

E1X (PEEK) Series

Stationary Working Electrode Product Guide

Part # Style: AFE1XFP030XXRPK

(XX = disk electrode material, e.g. AU = gold, PT = platinum, GC = glassy carbon, etc.)

Warnings



Caution:

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Do not attempt to use this electrode as a rotating disk electrode.



Thermal Stability:

Use electrode from 10°C to 80°C. Extreme temperatures damage electrode seals.



Chemical Compatibility:

The polyether ether ketone (PEEK) shroud will dissolve in concentrated acids such as nitric and sulfuric acids.

Contact Us / Support

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Description

The E1X Series electrode is designed for use as the working electrode in routine electrochemical experiments. This disk electrode has a robust design based on a sturdy stainless steel shaft that is protected by a shroud made from polyether ether ketone (PEEK) which is resistant to most solvents. It will dissolve in concentrated sulfuric acid, and it may undergo discoloration in other acid solutions.

At the top of the electrode is a standard banana binding post. Connection to the electrode may be made using a banana plug or by pushing a wire through the binding post and tightening the knurled plastic to secure the wire.

The electrode is narrow enough to fit through a 14/20 standard taper port or a #7 threaded port. A mounting adapter which fits a 14/20 port is available separately.

Maintenance

After using the electrode, clean it with distilled water and replace the protective cover to prevent scratching the electrode surface. The electrode surface will need to be polished periodically. A polishing kit which includes various alumina slurries and polishing pads is available separately. Note that the PEEK shroud is resilient and can be difficult to polish by hand. In some cases, it may be necessary to use a mechanical polisher to assure the shroud is coplanar with the electrode surface.

Leak Testing

The shroud is tightly sealed around the circumference of the working electrode material. The electrode is guaranteed to be leak-free at the time of shipment (each electrode is shipped with a copy of the factory leak test results). Leak testing is performed at ~25°C and ~80°C. Exposing the electrode to temperatures less than 10°C or greater than 80°C may cause a leak between the electrode and the shroud.

Photograph





binding post

Disk Diameter (D):	3-7 mm*
Shroud Diameter (S):	7.0 <i>mm</i>
Overall Length (L):	137 mm
Shroud Length (Z):	110 mm

*Custom Sizes Available