

## 1.1.1 DOSASens Chlorine Sensor CP4.0

Chlorine sensor with membrane-covered, amperometric 3-electrode system. For the measurement of total chlorine with greatly reduced pH-dependence.



### Product description:

- Measurand(s): NaClO (sodium hypochlorite), Ca(ClO)<sub>2</sub> (calcium hypochlorite), Cl<sub>2</sub> (chlorine gas), electrolytically generated chlorine
- Calibration: at the controller, via analytical chlorine determination by DPD-4 method (DPD-1 + DPD-3)
- Interferences: ClO<sub>2</sub> is registered with 100 %, O<sub>3</sub> is measured with a slope of approx. 130% (factor 1.3 with regard to the chlorine slope)
- Resolution: depending on the sensor type 0.1 ... 0.001 ppm
- pH range: 4 ... 12 (linear decrease with approx. 5 % per increasing pH-unit)
- Pressure range:
  - 0.5 bar, no pressure surges and/or fluctuations (without securing collar)
  - 3,0 bar, no pressure surges and/or fluctuations (with securing collar)
- Temperature range: 0 ... 45 °C (no ice crystals are allowed in the water)
- Sensor with automatic temperature compensation
- Response time: T<sub>90</sub> approx. 2 min.
- Flow rate: approx. 15 ... 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: microporous hydrophilic membrane, PVC-U, Peek, stainless steel

### Areas of Application:

- Swimming-pool-, drinking-water, surfactants are partially tolerated

### Scope of supply:

- **CP4.0:** sensor, membrane cap, electrolyte

### Ordering data:

Type:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CP4.0H	0,005 ... 2,000	0,001 ppm	0 ... -2000 mV/ 1 kΩ	±5 ... ±15 V DC 10 mA	3226300
CP4.0N	0,05 ... 20,00	0,01 ppm			3226301
CP4.0MA0,5	0,05 ... 0,50	0,01 ppm	4 ... 20 mA	12 ... 30 V DC Ri: 50Ω ... 900Ω	3226310
CP4.0MA2	0,01 ... 2,00	0,01 ppm			3226311
CP4.0MA5	0,01 ... 5,00	0,01 ppm			3226312
CP4.0MA10	0,01 ... 10,00	0,01 ppm			3226313
CP4.0MA20	0,01 ... 20,00	0,01 ppm			3226314
CP4.0MA0,5-M12	0,05 ... 0,50	0,01 ppm			4 ... 20 mA
CP4.0MA2-M12	0,01 ... 2,00	0,01 ppm	3226321		
CP4.0MA5-M12	0,01 ... 5,00	0,01 ppm	3226322		
CP4.0MA10-M12	0,01 ... 10,00	0,01 ppm	3226323		
CP4.0MA20-M12	0,01 ... 20,00	0,01 ppm	3226324		

Subject to technical modifications and printing errors. Images may vary slightly from actual product.  
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## Ordering data:

Typ:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CP4.0H-An	0,005 ... 2,000	0,001	0 ... -2000 mV/ (max. -2500 mV)	9 ... 30 V DC ca. 20 ... 56 mA	3226330
CP4.0N-An	0,05 ... 20,00	0,01	1 kΩ		3226331
CP4.0H-M0c	0,005 ... 2,000	0,001	Modbus RTU		3226340
CP4.0N-M0c	0,05 ... 20,00	0,01			3226341

## Additional technical data:

Type:	Slope:	Connection:	Special characteristics:
CP4.0H	-1000 mV/ppm	4-pin plug	Connection only to a controller with galvanically separated power supply.
CP4.0N	-100 mV/ppm		
CP4.0MA0,5	32.0 mA/ppm	2-pole terminal	
CP4.0MA2	8.0 mA/ppm		
CP4.0MA5	3.2 mA/ppm		
CP4.0MA10	1.6 mA/ppm		
CP4.0MA20	0.8 mA/ppm		
CP4.0MA0,5-M12	32.0 mA/ppm		
CP4.0MA2-M12	8.0 mA/ppm		
CP4.0MA5-M12	3.2 mA/ppm		
CP4.0MA10-M12	1.6 mA/ppm		
CP4.0MA20-M12	0.8 mA/ppm		
CP4.0H-An	-1000 mV/ppm	4-pin plug	
CP4.0N-An	-100 mV/ppm	4-pin plug	
CP4.0H-M0c	Modbus RTU	5-pin plug	
CP4.0N-M0c			

## Spare parts:

Spare part:	For sensor type:	Item number:
Membrane cap M48.4E	CP4.0	9026023
Electrolyte ECP1.4/GEL	CP4.0	9026074

## 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	all sensors	90231000

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