T-ORPPotentiometer

Robust sensor for heavy water



Applications

- · Control of water / wastewater treatment
- · Regulation of coagulation and flocculation
- Measurement of acid / base neutralization processes
- · Monitoring of waste water

Advantages

- High-quality combination electrode with annular measuring diaphragm and polymerized solid electrolyte
- · LED operating status indicator
- · Submersible probe for in situ measurements
- · Suitable measuring cell available
- · "Plug and play" equipment with TriBox transmitter

REDOX digital sensor

The T-ORP probe allows stable and precise measurements of the redox potential of water by being directly immersed in the medium or installed in a measuring cell. The high-quality REDOX electrode features a porous, dirt-insensitive, high-density polyethylene (HDPE) diaphragm, making it the ideal sensor for wastewater applications.

The T-ORP probe works with TriBox 3 and TriBox Mini controllers and stores calibration data in memory for a «plug and play» installation.

Available with a fixed cable of 2 or 10 meters and M12 connector. Possible cable extensions of 0.3 m, 2 m, 10 m and 25 m.

Status light indicator functioning

The operating status is indicated by an LED in the upper part of the sensor, making it easy to visually identify the correct operation of the system when it is installed on a measurement board.



The T-ORP digital probe works with TriBox Mini and TriBox 3 transmitters.

Once the probe is connected, the transmitter powers the sensor, receives and uses the data. The measurements are displayed on the screen, they are recorded and can be converted to the 4-20 mA analog signal.

Wifi or Ethernet communication via web browser.

-TriBox Mini-



T-ORP Redox

Technical specifications

Measurement technology	Electrode ORP Redox
Measuring principle	Potentiometry
Parameter	REDOX and temperature
Measuring range	-1000 +1000 mV
Measurement accuracy	+/- 1 mV
Temperature compensation	Automatique Pt1000
Response time	95% of value <10 seconds
Measuring interval	> 5 seconds
Probe body materials	PPS PET NBR (polyphenylene sulfide / polyethylene terephthalate / butadiene nitrile acrylic)
Dimensions	Diameter 27 mm, length 180 mm
Weight	110 g
Connector	8-pin M12 with fixed cable
Interface	RS-485 / Modbus RTU
Consumption	0,2 W
Power supply	12 24 VDC
rower suppry	12 24 VDC
Maintenance	<0.5 hour / month
Calibration interval	4 weeks
Compatibility	Modbus RTU - Transmitters TriBox 3, TriBox mini
Warranty	24 months in the European Union
Maximum working pressure	3 bar.
Protection sign	IP68
Temperature of the medium / sample	2 + 40 °C
Ambient temperature	-5 + 55 °C
Inflow velocity	0,3 m/s
Illiow velocity	U ₁) III/3



Measuring cell for By-Pass installation