# **Battery Probe**

# **BATTERY PROBE**

Battery Probes are typically contained in modules where consistent, long-life, low-resistance, compliant electrical and mechanical connections are required. Battery Probes offer superior durability in high cycle life application 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.

They 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 faster and easier. 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 BIP-3

# .323 (8.20) BIP-1 .060 (1.52) .173 (4.40) .075 (1.91) .064 (1.63) .035 (0.89) A.124 (3.15)

### Mechanical

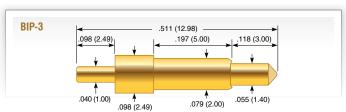
Recommended Iravei:	.050 (1.27)
Full Travel:	.075 (1.91)
Operating Temperature:	$-55^{\circ}$ C to $+150^{\circ}$ C

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

	Preload	Rec. Travel
Standard	1.18 (33)	3.25 (92)
Electrical (Static Conditions)		
Current Rating:		5 amps

# Average Probe Resistance: **Materials and Finishes**

BeCu, Gold plated over hard Nickel Plunger: Brass, Gold plated over hard Nickel Barrel: Stainless Steel, Silver plated Spring:



### Mechanical

.060 (1.52)
.100 (2.54)
$-55^{\circ}\text{C}$ to $+105^{\circ}\text{C}$

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
Standard		0.30 (8.5)	1.06 (30)
Alternate	-1	1.1 (31)	3.40 (86)

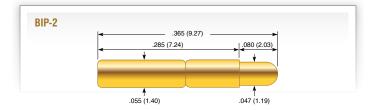
## **Electrical (Static Conditions)**

Current Rating: 5 amps Average Probe Resistance: <30 m0hms

#### **Materials and Finishes**

Plunger: Brass, Gold plated over hard Nickel Brass, Gold plated over hard Nickel Barrel: Spring: Music Wire, Silver plated

# BIP-2 BIP-8



### Mechanical

Recommended Travel:	.050 (1.27)
Full Travel:	.050 (1.27)

-55°C to +150°C

# Operating Temperature: Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	1.10 (31)	3.85 (109)

### **Electrical (Static Conditions)**

Current Rating: 5 amps Average Probe Resistance: <30 m0hms

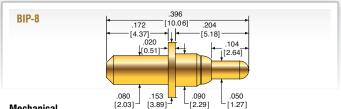
### **Materials and Finishes**

<16 m0hms

Heat-treated BeCu, Gold plated over hard Nickel Plunger:

Work-hardened Nickel Silver, Gold plated over hard Nickel Barrel:

Stainless Steel, Silver plated Spring:



### Mechanical

Recommended Travel:	.060 (1.52)
Full Travel:	.090 (2.29)

Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel	
Standard	2.40 (68.0)	6.20 (176)	

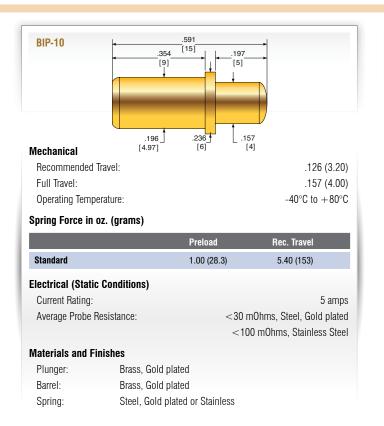
### **Electrical (Static Conditions)**

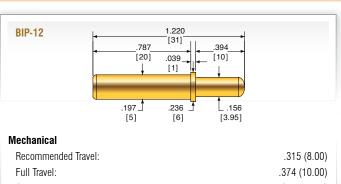
Current Rating: 5 amps Average Probe Resistance: <30 m0hms

## **Materials and Finishes**

BeCu, Gold plated Plunger: Barrel: BeCu, Gold plated Spring: Stainless Steel Ball: Stainless Steel

BIP-10 BIP-12

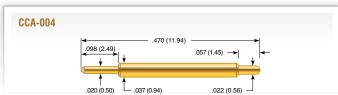




Recommended	Iravel:		.315 (8.0
Full Travel:			.374 (10.0
Operating Temp	erature:		$-40^{\circ}$ C to $+80^{\circ}$
Spring Force in	oz. (grams)		
		Preload	Rec. Travel
Standard		0.87 (24.7)	5.40 (153)
Electrical (Statio	c Conditions)		
Current Rating:			5 am
Average Probe F	Resistance:	<30	) m0hms, Steel, Gold plate
		<	100 m0hms, Stainless Ste
Materials and F	inishes		
Plunger:	BeCu, Gold	plated	
Barrel:	Brass, Gold	plated	
Spring:	Steel, Gold	plated or Stainless	

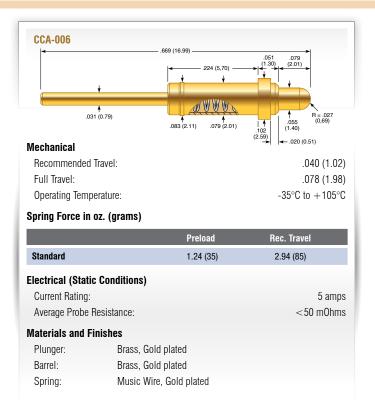
# CCA-003 CCA-004

### CCA-003 at W W W .031 (0.79) .079 (2.01) Mechanical .040 (1.02) Recommended Travel: Full Travel: .078 (1.98) Operating Temperature: -35°C to +105°C Spring Force in oz. (grams) Preload Rec. Travel Standard 1.27 (36) 2.94 (83) **Electrical (Static Conditions)** Current Rating: 10 amps Average Probe Resistance: <50 m0hms **Materials and Finishes** Plunger: Brass, Gold plated Brass, Gold plated Barrel: Music Wire, Gold plated Spring:



#### Mechanical Recommended Travel: .040 (1.02) .057 (1.45) Full Travel: Operating Temperature: $-35^{\circ}C$ to $+105^{\circ}C$ Spring Force in oz. (grams) Preload Rec. Travel Standard 0.83 (24) 2.85 (81) **Electrical (Static Conditions)** Current Rating: 10 amps Average Probe Resistance: <50 m0hms **Materials and Finishes** Plunger: Brass, Gold plated Barrel: Brass, Gold plated Spring: Music Wire, Gold plated

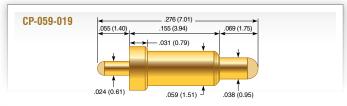
# **CCA-006**



# CP-059-019 CP-059-025

10 amps

# CP-059-026



### Mechanical

 Recommended Travel:
 .040 (1.02)

 Full Travel:
 .062 (1.57)

 Operating Temperature:
 -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	1.63 (46)	4.50 (128)

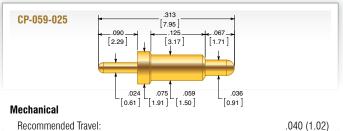
# **Electrical (Static Conditions)**Current Rating:

Average Probe Resistance: <25 m0hms

### **Materials and Finishes**

Plunger: Brass, Gold plated
Barrel: Brass, Gold plated
Spring: Staipless Steel, Go

Spring: Stainless Steel, Gold plated



Recommended Travel: .040 (1.02) Full Travel: .057 (1.45) Operating Temperature:  $-55^{\circ}$ C to  $+150^{\circ}$ C

Preload

0.81 (23.0)

Rec. Travel

4.50 (128)

<25 m0hms

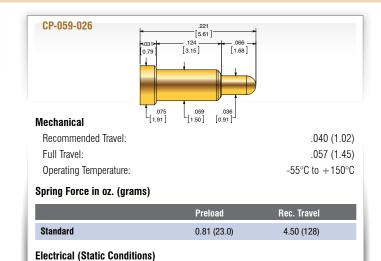
## Spring Force in oz. (grams)

Electrical (Static Conditions)	
Current Rating:	10 amns

# Average Probe Resistance: Materials and Finishes

Standard

Plunger: Brass, Gold plated over hard Nickel
Barrel: Brass, Gold plated over hard Nickel
Spring: Stainless Steel, Gold plated



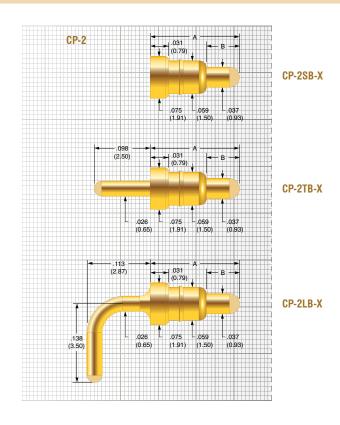
Current Rating:		10 amps
Average Probe Resist	ance:	<25 m0hms
Materials and Finish	es	
Plunger:	Brass, Gold plated	
Barrel:	Brass, Gold plated	
Spring Standard:	Stainless Steel, Gold plated	

# **Battery Probe**





# **CP-2**



	Size 4	Size 6	Size 8	Size 12
Recommended Travel:	0.030 (0.75)	0.059 (1.50)	0.079 (2.00)	0.118 (3.00)
Full Travel:	0.039 (1.00)	0.069 (1.75)	0.089 (2.25)	0.128 (3.25
Operating Temperature:	-55°C to +155°C			
Spring Force in oz. (gram	s)			
Preload	0.66 (18.7)	1.32 (37.4)	1.17 (33.3)	0.95 (26.9)
Rec. Travel	4.5 (127.6)	4.5 (127.6)	4.5 (127.6)	4.5 (127.6)
Mechanical				
Dimension A	0.158 (4.00)	0.236 (6.00)	0.315 (8.00)	0.472 (12.00
Dimension B	0.059 (1.50)	0.087 (2.20)	0.114 (2.90)	0.169 (4.30
Electrical (Static Conditio	ns)			
Current Rating	5 A			
Average Probe Resistanc	e 50 mOhms			
Materials and Finishes				
Plunger:	BeCu, Gold plated			
Barrel:	Brass, Gold plated			
Spring:	Stainless Steel			

# CP-4

#### Mechanical .040 (1.01) Recommended Travel: .060 (1.52) Full Travel: Operating Temperature: -55°C to +150°C Spring Force in oz. (grams) Preload Rec. Travel 0.49 (13.89) 2.50 (70.87) Standard **Electrical (Static Conditions)** Current Rating: 10 amps Average Probe Resistance: <25 m0hms **Materials and Finishes** Plunger: BeCu, Gold plated Brass, Gold plated Barrel: Stainless Steel, Gold plated Spring: Ball: Stainless Steel

