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**DOSASens Chlorine sensor CP4.0-...-SW**



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

**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:
  - Operation without circlip: 0–0.5 bar, no pressure surges and/or vibrations
  - Operation with circlip: 0–3.0 bar, no pressure surges and/or vibrations
- 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. 5 min.
- Absence of the disinfectant: max. 24 h
- Flow rate: approx. 15–30 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: microporous hydrophilic membrane, PVC-U, Peek, stainless steel

**Areas of application:**

- Seawater, brine (15 % NaCl) surfactants are partially tolerated.

**Scope of supply:**

- DOSASens CP4-...-SW sensor, membrane cap, electrolyte, operating manual

**Ordering data:**

Type:	Measuring range: ppm	Resolution: ppm	Output signal:	Power supply:	Item number:
CP4.0H-SW-M12	0,005 ... 2,00	0,001	0 ... -2000 mV/ 1 kΩ	±5 ... ±15 VDC 10 mA	3626130
CP4.0N-SW-M12	0,05 ... 20,00	0,01			3626131
CP4.0H-An-SW-M12	0,005 ... 2,00	0,001		Modbus RTU	12 ... 30 VDC R <sub>L</sub> = 50 ... 900 Ω
CP4.0N-An-SW-M12	0,05 ... 20,00	0,01	3626141		
CP4.0H-SW-M0c	0,005 ... 2,00	0,001	3226390		
CP4.0N-SW-M0c	0,05 ... 20,00	0,01	3226391		

## Ordering data:

Type:	Measuring range:	Resolution:	Output signal:	Power supply:	Item number:
	ppm	ppm			
CP4.0MA0,5-SW	0,05 ... 0,50	0,01	4 ... 20 mA	12 ... 30 VDC R <sub>L</sub> = 50 ... 900 Ω	3226360
CP4.0MA2-SW	0,01 ... 2,00	0,01			3226361
CP4.0MA5-SW	0,01 ... 5,00	0,01			3226362
CP4.0MA10-SW	0,01 ... 10,00	0,01			3226363
CP4.0MA20-SW	0,01 ... 20,00	0,01			3226364
CP4.0MA0,5-SW-M12	0,05 ... 0,50	0,01			3226370
CP4.0MA2-SW-M12	0,01 ... 2,00	0,01			3226371
CP4.0MA5-SW-M12	0,01 ... 5,00	0,01			3226372
CP4.0MA10-SW-M12	0,01 ... 10,00	0,01			3226373
CP4.0MA20-SW-M12	0,01 ... 20,00	0,01			3226374

## Additional technical data:

Type:	Slope:	Conductivity:	Connection:	Special characteristics:	
		μS/cm (brine)			
CP4.0H-SW-M12	-1000 mV/ppm	approx. 10–200	5-pin M12 screwed plug	Connection only to a controller with galvanically separated power supply.	
CP4.0N-SW-M12	-100 mV/ppm				
CP4.0H-An-SW-M12	-1000 mV/ppm				
CP4.0N-An-SW-M12	-100 mV/ppm				
CP4.0H-SW-M0c	Modbus RTU			2-pole terminal	Connection only to a controller with galvanically separated power supply.
CP4.0N-SW-M0c					
CP4.0MA0,5-SW	32,0 mA/ppm				
CP4.0MA2-SW	8,0 mA/ppm				
CP4.0MA5-SW	3,2 mA/ppm				
CP4.0MA10-SW	1,6 mA/ppm				
CP4.0MA20-SW	0,8 mA/ppm				
CP4.0MA0,5-SW-M12	32,0 mA/ppm				
CP4.0MA2-SW-M12	8,0 mA/ppm				
CP4.0MA5-SW-M12	3,2 mA/ppm				
CP4.0MA10-SW-M12	1,6 mA/ppm				
CP4.0MA20-SW-M12	0,8 mA/ppm				

## Spare parts:

Spare parts:	for sensor type:	Item number:
Membrane cap M48.4S	CP4.0-SW all types/brine	9026026
Electrolyte ECP1.4/GEL for brine	CP4.0 all types/brine	9026074

## 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