

S406 DIG ORP Electrode

Digital measurement with built-in Temperature sensor

The sensor **S406 DIG** is used for digital measurement of ORP in pure water, wastewater treatment plants, suspended solids fouling processes, processes with pollutants, processes with high concentrations of sulfides, coagulation and flocculation, scrubbers, galvanic processes, surface finishing, processes of elimination or recovery of heavy metals.



Applications

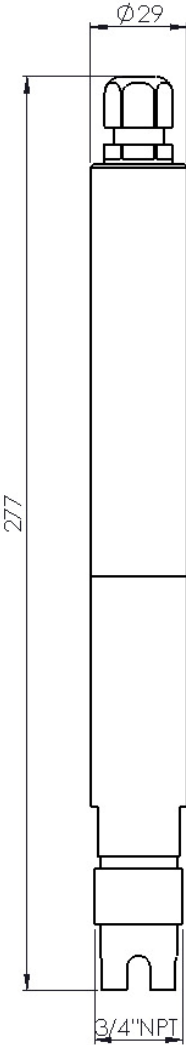
ORP Measurement in:

- Water and Wastewater Treatment
- Coagulation and Flocculation
- Process Monitoring and Control
- Acid / Caustic Neutralization Plant Effluent

Features and benefits

- Reliable ORP measure thanks to the use of a process of digital measurement
- Communication of measurements via MODBUS RTU protocol
- Possibility to execute all the calibrations via serial port
- Absence of moving mechanical parts
- Immediate installation and easy maintenance

The S406 DIG ORP Electrode is suitable for ORP measures in various applications. The porous Teflon® liquid junction resists fouling and chemical attack. Double junction reference cells increase the servicelife in applications containing sulfides (H₂S) and metals such as lead, mercury and silver. The new cast-in-place solidreference electrolyte helps maintain a constant reference cell potential by resisting dilution over time with pressure and temperature changes. The new capillary temperature sensor design places the Pt100 behind the ORP-sensitive membrane for accurate temperature compensation and measurement. The IP68 environmental rating protects the high imped-ance ORP electrode signal from moisture resulting from condensate build up in submersion pipes.

TECHNICAL DATA	DIMENSIONS
Materials : — Ryton® and PVC body — Viton® O-Rings — Other materials: Teflon®, carbon, epoxy	
Measuring Electrode: Glass bulb membrane	
Thread: 3/4" NPT	
Measuring range: -1500mV ÷ +1500mV	
Measuring method: Digital	
Accuracy: less than 0,5 mV	
Repeatability: 98 %	
Responding time: 10 sec. To reach the 95% of the value	
Temperature sensor: PT100	
Operating Temperature: 0÷50°C (122°F)	
Max operating Pressure: 6,9 bar at 50°C (122°F)	
Mechanical protection: IP68 Sensor+cable	
Cable length: 10m integrated with the sensor (more on request)	
Power supply: 12...24Vdc	
Communication: RS485 Modbus	
Equipotential contact for the solution: included	
Dimensions (LxHxP): 29x280x29mm	

ELECTRICAL CONNECTIONS	
RED	12-24VDC
BLACK	GROUND
YELLOW	RS485 A+
GREEN	RS485 B-