

Dissolved Oxygen Sensor Digital

90S5311X0 · 90S5341X0



Calibration-free measuring sensor for dissolved oxygen according to the luminance method. Digital value transmission to the controller. No interference by H₂S, reducing or oxidizing substances. Evaluation via display unit. The dissolved oxygen sensor is available with a 10 m or a 2 m fixed cable.

Benefits

- No electrolyte replacement necessary
- Reliable concentration measurement using an optical measuring method
- Interchangeable cap for luminophore replacement (membrane)
- No mechanically moving parts
- Immediate installation and easy maintenance
- Parameterization of salinity and barometric pressure to compensate for oxygen value

Applications

- Measurement of dissolved oxygen in surface water, aquacultures, sea water, as well as drinking- and wastewater systems

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	Optical measurement	
Measurement principle	Luminescence	
Parameter	Dissolved Oxygen	
Measuring range	0...20 mg/L	
Measurement accuracy	± 0.1 mg/L	
Temperature compensation	Via NTC	
Response time	90 % of value in < 60 sec	
Measurement interval	> 5 s	
Housing material	Stainless steel (316L) or titanium	
Dimensions (L x Ø)	146 x 25 mm	~ 5.7" x 1"
Weight	VA: ~ 450 g Ti: ~ 300 g	VA: ~ 1 lbs Ti: ~ 0.7 lbs
Interface	RS-485, Modbus RTU	
Power consumption	1 W	
Power supply	12...24 VDC (± 10 %)	

Connector	8-pin M12-plug	
Maintenance effort	≤ 0.5 h/month (typical)	
Calibration/maintenance interval	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	5 bar	~ 72.5 psig
Protection type	IP68	NEMA 6P
Sample temperature	0...+50 °C	~ +32°F... +122°F
Ambient temperature	0...+50 °C	~ +32°F... +122°F
Storage temperature	-10...+60 °C	~ +14°F... +140°F
Inflow velocity	no movement necessary	