

Differential digital pH and ORP sensors

S401 DIFF • S406 DIFF Applications Heavy industry Wastewater

General features

S401 DIFF and S406 DIFF are pH and ORP (redox) differential electrodes designed for measurement in heavy-duty applications, where traditional reference system electrodes would have a short life.

They consist of a Ryton® body which houses a glass electrode for pH or redox measurement, the reference electrode with salt bridge and KCL reserve which guarantees high stability of the reference signal over time and operation with varying environmental conditions.

The measurement and reference electrodes are connected to a ground reference for excellent measurement accuracy even in extreme conditions.

The reference electrode is replaceable.

Applications

Entry and exit from biological treatments of water treatment plants. Aggressive industrial applications.



Technical specifications

Models	S401 DIFF	S406 DIFF
Measuring range	014 pH	-1500+1500 mV
Measurement methods	Potentiostatic differential	
Sensitivity	± 0.05 pH	± 5 mV
Repeatability	± 0.05 pH	± 5 mV
Response time	T ₉₀ < 60s	
Operating temperature	085°C (32-185 °F)	
Max pressure	6.9 Bar (100 psi)	
Body material	Ryton®	
Measuring electrode	Hemispherical glass membrane	Platinum wire
Other materials	PVDF, ceramic junction, Viton o-rings, Titanium (ground ref)	
Mechanical protection	IP68 sensor & cable.	
Power supply	12 24Vdc	
Absorption	Max. 2W	
Cable	PUR, integral with the sensor, 10m	
Equipotential contact	Included (Titanium)	
Interface	Standard Modbus RTU protocol	





