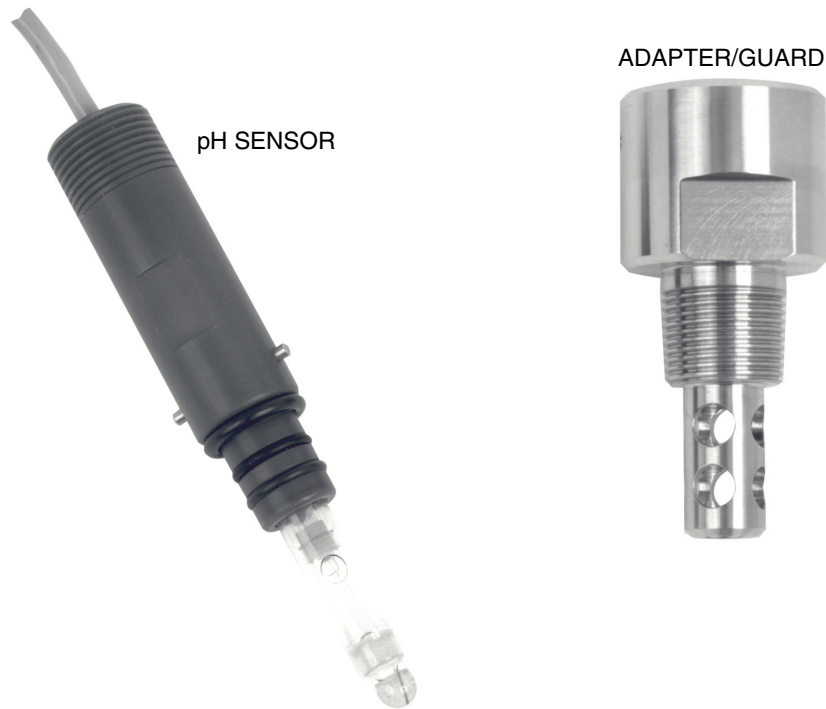


pH Sensor for Low Conductivity Water Measurements



This combination pH sensor utilizes a low-impedance measurement electrode for use in pure water applications such as steam condensate, boiler feedwater, and other water supplies with conductivity from 1 to 10 $\mu\text{S}/\text{cm}$.

SPECIALLY FORMULATED GLASS ELECTRODE ADAPTER/GUARD ACCESSORY

The low-impedance (< 100 M Ω) glass measuring electrode has been designed specifically for measurements in low-conductivity water.

This sensor is used in conjunction with a stainless steel adapter that shields against electrical interference.

DOUBLE JUNCTION REFERENCE ELECTRODE FOXBORO ANALYZER/TRANSMITTER COMPATIBILITY

The reference electrode utilizes a double junction design which inhibits silver ions from contacting the process solution, thereby preventing junction fouling from silver compound precipitates.

A variety of Foxboro analyzers and transmitters are available for conditioning the signal generated by this combination pH sensor.

FACTORY-SEALED ELECTRODE DESIGN

By using a self-contained sensor comprising measuring electrode, reference electrode, and temperature compensator, maintenance and troubleshooting time are minimized.

EFFICIENT PROCESS MOUNTING

The twist lock process connection facilitates proper in-line mounting and instant service. For in-situ installations, a convenient 3/4 NPT connection is provided at the cable end of the sensor.

STANDARD SPECIFICATIONS

Sensitivity

±0.02 pH (±1.5 mV)

Accuracy

±0.05 pH (±3 mV)

Measuring Electrode

Low impedance spherical glass

Reference Electrode

Annular ceramic junction, double junction, Ag/AgCl internal half cell

Minimum Conductivity of Sample

1 µS/cm

Measurement Range

2 to 12 pH

Temperature Range

-5 to +100°C (25 to 212°F)

Maximum Pressure

At 25°C (77°F): 1.03 MPa (150 psi)

At 100°C (212°F): 0.52 MPa (75 psi)

Process Connection

Twist lock adapter for 3/4 or 1 NPT tee

Maximum Flow Rate

125 ml/min

Automatic Temperature Compensation

Integral 100Ω platinum RTD (resistance temperature detector)

Wetted Parts

BODY

Kynar

MEASURING ELECTRODE

Glass

REFERENCE ELECTRODE

Ceramic

O-RINGS

Viton and EPR

Wire Termination

Stripped and tinned, or spade lugs. Selectable by part number.

Cable Length

6 m (20 ft)

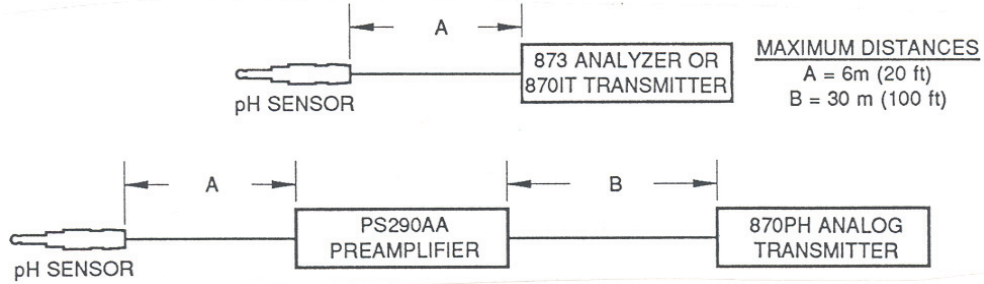
Solution Ground

None. User should connect metal object in contact with process to analyzer solution ground.

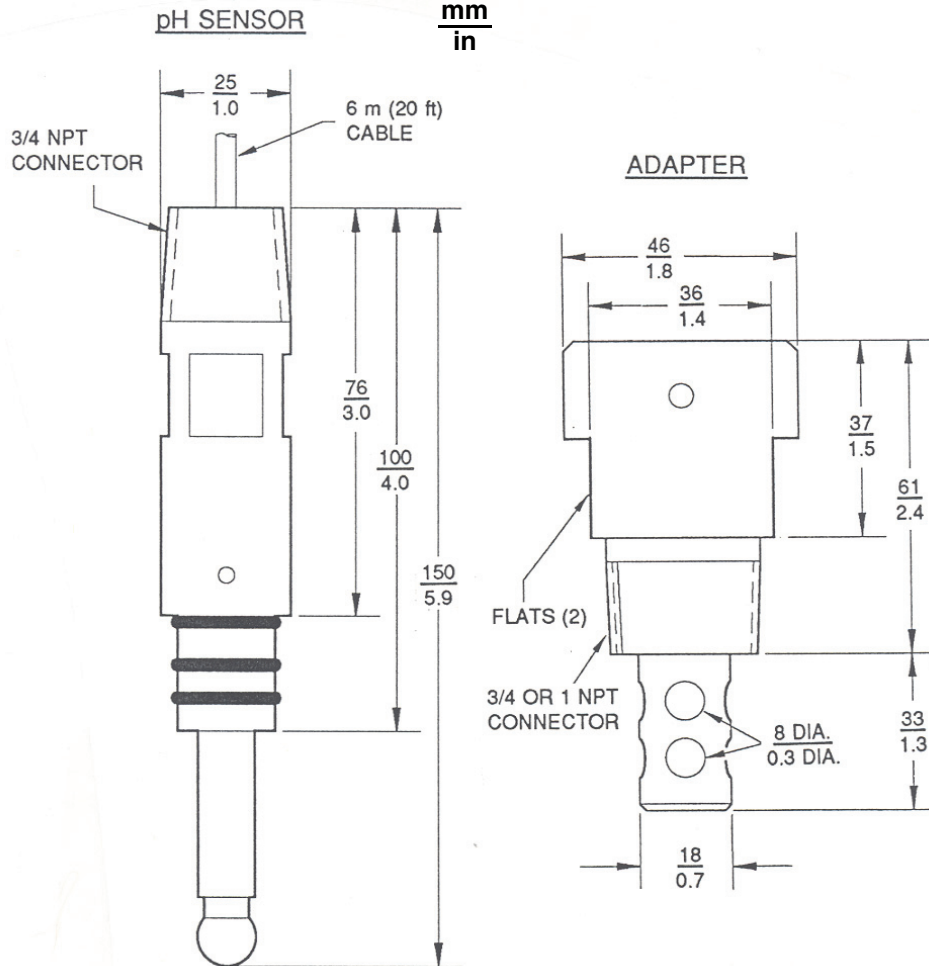
PART NUMBERS

Selections	Part Number
Pure water pH sensor with tinned leads	AS100AD
Pure water pH sensor with spade lugs	AS100AC
Twist lock adapter, 316 ss, 3/4 NPT	AS100AW
Twist lock adapter, 316 ss, 1 NPT	AS100AX

SENSOR WIRING EXAMPLES



DIMENSIONS – NOMINAL



ORDERING INSTRUCTIONS — SPECIFY

1. Sensor Part Number
2. Adapter Part Number

OTHER FOXBORO PRODUCTS

The Foxboro product lines offer a broad range of measurement and instrument products, including solutions for pressure, flow, analytical, temperature, positioning, controlling, and recording. For a list of these offerings, visit our web site at:

www.fielddevices.foxboro.com