

Type 18 pH Sensor



Differential pH Sensor for Aggressive Media

The Type 18 differential sensor measures pH or high-resolution pH compensated ORP. It features a rugged enamel Glasteel™ construction with integral temperature sensor which allows the sensor to be mounted directly into the process, in any orientation, thus sensing the pH directly and without a protective cage.

The Type 18 provides a low maintenance measurement by removing internal electrolyte solutions and reference junctions/diaphragms. Therefore, the design eliminates typical glass sensor issues such as aging and reference system fouling.

Maintenance efforts are further minimized with the ability to perform a single point, in process, calibration. The sensor does not need to be removed. Additionally, the sensor can be left dry in an empty pipe or vessel without causing permanent damage to the sensing elements.

The Type 18 is suitable for use with the Protos, Stratos Pro, and Stratos EVO transmitters.

QUICK SPECS

Range: 3 ... 10 pH

Temperature: 32 ... 284°F (0 ... 140°C)

Pressure: Full vacuum ... 215 psig (-1 ... 15 bar)

Sensor Material: Glasteel and Rhodium

Electrode: Sodium/Hydrogen sensitive

Length: 5.5...7.5" (140...190mm)

Diameter: 0.7" (18mm)

TYPICAL APPLICATIONS

- Where glass sensors are being replaced frequently
- Batch processes where the sensor may be dry for extended periods of time
- Media with heavy suspended solids
- High pressure
- Fermenters
- Wet gas scrubbers

TYPE 18 PH SENSOR ANATOMY

CABLE CONNECTION

LEMO Connector

Industrial push-pull connector for low voltage applications.

MEASUREMENT ELECTRODE

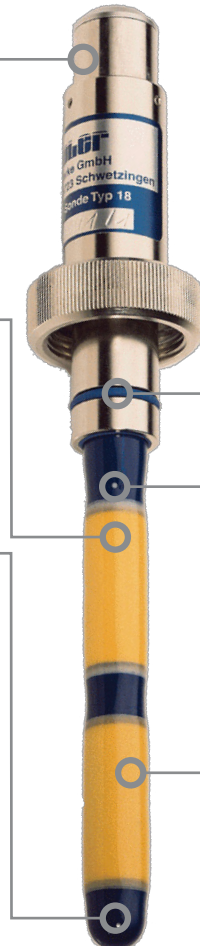
Hydrogen Sensitive

Glasteel enamel band sensitive to H ions in the process.

SENSOR MATERIAL

Glasteel™

- Resistant to most corrosive substances, even under extreme thermal conditions.
- Essentially inert, so it cannot adversely affect product purity or flavor.
- Resists the buildup of viscous or sticky products, leading to better heat transfer, less frequent cleaning and higher performance.
- Strong: fusing glass to steel produces a high strength, corrosive resistant composite.



HOLDER

Mounting Hardware

Available in a wide variety of materials and configurations.
Materials: 316 SS, Titanium, HC 22, Polypropylene, PVDF
Configurations: Threaded (NPT), Flanged (ANSI, DIN)
Sanitary (Tri-clamp, Ingold)

SOLUTION GROUND

Rhodium

Protects against damage of reference electrode from ground loops.

REFERENCE ELECTRODE

Sodium Sensitive

Glasteel enamel band sensitive to sodium ions in the process.