

Digital pH and ORP sensors



S401 DIG/N • S406 DIG/N



General features

The pH electrode S401 DIG/N and the ORP (redox) S406 DIG/N electrode are suitable for measuring pH and ORP (redox) in various applications.

The liquid junction of the Teflon[®] porous septum resists encrustations and chemical attack. The double junction of the reference electrode increases the service life in applications containing sulphides (H2S) and metals such as lead, mercury and silver. The new type of solid-state electrolyte allows a constant reference potential over time and with variations in pressure and temperature.

The Pt100 capillary temperature sensor is positioned behind the sensitive membrane (pH or ORP (redox)) thus ensuring accurate temperature measurement and compensation.

The IP68 mechanical protection protects the high impedance signal of the electrodes from humidity 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	S401 DIG/N	S406 DIG/N
Measurement range	014 pH	-1500mV +1500mV
Measurement method	Potentiostatic	
Accuracy	0.05 pH	± 5mV
Repeatability	± 0.05 pH	± 1mV
Response time	T ₉₀ < 60s	
Working temperature	0100°C in insertion / by-pass - 050°C in immersion	
Max pressure	11 bar	
Body material	Glass and PPS	
Measuring electrode	Hemispherical glass membrane	
Other materials	Teflon [®]	
Mechanical protection	IP68 sensor & cable	
Power supply	12 24Vdc	
Absorption	Max. 1W	
Cable	10 m integral with the sensor (others on request)	
Signal interface	Standard Modbus RTU protocol	

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