SE 571 pH Sensor

pH Sensor for Oily Liquids or Suspended Solids

The SE 571 design provides high accuracy, stability, speed, and long life in applications containing high pressures, oils, suspended solids, and sulfides. A PTFE ring junction provides a low risk for contamination or plugging of the reference system. A KCl reservoir protects against leaching of electrolyte out of the sensor. An integrated NTC 30K temperature element assures that all pH measurements are accurately compensated for the temperature of the process media.

The robust sensor design, along with the integration of Memosens technology, provide for a significant reduction in overall cost of ownership.

The SE 571 is suitable for use with any M4 Knick Memosens transmitter.

QUICK SPECS

Range: 0 … 14 pH
Temperature: 23 … 266°F (-5 … 130°C)
Pressure: 0… 174 psig (0 … 12 bar)
Sensor Material: Alpha pH glass
Diaphragm/Junction: PTFE Ring
Electrolyte: Gel
Reference Electrode: Ag/Ag Cl – Silamid®

TYPICAL APPLICATIONS

- Media with heavy suspended solids
- Oily media
- Media with sulfides
- Refinery Crude Distillation Units
- Wastewater

SE 571 PH SENSOR ANATOMY

SENSOR HEAD
Memosens Digital Sensing Technology

Memosens sensors provide several benefits with regard to ease of use and reduction of operating costs:

- Submersible inductive connection removes measurement influence from moisture and humidity that are commonly present in process applications.
- Galvanically isolated so there is no measurement influence from noise or ground loops. This is especially beneficial when using plastic holders.
- Calibration and diagnostics can be performed in the shop or lab. This reduces field maintenance time and process down time.

REFERENCE ELECTRODE
Ag/Ag Cl – Silamid®

The Silamid reference electrode is constructed using a glass tube internally lined with silver and packed with silver chloride powder. A polyester fiber plug is added as an additional barrier to prevent poisoning and extend sensor life.

SENSOR GLASS
Alpha pH glass

Alpha glass is a medium-impedence, fluoride resistant, hydrogen sensitive glass. It's designed for use in applications requiring fast response time.

ELECTROLYTE
Gel Electrolyte

Gel electrolyte does not require refilling, making this sensor a low cost and low maintenance option.

KCl Rings

A KCl reservoir (solid KCl rings) assists in preventing the electrolyte from being leached out of the reference system, extending sensor life.

DIAPHRAGM/JUNCTION
PTFE Ring

Robust design with a large surface area that is resistant to buildup from oils and suspended solids.