

# DIGITAL PH AND ORP ELECTRODES



## General features

The pH electrode **S401DIG** and the ORP electrode **S406DIG** are suitable for the measurement of pH and ORP in various applications.

The porous liquid junction resists fouling and chemical attack. The double junction of the reference electrode increases the operating life in applications containing sulphides (H<sub>2</sub>S) and metals such as lead, mercury and silver.

The new type of solid reference electrolyte allows a reference potential constant in time and at pressure and temperature variations.

The new capillary temperature sensor design places the Pt100 behind the (pH or ORP) sensitive membrane for accurate temperature compensation and measurement.

The mechanical protection IP68 protects the high impedance signal of the electrodes from moisture that can be generated in immersion applications (condensation).

## Applications

Drinking water, process water, wastewater, samples containing sulphides and metals such as mercury, lead and silver.

## Technical specifications

Models	S401DIG	S406DIG
Measuring range	0 ÷ 14 pH	-1500mV + 1500 mV
Measuring method	Potentiostatic	
Sensitivity	0.05 pH	+ - 1 mV
Repeatability	98 %	
Response time	10 sec. to reach 95% of the value	
Operating temperature	0 ÷ 80°C in insertion/by-pass – 0 ÷ 50°C in immersion	
Maximum pressure	6.9 bar	
Body material	Ryton® and PVC	
Measuring electrode	hemispherical glass membrane	
Other materials	Teflon®, carbon, epoxy	
Mechanical protection	IP68 Sensor + cable	
Power supply	12 ÷ 24Vdc	
Power consumption	max. 2W	
Cable	10m integral with the sensor (other on request)	
Signal interface	Modbus RTU Standard Protocol	