

This electrode is designed for the measurements of the pH and temperature in aqueous solution and is suitable for continuous use in process applications.

Overview



Connections



Specifications

pH Range	0 to 14 pH
Temperature Sensor	ΝΤC 10 ΚΩ
Operating Temperature	0 to 60°C (32 to 140°F)
Maximum Process Pressure	0.6 MPa (87 PSIG)
Body Type	PPS/PC
Reference	Ag/AgCl
Electrode Diameter	29.5 mm (1.16 in.), with 3/4 in. NPT thread at ends
Standard Electrode Cable Length	5 m (16.4 ft.)
Maximum Transmission Distance	30 m (98.4 ft.)

Installation

Selectable Mounting Positions



- 3 Pipe mounting
- 4 Immersion mounting
- 5 Top mounting
- 6 Flow cell mounting

Installing the Electrode



- Remove the protective cap from the bottom of the pH electrode. If tiny air bubbles are present inside the pH-sensitive glass membrane, gently shake the electrode downward to remove air bubbles.
- 2. Wrap Teflon tape to the electrode body threads.
- Insert the electrode into the mounting position and slowly turn clockwise until secure. Hand tighten the electrode to prevent liquid leakage.

4

DO NOT immerse the electrode into liquid completely, the cable is not waterproof.

3M KCl solution

Electrode Maintenance

In order to maintain an accurate measurement value, the electrode needs cleaning and regular maintenance, cleaning procedure is as follows:

General Cleaning

Remove electrode from service and rinse the pH-sensitive glass membrane and liquid junction with clear water to remove deposits. If necessary, use a soft-bristled brush to clean electrode. Note, DO NOT scratch or break the glass membrane.

pH-sensitive glass membrane

Temperature sensor Liquid junction

Oil or Grease

Soak the electrode in detergent for 30 minutes. Rinse the electrode with clear water and soak in 3M KCI solution for 1 hour.

Lime or Mineral Deposits

Soak the electrode in 0.1M HCl for 10 minutes. Rinse the electrode with clear water and soak in 3M KCl solution for 6 hours

Protein

6

Add 1% pepsin to 0.1M HCl solution. Soak the electrode in above solution for 15 minutes. Rinse the electrode with clear water and soak in 3M KCl solution for 6 hours.

Bacterial or Mold Growth

Soak the electrode with dilute chlorine bleach. Binse the electrode with clean water and soak in 3M KCI solution for 30 minutes.

After cleaning, calibrate electrode according to instructions in the controller manual. Reinstall the electrode.

If you do not use the electrode for long periods, store the electrode in 3M KCl solution. If this solution is not available, use 4.01 pH buffer or tap water.

Optional Accessories

Order code	Description
PHCS-USA	pH 4.01, 7.00, 10.01 buffer solutions, 480 ml
PHCS-NIST	pH 4.01, 6.86, 9.18 buffer solutions, 480 ml
PHCS-ES	pH electrode storage solution, 480 ml
PHCS-GC	Electrode cleaning solution, removes inorganic residues, 480 ml
PHCS-PR	Electrode cleaning solution, removes protein contamination, 480 ml