

NCL SW series (Sea Water) – Data sheet

Membrane-covered amperometric 3-electrode sensor for the detection of free chlorine (inorganic and organic) suitable to be applied in seawater due to the high oxidation resistance.

Tecnosens Patent



Features	
Indicator	Free chlorine Inorganic and organic (based on cyanuric acid)
Chlorination compound	Sodium hypochlorite, calcium hypochlorite, chlorine gas, electrolytically generated chlorine, and chlorine compounds based on isocyanuric acid
Application	Seawater, swimming pool water, and process water, preferably surfactant free. Surfactants are partially tolerated.
Interferences	ClO ₂ 100%, O ₃ , and monochloramine
pH range	4 10 (see diagram last page of the data sheet, refer to operating instruction if pH > 8)
Conductivity	100 – 63000 µS/cm
Flow rate	30 60 l/h
Pressure range	0 1 bar (suggested range 0.3 0.5 bar, no pressure impulses and/or vibrations)
Working temperature	0 45°C (no ice crystals in the measuring water)
Temperature compensation	Automatically
Run-in time	First start-up < 2 h
Calibration	Reference photometric methd DPD1
Measuring range information	Signal slope can range from +50% to -50% compared to nominal slope
Slope drift	< -3% per month (25°C, pH 7.2, drinking water)
Material	PVC, PEEK, microporous membrane

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Maintenance	
Calibration	Recommended once a week and whenever the working conditions (free chlorine concentration, temperature, or pressure) and/or electrolyte solution, and/or membrane cup are modified.
Electrolyte solution	To replace 3 - 6 months depending on the water quality
Membrane cap	To replace 6 - 12 months depending on the water quality

(Subject to technical changes)

NCL SW series ordering data:

Type	Measuring range [ppm]	Resolution [ppm]	Output	Power supply	Item number
NCL T20 SW	0.05 ...20	0.01	0 ... -2000 mV	±5...±15 VDC +10...+30 VDC Max 10 mA	NCL0001A2
NCL T10 SW	0.05 ...10	0.01			NCL0003A2
NCL T5 SW	0.05 ...5	0.01			NCL0004A2
NCL T2 SW	0.01 ...2	0.005			NCL0002A2
NCL C20 SW	0.05 ...20	0.01	4 ... 20 mA	12 ... 30 VDC	NCL0001A3
NCL C10 SW	0.05 ...10	0.01			NCL0003A3
NCL C5 SW	0.05 ...5	0.01			NCL0004A3
NCL C2 SW	0.05 ...2	0.005			NCL0002A3

(Subject to technical changes)

NCL SW series accessories:

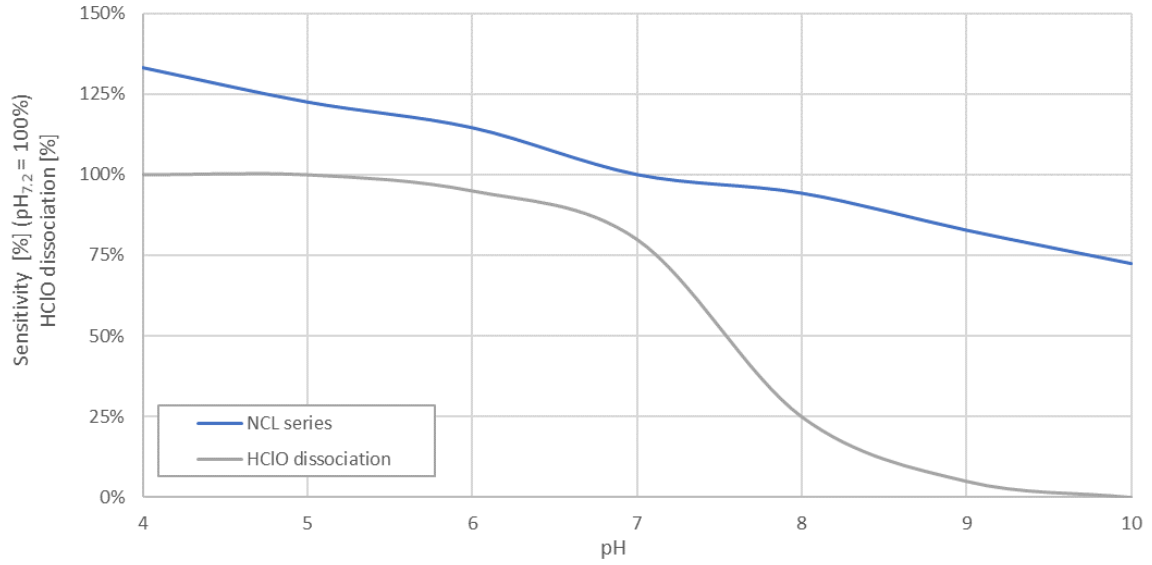
Type	Item number
Membrane cap	NAS0003A2
Electrolyte solution	NSH0001A1
NCL/NCT cable (2m)	NAS0005A1

(Subject to technical changes)

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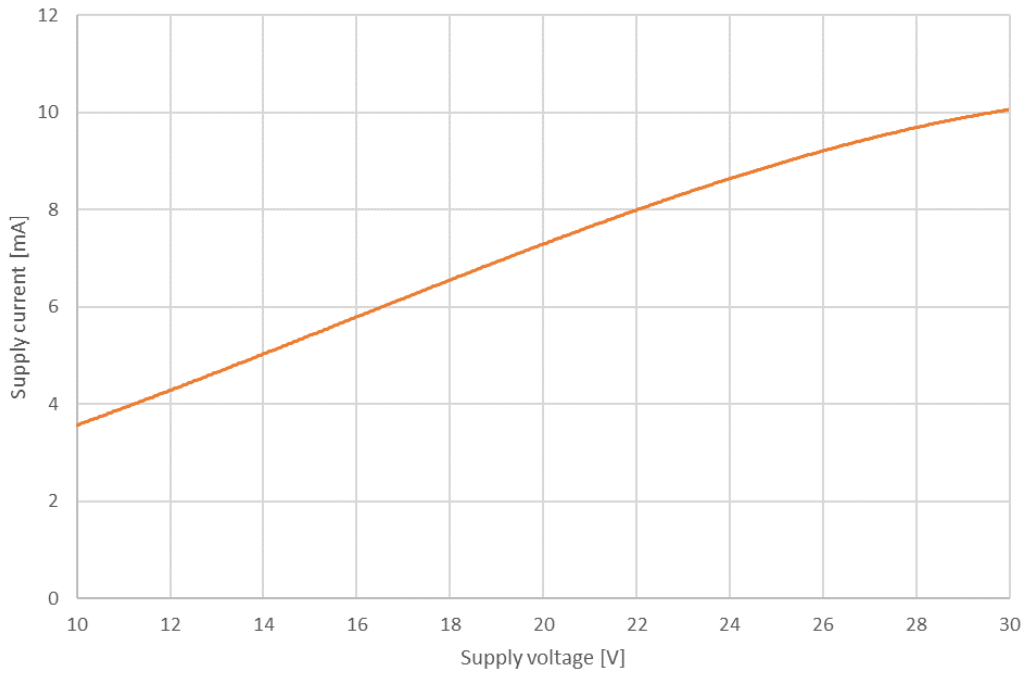
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NCL sensor response vs pH



(Subject to technical changes)

Supply current vs Supply voltage



(Subject to technical changes)

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