

AquaPro Series AQUA20 Combination pH Electrode and AQUA2A Twistlock Adapter

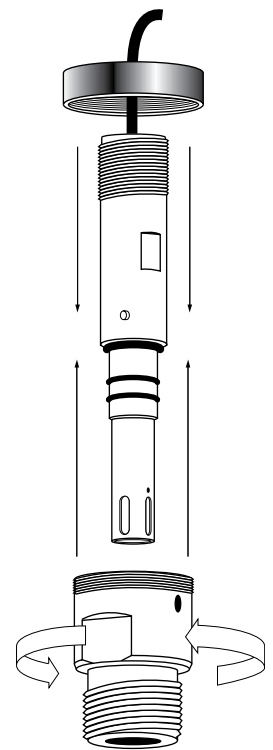
General Information

The AQUA20 industrial combination pH electrode features a twistlock design ideal for quick insertion and removal applications. The AQUA20 pH electrode has a rugged housing designed for accurate pH measurements in the harshest environments and samples. The AQUA20 is a double junction Ag/AgCl nonrefillable pH electrode with automatic temperature compensation and solution ground. The bulb guard protects the pH sensing bulb from particulates or solids in a flowing sample.

The AQUA20 electrode is easily inserted into the AQUA2A twistlock adapter. It locks into place with a 1/4 turn. After the twistlock electrode and adapter are assembled, you can see the locking pins through the side holes. The adapter nut then slides over the electrode and is screwed onto the adapter. The AQUA2A adapter has 1" NPT threads for mounting within pipe systems. The electrode has 3/4" NPT threads for mounting at the end of a piece of conduit for submersion applications.

Recommendations

- Silicon lubricant should be applied to the O-rings on the AQUA20 electrode before inserting it into the adapter. The electrode should be inserted vertically (at least 15° from horizontal).
- Inspect the electrode for scratches, cracks, salts or other deposits on the sensing element and reference junction. Rinse off any precipitates with distilled water.
- To attach the electrode to the monitor, wire the stripped, unterminated ends to the monitor. Refer to the monitor user guide.
- The first time a new electrode is installed, condition the electrode in pH 7 buffer (Cat. No. 910107) for at least 1 hour.
- Put the electrode online and allow the electrode to equilibrate in the sample for a few hours prior to calibration.



- Always use fresh buffers when calibrating. Use Thermo Scientific Orion precision buffers: pH 4 (Cat. No. 910104), pH 7 (Cat. No. 910107) or pH 10 (Cat. No. 910110). Choose buffers that bracket the expected sample pH. Check electrode slope by performing a two-point buffer calibration. Slope should be within 92 to 102 %. For detailed calibration and temperature compensation procedures, consult the monitor user guide.
- To maximize the life of your pH electrode, use the Thermo Scientific Orion pH electrode cleaning kits. After cleaning the electrode, soak it in pH 7 buffer (Cat. No. 910107) for at least 1 hour. Recalibrate the system before returning to online measurements.

Specifications

pH Range:	0 to 14
Temperature Range:	-5 to 80 °C
Pressure Range:	0 to 100 psi
Drift:	≤0.5 pH units for 30 days
Reproducibility:	±2%
Slope:	92 to 102 % (54.4 to 60.3 mV/dec)
ATC Resistance:	30 kΩ
Reference System:	HYDRAPERM
Reference Electrolyte:	Non-refillable, polymer gel
AQUA20 Length:	5.7"
Cable:	Coaxial, 5 meters

Ordering Information

Cat. No.	Description
AQUA20	Twistlock industrial combination pH electrode
AQUA2A	Twistlock adapter for the AQUA20 pH electrode
910104	pH 4.01 buffer, 475 mL bottle
910107	pH 7.00 buffer, 475 mL bottle
910110	pH 10.01 buffer, 475 mL bottle
900021	pH cleaning solution A for removing protein contaminants, 4 x 30 mL bottles
900022	pH cleaning solution B for general cleaning and removing bacterial contaminants, 4 x 60 mL bottles
900023	pH cleaning solution C for general cleaning, 4 x 30 mL bottles
900024	pH cleaning solution D for removing oil and grease contaminants, 4 x 60 mL bottles

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Environmental Instruments
Water Analysis Instruments

North America
166 Cummings Center
Beverly, MA 01915 USA
Toll Free: 1-800-225-1480
Tel: 1-978-232-6000
Dom. Fax: 1-978-232-6015
Int'l Fax: 978-232-6031

Europe
P.O. Box 254, 3860 AG Nijkerk
Wallerstraat 125K, 3862 BN
Nijkerk, Netherlands
Tel: (31) 033-2463887
Fax: (31) 033-2460832

Asia Pacific
Blk 55, Ayer Rajah Crescent
#04-16/24, Singapore 139949
Tel: 65-6778-6876
Fax: 65-6773-0836

www.thermo.com/water

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