEK, stainless steel 1.4571, microporous hydrophilic membrane



Areas of application:

- Swimming pool, drinking, sea water, surfactants are tolerated in part.

Scope of supply:

- DOSASens CC1 sensor, membrane cap, electrolyte for use in fresh water use, instruction manual

Ordering data:

Type:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CC1H-M12	0.005–2.000	0.001	0 to -2000 mV	±5 to ±15 VDC	3626090
CC1N-M12	0.05–20.00	0.01	1 kΩ	10 mA	3626091
CC1H-An-M12	0.005–2.000	0.001	0 to -2000 mV	9–30 VDC	3626100
CC1N-An-M12	0.05–20.00	0.01	1 kΩ		3626101
CC1H-M0c	0.005–2.000	0.001	Modbus RTU	20–56 mA	3426610
CC1N-M0c	0.05–20.00	0.01			3426611
CC1MA2	0.01–2.00	0.01	4–20 mA	12–30 VDC R _i = 50 Ω to 900 Ω	3326094
CC1MA5	0.01–5.00	0.01			3326096
CC1MA10	0.01–10.00	0.01			3326095
CC1MA20	0.01–20.00	0.01			3326107
CC1MA2-M12	0.01–2.00	0.01			3426615
CC1MA5-M12	0.01–5.00	0.01			3426616
CC1MA10-M12	0.01–10.00	0.01			3426617
CC1MA20-M12	0.01–20.00	0.01			3426618

Additional technical data:

Type:	Slope:	Connection:	Special characteristics:
CC1H-M12	-1000 mV/ppm	5-pin M12 screwed plug	Connection only to a controller with galvanically separated power supply.
CC1N-M12	-100 mV/ppm		
CC1H-An-M12	-1000 mV/ppm		
CC1N-An-M12	-100 mV/ppm		
CC1H-M0c	-1000 mV/ppm		
CC1N-M0c	-100 mV/ppm		
CC1MA2	8.0 mA/ppm	2-pole terminal	Connection only to a controller with galvanically separated power supply.
CC1MA5	3.2 mA/ppm		
CC1MA10	1.6 mA/ppm		
CC1MA20	0.8 mA/ppm		
CC1MA2-M12	8.0 mA/ppm	5-pin M12 screwed plug	
CC1MA5-M12	3.2 mA/ppm		
CC1MA10-M12	1.6 mA/ppm		
CC1MA20-M12	0.8 mA/ppm		

Spare parts:

Spare parts:	for sensor type:	Item number:
Membrane cap M48.2	CC1 all types	9026020
Electrolyte ECC1.1	CC1 all types	9026075

Accessories:

Type:	for sensor type:	Item number:
Sensor simulator pH, Redox, Cl	all sensors with mV signal	21131100
Sensor simulator SIM11.1n	0 mV, -100 mV, -1000mV	9026205
Sensor simulator 4 – 20 mA, current sensor	all sensors with mA signal	90249000
mV Simulator and mA Tester	all sensors with mV signal or mA signal	21131105
Photometer for calibration	chlorine, total chlorine, isocyanuric, pH	90231000