

Free Chlorine Sensor Digital

90S210001 · 90S210000



The chlorine measuring probe is an electrochemical sensor for measuring the concentration of chlorine in water. The measuring cell captures free chlorine from inorganic chlorine products (hypochlorite, chlorine gas, etc.). The measuring method has a reduced pH dependency, so that pH fluctuations only have a limited impact on the measurement signal. pH value increases only lead to an approximately 10 % reduction of the measuring signal per pH unit. The Sensor has a plug and is not delivered with a fixed cable.

Benefits

- Stable signals even with fluctuating pH values
- Abrasive particles are tolerated
- Surfactants are partially tolerated

Applications

- Swimming pools, drinking water, seawater

Accessories

- Cable: Extension cables of 0.3 m, 2 m, 10 m, 25 m
- Controller: TriBox3, TriBox Mini, HS100
- Fittings: FlowCell

Technical Specifications

Measurement technology	membrane-covered, potentiostatic amperometric 3-electrode system	
Measurement principle	Amperometry	
Parameter	Free chlorine with reduced pH-dependency	
Measuring range	0...2 mg/L, 0...20 mg/L	
Measurement accuracy	Measurement range 2 mg/L: at 0.4 mg/L & 1.6 mg/L < 1 % Measurement range 20 mg/L: at 4 mg/L < 1 % at 16 mg/L W37 < 3 %	
Temperature compensation	automatic through integrated temperature sensor Pt100	
Response time	T90: ~ 2 min	
Housing material	Micro-porous hydrophilic membrane, PVC-U, Stainless steel 1.4571	
Dimensions (L x Ø)	205 x 25 mm	~ 8" x 1"
Weight	0.1 kg	~ 0.2 lbs
Interface	RS-485, Modbus RTU	

Power consumption	0.6 W	
Power supply	12...24 VDC (± 10 %)	
Connector	8-pin M12-plug	
Maintenance effort	≤ 0.5 h/month (typical)	
Calibration/maintenance interval	Membrane cap change: every 24 months Electrolyte change: every 24 months	
System compatibility	Modbus RTU	
Warranty	1 Year (EU: 2 years) on electronics; All wearing parts are not included in the warranty	
Max. pressure	3 bar	~ 43.5 psig
Protection type	IP68	NEMA 6P
Sample temperature	0...+45 °C	~ +32 °F... +113 °F
Ambient temperature	0...+55 °C	~ +32 °F... +131 °F
Storage temperature	+5...+35 °C	~ +41 °F... +95 °F