ORP Sensor Digital

90S330100 · 90S330130

Robust digital REDOX sensor for operation on TriBox controllers and HS100 DIN G2 rail module. Digital communication ensures safe and trouble-free signal transmission from the sensor to the controller. The high-quality REDOX electrode features a hole diaphragm and is impervious to dirt, making the sensor ideal for wastewater applications.

Benefits

- High-quality combination electrode with hole diaphragm and polymerized solid electrolyte
- Low maintenance
- Plug and play with TriBox controller

Applications

- Water and wastewater treatment
- Coagulation and flocculation
- Process monitoring and control
- Acid/base neutralization systems

Accessories

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

Technical Specifications

OPERATION AND SYSTEM CONFIGURATION

Measurement principle	Digital
Measuring method	Potentiometry

AUXILIARY POWER

Electrical connection	8-pin M12 plug
Power supply	12...24 V
Power consumption	2 W

INPUT PARAMETERS

Measured variables	REDOX and temperature
Measuring ranges	-1500 mV...+1500 mV
Cable specification	black PUR (halogen free), shielded, M12 plug

OUTPUT SIZES

Temperature compensation	Pt100
Accuracy	± 1 mV
Data interface	RS-485, Modbus RTU

PERFORMANCE CHARACTERISTICS

Response time	95 % of the value in 10 sec.
Repeatability	98 %

AMBIENT CONDITIONS

Protection type	IP68

PROCESS CONDITIONS

Process temperature	0...+50 °C
Process pressure	6.9 bar at 50 °C
Conductivity	Min. operating conductivity 50 µS

STRUCTURAL DESIGN

Dimensions (Ø x L)	29 mm x 299 mm
Materials	Ryton® and PVC body, Viton® O-rings, other materials: Teflon®, carbon, epoxy
Thread	3/4" NPT

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