

Macro and Micro Metal Electrodes

Three Electrode Styles are Available:

- Standard style with 3 mm or 1 mm of Parylene-C insulation on the metal shaft.
- Standard style with the addition of polyimide tubing on the shaft which provides additional reinforcement for easy electrode insertion. The additional insulation also minimizes signal attenuation making this an ideal electrode for deep brain penetrations.
- Stereotrode/Biopolar style for micro bipolar stimulation. These Electrodes are ideal where the current injection needs to be confined to a small, localized part of the nervous system. They are also used for enhanced isolation of single neural elements by simultaneously recording from multiple units of two closely spaced microelectrodes.

All of the Microelectrodes are sharpened electrochemically and their tips are individually exposed under a microscope. Each is inspected to assure reproducible tip exposures and profile. Four different tip profiles are created using a unique process to remove the insulation from the electrode tip:

- **General Profile** with a 25:1 taper ending in a sharp point which is good for most applications.
- **Heat Tapered Profile** with a 25:1 taper ending in a sharp point with “toughened” Parylene-C near the exposed tip providing more rigidity. This tip is ideal for penetrating tough tissues.
- **Extra Fine Profile** with a 50:1 taper ending in a sharp point which is good for small cells and near surface work. This profile only has 1 mm of Parylene-C insulation on the metal shaft.
- **Bullet Profile** with a 25:1 taper ending in a rounded point which is ideal for stimulation due to reduced neuron penetration.

These Electrodes are supplied in a box of 10.

Metal Micro Electrodes						
Catalog No.	Electrode Style	Electrode Length	Insulation	Tip Imped.	Tip Profile Diameter	Shaft Tungsten
CGS8741.71	Stereotrode/Biopolar	127 mm (5 in)	3 μm	1	General	127 μm
CGS8742.71	Stereotrode/Biopolar	127 mm (5 in)	3 μm	1.5	General	127 μm
CGS8743.71	Stereotrode/Biopolar	127 mm (5 in)	3 μm	0.5	General	127 μm
CGS8744.71	Additional Polyimide	127 mm (5 in)	3 μm	2	General	127 μm
CGS8745.71	Additional Polyimide	127 mm (5 in)	3 μm	1	General	127 μm
CGS8746.71	Parylene Coated	127 mm (5 in)	3 μm	2	Tapered	127 μm
CGS8747.71	Parylene Coated	127 mm (5 in)	3 μm	2	General	127 μm
CGS8748.71	Parylene Coated	127 mm (5 in)	3 μm	1	Tapered	127 μm
CGS8749.71	Parylene Coated	127 mm (5 in)	3 μm	1	Bullet	127 μm
CGS8750.71	Parylene Coated	127 mm (5 in)	3 μm	1	General	127 μm
CGS8751.71	Parylene Coated	127 mm (5 in)	3 μm	1	General	127 μm
CGS8752.71	Parylene Coated	127 mm (5 in)	3 μm	0.5	Bullet	127 μm
CGS8753.71	Parylene Coated	127 mm (5 in)	3 μm	0.5	General	127 μm
CGS8754.71	Parylene Coated	127 mm (5 in)	3 μm	0.5	General	127 μm
CGS8755.71	Stereotrode/Biopolar	76 mm (3 in)	3 μm	1	General	127 μm
CGS8756.71	Stereotrode/Biopolar	76 mm (3 in)	3 μm	0.5	General	127 μm
CGS8757.71	Additional Polyimide	76 mm (3 in)	3 μm	2	General	127 μm
CGS8758.71	Additional Polyimide	76 mm (3 in)	3 μm	1	General	127 μm
CGS8759.71	Additional Polyimide	76 mm (3 in)	1 μm	5	X-Fine	127 μm
CGS8760.71	Parylene Coated	76 mm (3 in)	3 μm	2	General	127 μm
CGS8761.71	Parylene Coated	76 mm (3 in)	3 μm	2	General	127 μm
CGS8762.71	Parylene Coated	76 mm (3 in)	3 μm	1.5	General	127 μm
CGS8763.71	Parylene Coated	76 mm (3 in)	3 μm	1	General	254 μm
CGS8764.71	Parylene Coated	76 mm (3 in)	3 μm	1	General	127 μm
CGS8765.71	Parylene Coated	76 mm (3 in)	3 μm	0.5	General	254 μm
CGS8766.71	Parylene Coated	76 mm (3 in)	3 μm	0.5	General	127 μm
CGS8767.71	Parylene Coated	76 mm (3 in)	3 μm	0.1	General	254 μm
CGS8768.71	Parylene Coated	76 mm (3 in)	1 μm	5	X-Fine	127 μm
CGS8769.71	Parylene Coated	76 mm (3 in)	1 μm	2	X-Fine	127 μm
CGS8770.71	Parylene Coated	76 mm (3 in)	1 μm	1	X-Fine	127 μm
Stainless Steel						
CGS8771.71	Parylene Coated	76 mm (3 in)	3 μm	7	General	127 μm
CGS8772.71	Parylene Coated	76 mm (3 in)	3 μm	2	General	127 μm
CGS8773.71	Parylene Coated	76 mm (3 in)	3 μm	1	General	127 μm
Platinum/20% Iridium						
CGS8774.71	Additional Polyimide	51 mm (2 in)	3 μm	2	General	127 μm
CGS8775.71	Additional Polyimide	51 mm (2 in)	3 μm	1	General	127 μm
CGS8776.71	Parylene Coated	51 mm (2 in)	3 μm	2	General	127 μm
CGS8777.71	Parylene Coated	51 mm (2 in)	3 μm	1	General	127 μm
CGS8778.71	Parylene Coated	51 mm (2 in)	3 μm	0.5	General	127 μm
Iridium (Pure)						
CGS8779.71	Additional Polyimide	76 mm (3 in)	3 μm	2	General	127 μm
CGS8780.71	Additional Polyimide	76 mm (3 in)	3 μm	1	General	127 μm
CGS8781.71	Additional Polyimide	76 mm (3 in)	3 μm	0.5	General	127 μm