

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.



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 iso-cyanuric 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: 0... 0.5 bar, no pressure surges and/or fluctuations
- Temperature range: 0 ... 45 °C, (no ice crystals in test water allowed)
- Integrated automatic temperature compensation
- Response time: T₉₀ approx. 2 min.
- Flow rate: approx. 30 l/h, low flow dependence
- Shaft length: standard 175 mm, and up to 220 mm in length (mA-Version)
- Connection: standard 4-pole plug; for mA-version 2-pole terminal, M12 male or Modbus RTU with M12 male
- Material: PVC-U, PEEK, stainless steel 1.4571, microporous hydrophilic membrane

Areas of application:

- Fresh water and seawater; surfactants are tolerated in part

Scope of supply:

- **CC1**: sensor, membrane cap, electrolyte for use in fresh water use

Ordering data:

Type:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CC1H	0.005 ... 2.000	0.001	0 ... -2000 mV 1 kΩ	±5 ... ±15 V DC 10 mA	3326102
CC1N	0.05 ... 20.00	0.01			3326090
CC1H-An	0.005 ... 2.000	0.001	0 ... +2000 mV 1 kΩ	9 ... 30 V DC 20 ... 56 mA	3426600
CC1N-An	0.05 ... 20.00	0.01			3426601
CC1H-M0c	0.005 ... 2.000	0.001	Modbus RTU		3426610
CC1N-M0c	0.05 ... 20.00	0.01			3426611

Ordering data:

Type:	Measuring range:	Resolution: ppm	Output signal:	Power supply:	Item number:
CC1MA2	0.01 ... 2.00	0.01	4 ... 20 mA	12 ... 30 V DC R _L 50Ω ... R _L 900Ω	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	4 ... 20 mA	12 ... 30 V DC R _L 50Ω ... R _L 900Ω	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	-1000 mV/ppm	4-pole plug	Connection only to a controller with galvanically separated power supply.
CC1N	-100 mV/ppm		
CC1H-An	-1000 mV/ppm		
CC1N-An	-100 mV/ppm		
CC1H-M0c	-1000 mV/ppm	M12 male	-
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	M12 male	
CC1MA5-M12	3.2 mA/ppm		
CC1MA10-M12	1.6 mA/ppm		
CC1MA20-M12	0.8 mA/ppm		

Spare parts:

Spare part:	For sensor type:	Item number:
Membrane cap M48.2	CC1 (all types)	9026020
Electrolyte ECC1.1/GEL	CC1 also for measurement with sea water (all types)	9026075

Accessories:

Type:	For sensor type:	Item number:
Sensor simulator pH, Redox, Cl	all sensors with mV signal	21131100
mV sensor simulator	all sensors with mV signal	9026205
mA sensor simulator	all sensors with mA signal	on request
mV simulator and mA tester	all sensors with mV signal or mA signal	21131105
Photometer for calibration	for chlorine, pH, Iso-cyanuracid	90231000

Subject to technical modifications and printing errors. Images may vary slightly from actual product.
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