



S401 DIFF/N

DIFFERENTIAL pH ELECTRODE



S401 DIFF/N pH Electrode for prohibitive apps **Differential measurement with built-in Temperature sensor**

The sensor S401 DIFF/N is used for differential measurement of pH 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.

Features and benefits

- Reliable pH measure thanks to the use of a process of digital measurement
- Communication of measurements via MODBUS RTU protocol
- Differential method of measurement enables a longer electrode life in time and in the most prohibitive applications
- Possibility to execute all the calibrations via MODBUS RTU serial port
- Black RYTON® sensor body
- Absence of moving mechanical parts
- Immediate installation and easy maintenance

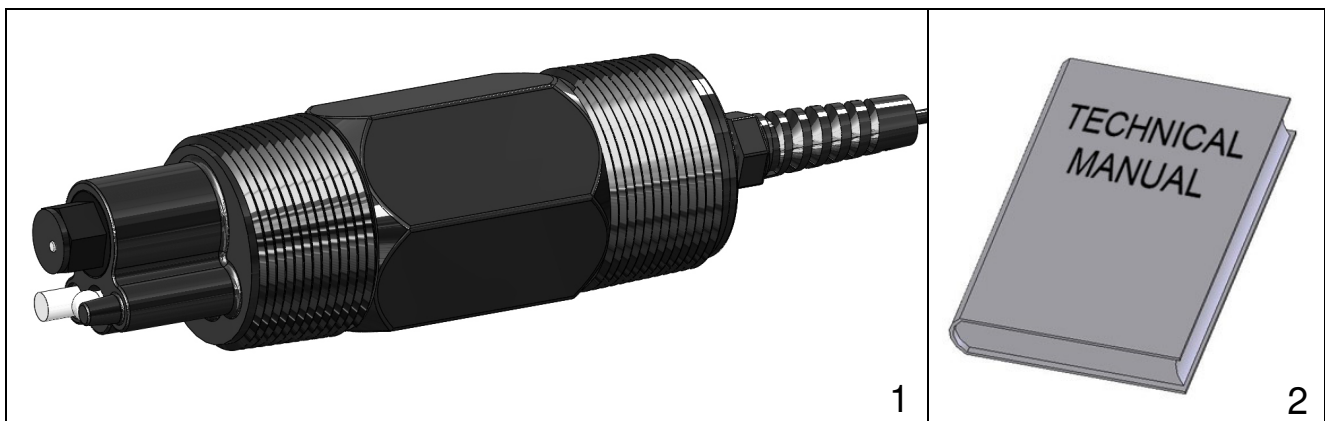
pH electrodes S401 DIFF/N are designed for measurements of pH in heavy duty applications where pH electrodes standards would not be able to work because the life of reference would be too short. The S401 DIFF/N pH sensor is constituted by a RYTON® body which houses the glass electrode for measuring the PH, the reference electrode with a salt bridge, the temperature sensor, the earth contact of the solution and the electronic board of signal handling.

These sensors are fully interchangeable with any pH electrode and are suitable for use with any MODBUS RTU pH meter. They are able to communicate the values of the measure pH and Temperature via MODBUS RTU protocol, and you can perform all calibrations through the serial port.

As already said, the S401 DIFF/N uses the proven technique of differential measurement in three electrodes, the pH and the reference electrode are compared to a ground electrode for a rate measuring accuracy, even in chemical applications difficult. The bridge replaced and the tank can be refilled ensure a long service life in applications containing sulphide (H₂S) and metals such as lead, mercury, and silver. Not surprisingly, examples of applications where differential pH electrodes are the most suitable choice are:

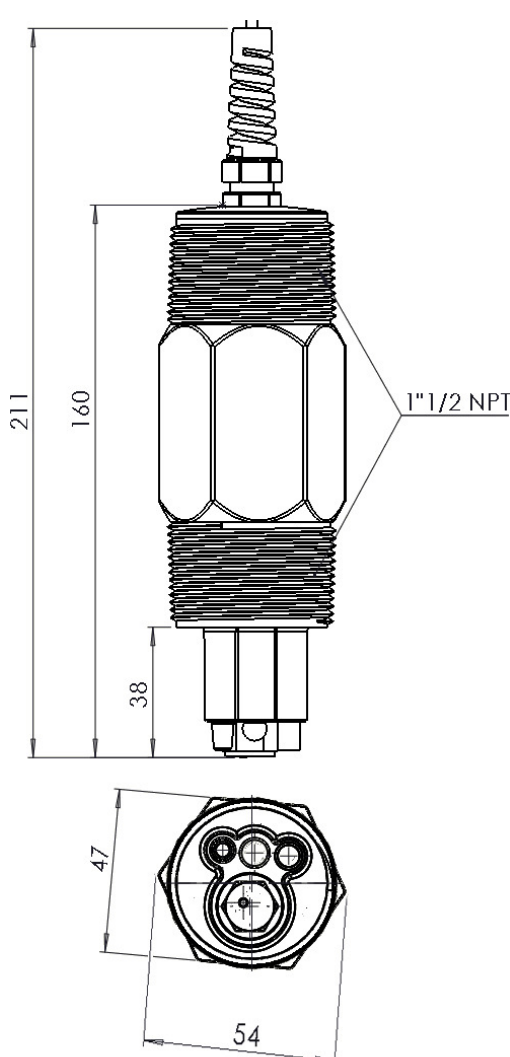
wastewater treatment plants, suspended solids fouling processes, processes with pollutants, processes with high concentrations of sulfides, coagulation and flocculation, scrubbers, galvanic processes, surface finishing, processes of elimination or recovery of heavy metals.

Composition of the supply



The supply consists of a single package containing the following parts:

1. 1 S401 DIFF/N Differential pH Electrode with 10m cable
2. 1 Technical manual for instruction

TECHNICAL DATA	DIMENSIONS
Materials : — Ryton® body and saline bridge — Ceramic & PVDF junction — Viton® Orings — Platinum electrode — Glass membrane — Nylon and NBR cable gland	
Measuring electrode: Hemispherical glass membrane	
Thread: 1-1/2 "NPT	
Measuring ranges: 0-14 pH	
Measurement method: Differential	
Resolution: 0.01 pH	
Accuracy: ± 0.01 pH	
Repeatability: ± 0.05 pH	
Stability: 0.03 pH in 24 hours, not cumulative	
Temperature probe: PT100	
Operating Temperature: -5 ... 70 °C (21 ... 158 °F)	
Maximum pressure: 6.9bar @ 95 °C (100psig @ 210 °F)	
Minimum operating conductivity: 50µS	
Maximum absorption: 1W	
Mechanical protection: IP68 Sensor + cable	
Cable: 10m integral with sensor (more on request)	
Power supply: 12... 24Vdc	
Communication: RS485 Modbus	
Dimensions (LxHxP): 54x160x54mm	

Order codes

9701110097	S401/DIFF/N pH Electrode for prohibitive apps 10m cable
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