Peripheral Nerve Cuff Electrodes

Flexible cuff electrodes for recording and stimulation

- For acute/chronic experiments
- 1-24 electrode sites
- Broad range of available inner diameters, from 5mm down to as small as 56µm
- Platinum, Stainless Steel and Platinum/Iridium metal electrodes
- Customizable electrode arrangements, including concentric and tri-bipolar
- Adaptable to interface with the acquisition system of your choice
- Suitable for rodent, feline, bird and primate research

Nerve cuff electrodes are designed for reliable recording and/or stimulation of any peripheral nerve. They can be used acutely or for chronic implantation, with a wide selection of inner diameters available to be selected based on the nerve diameter. The nerve cuffs are designed to provide flexibility in electrode contact location for recording and stimulation protocols.

**Configurations**

Many custom combinations of inner diameters and contact arrangements are available for standard, micro and nano nerve cuffs.

1. Optional Sutures
2. 1 to 24 Contacts (Platinum, Platinum/Iridium or Stainless Steel)
3. Custom length
4. Custom Diameter
5. Stranded Stainless Steel Leads

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**Standard Nerve Cuff**

Many custom combinations of inner diameters and contact arrangements are available.

Optional sutures

1 to 24 contacts

Platinum, Platinum/Iridium or Stainless Steel

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**Tripolar Nerve Cuff**

Complex tripolar recording/stimulating sets are available.

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**Concentric Nerve Cuff**

Concentric electrodes have multiple contacts around a single point of the nerve, allowing recording or stimulation at different locations around the same point.

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www.wpiinc.com
Nerve Cuff Electrodes

For acute and chronic experiments for recording and stimulation

Sterilization

Nerve cuffs are made entirely of autoclavable materials — silicone rubber, Teflon and stainless steel. They can be steam autoclaved without special precautions. If gas sterilization (EtO) is preferred, be sure to pack nerve cuffs in a gas-permeable bag and allow adequate outgassing time (at least 48 hours) to be sure all toxic gases have been desorbed from the silicone rubber.

Available Options

<table>
<thead>
<tr>
<th>Metal Type</th>
<th>Inner Diameter</th>
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</thead>
<tbody>
<tr>
<td>125µm stranded Stainless Steel</td>
<td>1.0 – 5.0mm</td>
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<tr>
<td>100µm Platinum</td>
<td>1.0 – 2.0mm</td>
</tr>
<tr>
<td>250µm Platinum*</td>
<td>2.0 – 5.0mm</td>
</tr>
<tr>
<td>100µm Platinum</td>
<td>0.5 – 0.75mm</td>
</tr>
<tr>
<td>50µm Platinum/Iridium</td>
<td>0.3mm</td>
</tr>
<tr>
<td>25µm Platinum/Iridium</td>
<td>160 - 250µm</td>
</tr>
<tr>
<td>12.5µm Platinum/Iridium</td>
<td>56 - 140µm</td>
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</tbody>
</table>

* Recommended for stimulation

Ordering

Contact sales@wpiinc.com or 866-606-1974 for pricing and availability. When ordering, you will need to specify:

- Cuff type (Standard, tripolar, concentric)
- Inner diameter
- Number of contacts (1–9)
- Distance between contacts (mm)
- Distance from the last contact to the edge of the cuff (mm)
- Length of the stranded SS leads (mm)
- Type of metal electrode (125µm stranded Stainless Steel, 100µm Platinum, 250µm Platinum, 50µm Platinum/Iridium)

<table>
<thead>
<tr>
<th>Male Implant Connector</th>
<th>Description</th>
<th>Female Mating Connector</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP-A11365-001</td>
<td>Male Omnetics connector - 8 channel, 10-pin 0.050&quot; pitch</td>
<td>MP-A11862-001</td>
</tr>
<tr>
<td>MP-A12623-001</td>
<td>Male Omnetics connector - 8 channel, 10-pin, 0.050&quot; pitch with latching mechanism</td>
<td>MP-A12624-001</td>
</tr>
<tr>
<td>MP-A8393-001</td>
<td>Male Omnetics connector - 8 channel, 10-pin, 0.025&quot; pitch, 2 guide post</td>
<td>MP-A8777-001</td>
</tr>
<tr>
<td>MP-A79000-001 (NPS-09-DD-GS)</td>
<td>Male Omnetics connector - 7 channel, 9-pin, 0.050&quot; pitch</td>
<td>MP-A8776-001</td>
</tr>
<tr>
<td>MP-A79014-001 (NPD-18-DD-GS)</td>
<td>Male Omnetics connector - 16 channel, 18-pin, 0.025&quot; pitch, 6 guide posts</td>
<td>MP-A79015-001</td>
</tr>
<tr>
<td>MP-A70242-001</td>
<td>Male Omnetics connector - 16 channel, 18-pin, 0.025&quot; pitch, 6 guides posts; Nickel free, MRI compatible</td>
<td>MP-A79015-001</td>
</tr>
<tr>
<td>MP-A79038-001 (NPD-18-DDGS)</td>
<td>Male Omnetics connector - 16 channel, 18-pin, 0.025&quot; pitch, 2 guide posts</td>
<td>MP-A79039-001</td>
</tr>
<tr>
<td>MP-A79022-001 (NPD-36-DD-GS)</td>
<td>Male Omnetics connector - 32 channel, 36-pin, 0.025&quot; pitch, 4 guide posts</td>
<td>MP-A79023-001</td>
</tr>
<tr>
<td>MP-A72312-001</td>
<td>Male Omnetics connector - 32 channel, 36-pin, 0.025&quot; pitch, 4 guide posts; Nickel free, MRI compatible</td>
<td>MP-A79023-001</td>
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</tbody>
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