

Industrial pH, ORP, Ion Selective (ISE), Conductivity & Dissolved Oxygen (DO) Measurement Product Line Overview

Industrial pH & ORP Sensors Custom Built-to-Order



Rugged line of custom built-to-order analog & smart digital industrial pH & ORP sensors for inline, immersion & submersible, twist lock quick disconnect, valve retractable and sanitary installations for wide range of applications from slurry/viscous solutions, sulfides, high-temperature, organic applications with various solvents, HF etching and treatment systems & many more.

Unique features include low-profile break-resistant parabolic thick-wall pH glass elements and platinum ball ORP sensing elements.

Special reference option for extreme dehydration resistant allows for intermittent wet & dry use and prolonged exposure to air without drying out.

The pH sensors & ORP sensors with integral analog preamplifiers are available with optional rugged field ready waterproof quick disconnect Q7M snap connectors.

Smart digital pH sensors & ORP sensors come standard with NEMA 6P rated quick disconnect HiQ4M snap connectors. Support for pressures up to 200 psig and temperatures up to 150 degrees Celsius.

ZEUS pH Sensors for Severe Service Installs



ZEUS™ pH SENSORS FOR TOUGH INDUSTRIAL APPLICATIONS ARE TYPICALLY IN STOCK FOR IMMEDIATE DISPATCH TO SOLVE YOUR PROBLEM INSTALLATION RIGHT AWAY.

ZEUS™ Industrial Grade pH sensors are designed and built with Extremely Rugged Construction to handle the Toughest Severe Service Process Inline, Immersion or Submersible Installations.

Analog ZEUS™ pH sensors available in Universal configuration with temperature compensation & liquid earth solution ground only or else with integral conventional or 5-wire differential integral preamplifier configurations.

Smart digital ZEUS™ pH sensor configuration interfaces the modular cost-effective intelligent 3TX-HiQ-pH digital pH/ORP transmitter. The ZEUS™ smart digital configuration is also available for ORP measurements.

Both analog and smart digital configuration of the ZEUS™ sensors can support pressures up to 200 psig & temperatures up to 150 degrees Celsius. Inquire to factory to ensure suitability for your exact use.

Industrial Ion Selective (ISE) Sensors



Most complete and rugged line of industrial ion selective sensors offered anywhere. Continuous inline measurement of ammonium, calcium, lithium, sodium and silver cations and fluoride, chloride, bromide, iodide, cyanide, nitrate, nitrite and perchlorate anions.

Available in inline, immersion, fully submersible, twist lock quick disconnect, sanitary and HOT-TAP valve retractable installation configurations. Ion selective (ISE) measurement systems are supplied complete including sensor and transmitter calibration scheme that is optimized for the intended application use.

Unique AB 6100 fluoride ion selective sensor is the only type in the industry that is suitable for low pH acid/etching solution at elevated temperatures and to undergo strong acid cleaning regimen.

Validation of process for feasibility is required for each ISE measurement. Generally only an offset calibration with the ISE sensor left in continuous field service is needed to allow for good agreement with offline grab sample determinations, most typically analyzed with a portable photometer.

Industrial Conductivity Sensors



Contacting and torodial (inductive contactless) industrial conductivity sensors for use up to 205 degrees Celsius and 500 psig. Suitable for measurements from 0.55 microSiemens and up to 2,000 milliSiemens. Applications from ultrapure water to strong acids, bases and electrolytes. Materials of construction include 316SS, Monel, Titanium, Hastelloy C-276 (and other) for the electrodes and TEFLON, CPVC, KYNAR and PEEK for the insulator on contacting conductivity sensors. Cell constants from 0.01/cm to 20.0/cm Custom designs are available upon request for applications not serviced by the existing sensors (MOQ may apply).

Industrial Dissolved Oxygen (DO) Sensors



AST-DO-UNIVERSAL Rugged Industrial Galvanic Dissolved Oxygen Sensors with High Stability Thick Membranes for Inline, Immersion, Submersion, Sanitary & HOT-TAP Installations. Ideal for Continuous Measurement in Tough Applications such with Abrasive Slurries, High Levels of Organic and Biological Content as well as solutions with High Turbidity & Viscosity. Available in without preamplifier (up to 15 meters) or with integral analog preamplifier for use with up to 100 meters. Integral preamplifier AST-DO-UNIVERSAL DO sensors available with NEMA 6P rated Q7M/Q7F snap connectors.

Industrial Process Instrumentation



Offering a wide range of options from low-cost 2-wire and 4-wire transmitters and controllers to intrinsically-safe explosion-proof & programmable instrumentation for **pH, ORP, ion selective (ISE), conductivity and dissolved oxygen (DO)** liquid analytical measurement. Options include PID & TPC relay controllers, HART, Fieldbus, Profibus & MODBus digital outputs as well as multiple isolated, configurable, reversible & scalable 4-20 mA analog current loop outputs. Available in IP65, IP67 and NEMA 4X rated enclosure options for wall & plate, panel and pipe mounting in the field.

HOT-TAP Valve Retractable Assemblies



Valve retraction HOT-TAP assemblies for insertion and removal of sensor without shutdown or separate isolation of the process line or tank. These HOT-TAP assemblies are available for 5X31, 5X41, 5X51 & 5XX0 sensor. 316SS standard with TEFLON seals & ferrules; Viton or Kalrez O-ring ensure secure water tight seal at high temperatures (150 °C) and pressures (150 psig max). Double redundant O-rings on sensors (Viton-75, CV75, Simriz 485 or Kalrez 4079) ensure leakproof seal between sensor and HOT-TAP assembly. Reducing bell stop-out for sensor holder makes blow-out nearly physically impossible for safe operation in high pressure installations. Custom configurations & materials of construction are available upon request.

Fully Submersible Assemblies with Integrated Waterproofing Seals



The longevity of pH, ORP, ion selective (ISE), dissolved oxygen (DO) and conductivity sensors can be significantly elongated for some applications by using waterproofing sealing options to create fully submersible assemblies without the need for an immersion tube. Installations either completely submersing the sensor or where the back of the sensor will be exposed to moisture or washdowns benefit greatly from waterproofing seals. Inquire to factory to determine if one of these waterproofing options is required for your installation scheme. Standard material of construction is polypropylene for A/B/C series and CPVC for G/H series. Special materials of construction are available for upon request (MOQ may apply).