

Emerson Process Management

Rosemount Analytical High-Temperature

PERpH-X™ Retractable pH Sensor for AN

Mr. Jim Gremillion
E: james.gremillion@emerson.com

Summary:

Rosemount Analytical PERpH-X™ High Performance pH / ORP sensors incorporate several design innovations that prolong the life of the pH sensor in difficult hot processes. High temperatures, fouling, coating and poisoning conditions cause increased deterioration of the glass pH sensing membrane, increased depletion of the reference electrolyte, and increased thermal stress on all sensor components. Use the Model 3400HT/3400HTVP to lower your total cost of ownership and avoid frequent sensor replacement.

For more information,
contact Jim Gremillion at james.gremillion@emerson.com
or contact your local Rosemount sales office.

Ammonium Nitrate

Rosemount Analytical High-Temperature PERpH-X™ Retractable pH Sensor



- **HT DESIGN PROVIDES INCREASED SENSOR LIFE** when used in elevated temperatures, fouling, coating and poisoning applications.
- **PRESSURE/TEMPERATURE RATINGS** of 100 psig (790 kPa [abs]) at 145°C (293°F) or 250 psig (1825 kPa [abs]) at 100°C (212°F) for all four models.
- **SEVERAL MOUNTING AND CABLING OPTIONS** including VP connector.

Rosemount Analytical PERpH-X™ High Performance pH / ORP sensors incorporate several design innovations that prolong the life of the pH sensor in difficult hot processes. High temperatures, fouling, coating and poisoning conditions cause increased deterioration of the glass pH sensing membrane, increased depletion of the reference electrolyte, and increased thermal stress on all sensor components. Use the Model 3400HT/3400HTVP to lower your total cost of ownership and avoid frequent sensor replacement.

The PERpH-X™ HT sensors contain an enhanced double junction reference that is excellent for extreme applications. The outer gel based reference retains viscosity to resist the pumping actions of temperature and pressure. A custom refill kit including a gel filled syringe is available as an accessory. Preventative maintenance of the outer reference can extend the ultimate life of the pH/ORP sensor considerably by preventing concentration changes in the inner reference. Reference flow into the process stream is controlled using a porous Teflon® junction that can be replaced in the event of fouling or plugging. The specially designed junction is chemically resistant and has a large surface area to maintain a steady reference signal in dirty or oily applications.

PERpH-X™ is a trademark of Rosemount Analytical