# **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

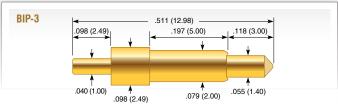
Recommended Travel: .050 (1.27) Full Travel: .075 (1.91) Operating Temperature: -55°C to +150°C

### 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

Recommended Travel: .060 (1.52) Full Travel: .100 (2.54) Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

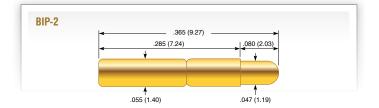
	Order Code	Preload	Rec. Travel
Standard		0.30 (8.5)	1.06 (30)
Alternate	-1	1.1 (31)	3.40 (86)

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

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

**Materials and Finishes** Plunger: Brass, Gold plated over hard Nickel Barrel: Brass, Gold plated over hard Nickel Spring: Music Wire, Silver plated

# BIP-2 BIP-8



### Mechanical

Recommended Travel: .050 (1.27) Full Travel: .050 (1.27) Operating Temperature: -55°C to +150°C

#### 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

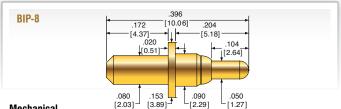
### **Materials and Finishes**

<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)

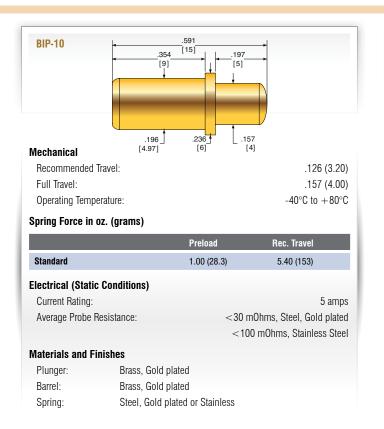
### **Electrical (Static Conditions)**

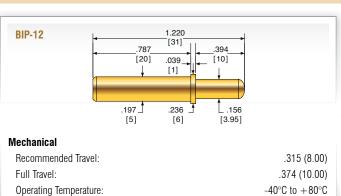
Current Rating: 5 amps Average Probe Resistance: <30 m0hms

### **Materials and Finishes**

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

BIP-10 BIP-12

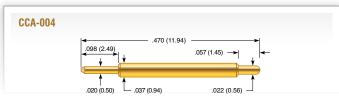




Recommended	Iraver:	ei: .313 (8.00)		
Full Travel:		.374 (10.00)		
Operating Temp	perature:	ure: $-40^{\circ}\text{C to} + 80^{\circ}\text{C}$		
Spring Force in	oz. (grams)			
		Preload	Rec. Travel	
Standard		0.87 (24.7)	5.40 (153)	
Electrical (Stati	c Conditions)			
Current Rating:			5 amps	
Average Probe Resistance: <30 m0hms, Steel, Gold plate		30 mOhms, Steel, Gold plated		
		<100 m0hms, Stainless Stee		
Materials and F	inishes			
Plunger:	BeCu, Gold	BeCu, Gold plated		
Barrel:	Brass, Gold	Brass, Gold plated		
Spring:	Steel, Gold	plated or Stainless		

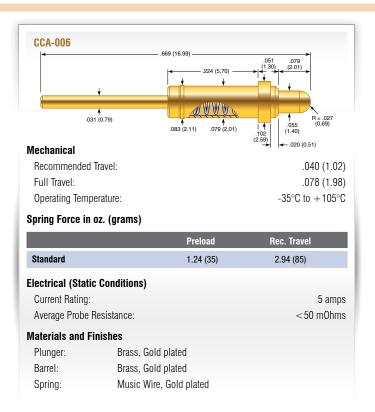
# CCA-003 CCA-004

### 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: $-35^{\circ}$ C to $+105^{\circ}$ 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:



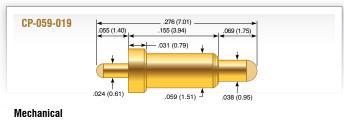
#### Mechanical Recommended Travel: .040 (1.02) .057 (1.45) Full Travel: Operating Temperature: $-35^{\circ}C$ to $+105^{\circ}C$ Spring Force in oz. (grams) Preload Rec. Travel Standard 0.83 (24) 2.85 (81) **Electrical (Static Conditions)** Current Rating: 10 amps Average Probe Resistance: <50 m0hms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

# **CCA-006**



# CP-059-019 CP-059-025

# CP-059-026



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

### Spring Force in oz. (grams)

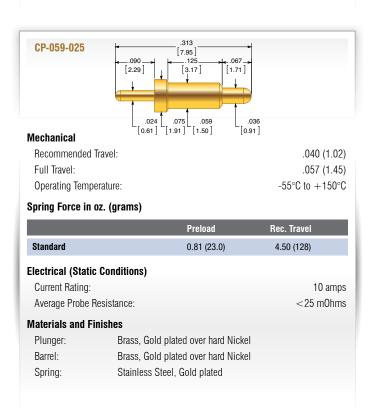
Barrel:

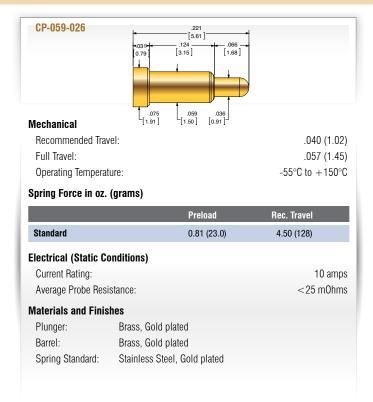
Spring:

		Preload	Rec. Travel
Standard		1.63 (46)	4.50 (128)
Electrical (Stat	ic Conditions)		
Current Rating	:		10 amps
Average Probe	Resistance:	<25 mC	
Materials and	Finishes		
Plunger:	Brass, Gold plate	b	

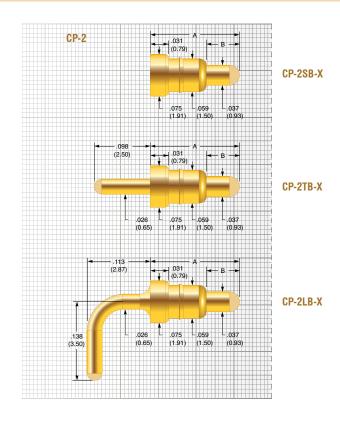
Brass, Gold plated

Stainless Steel, Gold plated





# 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 Resistance	e 50 m0hms				
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

