## Special pH and ORP Electrodes

electrodes

# Tips for the Most Accurate Measurements

#### Keep Electrode Hydrated

Ideally, pH electrodes should be kept in a storage solution when not in use. Placing the electrode in a small glass filled with storage solution is suitable. An option for pocket meters is to place a small piece of sponge into the meter's cap and pour storage solution into the cap to wet the sponge. Pouring off any excess solution beforehand, the cap can then be placed on the meter.

If a storage solution is not available the next best option is to use pH 4.01 buffer (pH 7.01 is also suitable to a lesser extent).

### Clean Electrodes Before Use

Clean the junction of your electrodes once a day or at least once a week to prevent junction clogging and to maintain accuracy. Immerse the electrode in the proper cleaning solution for at least 15 to 20 minutes. Hanna offers a wide range of cleaning solutions for general purpose and specific applications.

## Replace Electrodes Once a Year

If your electrode takes too long to stabilize a reading, or readings fluctuate wildly, it is most likely time to replace the electrode. The typical life span of any pH electrode is from 6 months to 1.5 years.

#### Additional Tips

- Calibration and storage solutions should be changed regularly (i.e. monthly).
- Calibrate the meter often if a high degree of accuracy is required.
- Remember that the calibration is as only as good the buffer being used (i.e. old or contaminated buffer may not have the same value on the label).
- Single-use calibration sachets, as opposed to bottles, ensure that your buffer solution is always fresh.
- If the meter takes an unusually long time to get a stable reading, the junction may be clogged.
- Rinse the probe with purified water after each use.

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L53.5 mm

Code	HI1217-1	HI1291D
Description	pH electrode	pH electrode
Reference	single, Ag/AgCl	single, Ag/AgCl
Junction / Flow Rate	ceramic, single	ceramic, single
Electrolyte	gel	gel
Max Pressure	2 bar	2 bar
Range	pH: 0 to 13	pH: 0 to 12
Recommended Operating Temp.	0 to 70°C (32 to 158°F)	0 to 70°C (32 to 158°F)
Glass Type	GP (general purpose)	GP (general purpose)
Tip/Shape	spheric (dia: 5.0 mm)	spheric (dia: 5.0 mm)
Temperature Sensor	yes	yes
Amplifier	yes	yes
Body Material	PEI	PEI
Cable	coaxial; 1 m (3.3′)	coaxial; 1 m (3.3′)
Recommended Use	general purpose	general purpose, education, laboratory
Connection	HI1217-1 DIN**	HI1291D DIN**

\*\* Recommended for use with HI8314-1 pH meter \*\* Recommended for use with HI207 and HI208 pH meters



