BATTERY PROBE

Battery probes are typically contained in modules where consistent long-life, low-resistance, electrical and mechanical connections are required. ECT battery probes offer superior durability in high cycle life applications compared to leaf spring applications. Pogo based solutions can maintain consistent electro-mechanical characteristics in excess of mission cycles. When mating planar tolerances pose a challenge or a longer reach is required, spring probes are the preferred solution.

Battery probes are typically molded into a housing and soldered either to mating PCB or terminal to provide a permanent stable and reliable electrical and mechanical connection.

Everett Charles Technologies versatile line of battery interconnect probes gives you design flexibility to match your performance, cost, and assembly requirements. Our design expertise and complete manufacturing capabilities will help you bring your product to market quickly and easily. As part of our customer service commitment, these products can be modified or custom designed to meet your needs. Contact us to discuss the limitless possibilities.
**BIP-1**

**Mechanical**
- Recommended Travel: 0.060 (1.52)
- Full Travel: 0.090 (2.29)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>1.18 (33)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms

**Materials and Finishes**
- Plunger: BeCu, Gold plated over hard Nickel
- Barrel: Brass, Gold plated over hard Nickel
- Spring: Stainless Steel, Silver plated

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**BIP-2**

**Mechanical**
- Recommended Travel: 0.050 (1.27)
- Full Travel: 0.075 (1.91)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>1.10 (31)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms

**Materials and Finishes**
- Plunger: Heat-treated BeCu, Gold plated over hard Nickel
- Barrel: Work-hardened Nickel Silver, Gold plated over hard Nickel
- Spring: Stainless Steel, Silver plated

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**BIP-3**

**Mechanical**
- Recommended Travel: 0.060 (1.52)
- Full Travel: 0.100 (2.54)
- Operating Temperature: -55°C to +105°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Order Code</th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>0.30 (8.5)</td>
<td>1.06 (30)</td>
</tr>
<tr>
<td>Alternate</td>
<td>-1</td>
<td>1.1 (31)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms

**Materials and Finishes**
- Plunger: Brass, Gold plated over hard Nickel
- Barrel: Brass, Gold plated over hard Nickel
- Spring: Stainless Steel, Silver plated

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**BIP-8**

**Mechanical**
- Recommended Travel: 0.060 (1.52)
- Full Travel: 0.090 (2.29)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>2.40 (68.0)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms

**Materials and Finishes**
- Plunger: BeCu, Gold plated
- Barrel: BeCu, Gold plated
- Spring: Stainless Steel, Gold plated
- Ball: Stainless Steel
### BIP-10

**Mechanical**
- Recommended Travel: 0.126 (3.20)
- Full Travel: 0.157 (4.00)
- Operating Temperature: -40°C to +80°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>1.00 (28.3) 5.40 (153)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms, Steel, Gold plated
  - <100 mOhms, Stainless Steel

**Materials and Finishes**
- Plunger: Brass, Gold plated
- Barrel: Brass, Gold plated
- Spring: Stainless Steel, Silver plated

**Receptacle**
- Hole Diameter: 0.221 to 0.228 (5.61 to 5.79)
- Suggested drill: #2 or #1
- Material Housing: Brass, Gold plated

### BIP-12

**Mechanical**
- Recommended Travel: 0.315 (8.00)
- Full Travel: 0.394 (10.00)
- Operating Temperature: -40°C to +80°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>0.87 (24.7) 5.40 (153)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 5 amps
- Average Probe Resistance: <30 mOhms, Steel, Gold plated
  - <100 mOhms, Stainless Steel

**Materials and Finishes**
- Plunger: BeCu, Gold plated
- Barrel: Brass, Gold plated
- Spring: Stainless Steel, Silver plated

**Receptacle**
- Hole Diameter: 0.221 to 0.228 (5.61 to 5.79)
- Suggested drill: #2 or #1
- Material Housing: Brass, Gold plated
Battery Probe

CCA-003

CCA-004

CCA-006

Mechanical
- Recommended Travel: 0.040 (1.02)
- Full Travel: 0.078 (1.98)
- Operating Temperature: -35°C to +105°C

Spring Force in oz. (grams)

<table>
<thead>
<tr>
<th></th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>1.27 (36.9)</td>
<td>2.94 (83.9)</td>
</tr>
</tbody>
</table>

Electrical (Static Conditions)
- Current Rating: 10 amps
- Average Probe Resistance: <50 mOhms

Materials and Finishes
- Plunger: Brass, Gold plated
- Barrel: Brass, Gold plated
- Spring: Music Wire, Gold plated

Mechanical
- Recommended Travel: 0.040 (1.02)
- Full Travel: 0.057 (1.45)
- Operating Temperature: -35°C to +105°C

Spring Force in oz. (grams)

<table>
<thead>
<tr>
<th></th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>0.83 (24.0)</td>
<td>2.85 (81.0)</td>
</tr>
</tbody>
</table>

Electrical (Static Conditions)
- Current Rating: 10 amps
- Average Probe Resistance: <50 mOhms

Materials and Finishes
- Plunger: Brass, Gold plated
- Barrel: Brass, Gold plated
- Spring: Music Wire, Gold plated

Dimensions in inches (millimeters). Specifications subject to change without notice.
Consult factory for other temperature requirements, and applications below -40°C.
Stocking Disclaimer: Stocking levels for part numbers listed in this catalog are subject to change.
Availability is based on current levels of usage and demand.
Battery Probe

**CP-059-019**

**Mechanical**
- Recommended Travel: .040 (1.02)
- Full Travel: .062 (1.57)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.63 (46.0)</td>
<td>4.50 (128)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 10 amps
- Average Probe Resistance: <25 mOhms

**Materials and Finishes**
- Plunger: Brass, Gold plated
- Barrel: Brass, Gold plated
- Spring: Stainless Steel, Gold plated

**CP-059-025**

**Mechanical**
- Recommended Travel: .040 (1.02)
- Full Travel: .057 (1.45)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.81 (23.0)</td>
<td>4.50 (128)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 10 amps
- Average Probe Resistance: <25 mOhms

**Materials and Finishes**
- Plunger: Brass, Gold plated over hard Nickel
- Barrel: Brass, Gold plated over hard Nickel
- Spring: Stainless Steel, Gold plated

**CP-059-026**

**Mechanical**
- Recommended Travel: .040 (1.02)
- Full Travel: .057 (1.45)
- Operating Temperature: -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.81 (23.0)</td>
<td>4.50 (128)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- Current Rating: 10 amps
- Average Probe Resistance: <25 mOhms

**Materials and Finishes**
- Plunger: Brass, Gold plated
- Barrel: Brass, Gold plated
- Spring Standard: Stainless Steel, Gold plated
Battery Probe

Mechanical

<table>
<thead>
<tr>
<th>Size</th>
<th>Recommended Travel</th>
<th>Full Travel</th>
<th>Operating Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0.030 (0.75)</td>
<td>0.039 (1.00)</td>
<td>-55°C to +155°C</td>
</tr>
<tr>
<td>6</td>
<td>0.059 (1.50)</td>
<td>0.069 (1.75)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.079 (2.00)</td>
<td>0.089 (2.25)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>0.118 (3.00)</td>
<td>0.128 (3.25)</td>
<td></td>
</tr>
</tbody>
</table>

Spring Force in oz. (grams)

<table>
<thead>
<tr>
<th></th>
<th>Size 4</th>
<th>Size 6</th>
<th>Size 8</th>
<th>Size 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preload</td>
<td>0.66 (18.7)</td>
<td>1.32 (37.4)</td>
<td>1.17 (33.3)</td>
<td>0.95 (26.9)</td>
</tr>
<tr>
<td>Rec. Travel</td>
<td>4.5 (127.6)</td>
<td>4.5 (127.6)</td>
<td>4.5 (127.6)</td>
<td>4.5 (127.6)</td>
</tr>
</tbody>
</table>

Mechanical

<table>
<thead>
<tr>
<th>Size</th>
<th>Dimension A</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>0.158 (4.00)</td>
<td>0.059 (1.50)</td>
</tr>
<tr>
<td>6</td>
<td>0.238 (6.00)</td>
<td>0.087 (2.20)</td>
</tr>
<tr>
<td>8</td>
<td>0.315 (8.00)</td>
<td>0.114 (2.90)</td>
</tr>
<tr>
<td>12</td>
<td>0.472 (12.00)</td>
<td>0.169 (4.30)</td>
</tr>
</tbody>
</table>

Electrical (Static Conditions)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Rating</td>
<td>5 A</td>
</tr>
<tr>
<td>Average Probe Resistance</td>
<td>50 mOhms</td>
</tr>
</tbody>
</table>

Materials and Finishes

- Plunger: BeCu, Gold plated
- Barrel: Brass, Gold plated
- Spring: Stainless Steel

Dimensions: inches (millimeters). Specifications subject to change without notice. Consult factory for other temperature requirements and applications below -40°C. Stocking Disclaimer: Stocking levels for part numbers listed in this catalog are subject to change. Availability is based on current levels of usage and demand.
Battery Probe

### CP-4

**Mechanical**
- **Recommended Travel:** .040 (1.01)
- **Full Travel:** .060 (1.52)
- **Operating Temperature:** -55°C to +150°C

**Spring Force in oz. (grams)**

<table>
<thead>
<tr>
<th>Preload</th>
<th>Rec. Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.49 (13.89)</td>
<td>2.50 (70.87)</td>
</tr>
</tbody>
</table>

**Electrical (Static Conditions)**
- **Current Rating:** 10 amps
- **Average Probe Resistance:** <25 mOhms

**Materials and Finishes**
- **Plunger:** BeCu, Gold plated
- **Barrel:** Brass, Gold plated
- **Spring:** Stainless Steel, Gold plated
- **Ball:** Stainless Steel

Dimensions in inches (millimeters). Specifications subject to change without notice. Consult factory for other temperature requirements, and applications below -40°C. Stocking Disclaimer: Stocking levels for part numbers listed in this catalog are subject to change. Availability is based on current levels of usage and demand.