

L-Shaped Glassy Carbon Electrode



KDE07

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The L-shaped Glassy Carbon Electrode (GCE) is a high-purity (99.9%) working electrode, designed for a wide range of electrochemical

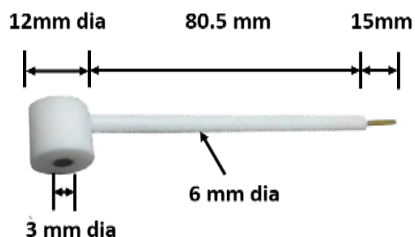
applications. Its unique L-shape allows for easy handling, integration into electrochemical setups, and improved stability during measurements.

Glassy carbon electrode surface can parallel the counter electrode or reference electrodes.

Technical Specification

Material	High-Purity Glassy Carbon
Shape	L-shape for parallel positioning to counter electrodes and improved drop reduction
Electrode outer dia	6mm
Glassy Carbon dia	3mm
L-rod dia	12mm
Electrode body material	PTFE (Teflon)
Total Length	Customizable
Temperature Stability	Up to 1000°C
Surface Finish	Mirror-polished or unpolished

Electrode dimensions



Applications

- **Electrochemical Analysis:** Cyclic Voltammetry (CV), Electrochemical Impedance Spectroscopy (EIS).
- **Biosensors & Medical Diagnostics:** Used in enzyme-based electrochemical sensors.
- **Corrosion & Material Science Studies:** Evaluates coatings, corrosion resistance, and material durability.
- **Battery & Supercapacitor Research:** Works as a stable electrode material in energy storage systems.
- **Environmental Monitoring:** Detection of heavy metals and pollutants in water and soil.

Key Features & Benefits

- **Design:** The L-shape allows the electrode surface to be parallel to the counter electrode, improving current distribution.
- **Highly Conductive & Chemically Inert:** Ensures reliable and stable electrochemical responses.
- **Wide Temperature Range:** Can withstand high temperatures up to 1000°C.
- **Reduced iR Drop:** Enables close placement of the Luggin capillary/reference electrode for high-accuracy measurements.
- **Versatility:** Suitable for voltammetry, in-situ Raman studies, and as a substrate for modified electrodes.
- **Superior Surface Finish:** Available in polished and unpolished versions for different electrochemical needs.

Maintenance & Handling

- **Polishing:** Should be polished with micro-sized alumina (Al_2O_3) or diamond paste to a mirror finish before use.

- **Cleaning:** Clean with ethanol and deionized water after experiments.

➤ Handling:

- Avoid dropping or applying mechanical force to electrode tip.
- Do not expose to strong oxidizers at high temperature.
- When polishing, avoid inhaling fine alumina/polishing powders.

➤ Storage:

- Store dry, clean and protected from mechanical change.
- Keep electrode surface covered when not in use.

➤ Precautions:

- Clean before use by polishing with alumina slurry or suitable polishing pads.
- Rinse thoroughly with DI water and solvent to remove debris.
- Ensure proper electrical connection before measurement.
- Chemically inert under normal lab conditions.
- Avoid:
 - Strong oxidizers at high temperature (may oxidize carbon surface)
 - Hydrofluoric acid (can damage carbon)

Optional Parts:



KEC10A
Banana Cable Set



KEC10B
Banana Connector Pin



KA01 (Red), KA02 (Black)
Alligator Clip

Our Valuable Clients



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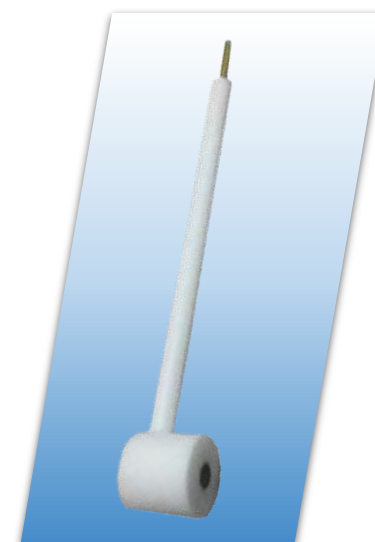
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Product Information Leaflet



L-Shaped Glassy Carbon Electrode
Product ID: KDE07

A complete solution for your
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