

# POGO® Contacts

# 2014



ICT/FCT

**GENERAL PURPOSE**

HIGH CURRENT

HIGH FREQUENCY

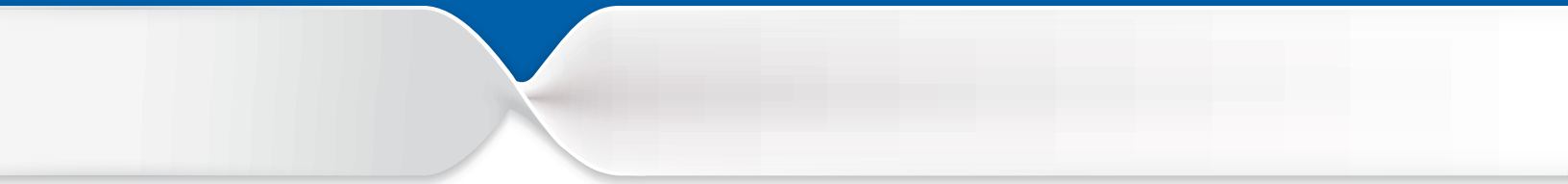
SWITCH PROBE

STEP PROBE

BATTERY CONTACT

SEMICONDUCTOR

**ECT**  
EVERETT CHARLES  
TECHNOLOGIES



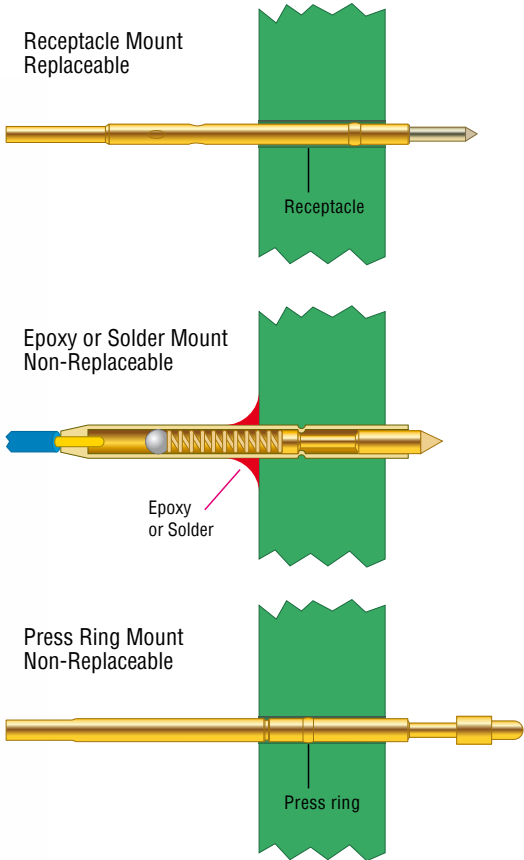
### GENERAL PURPOSE - REPLACEABLE PROBES

Replaceable Probes are those designed for typical Automotive and Industrial Board Test and standard continuity test, contacting industry norm test points such as leads, vias and pads.

All of the probes in this section are designed for high volume testing and are replaceable through the use of a mating receptacle mounted into a retaining plate or retaining block via a “press-ring” or knurl.

A replaceable probe is retained by a separate component, the receptacle, which is permanently fixed into a retention plate to which electrical connection is made. Removal of the probe does not damage or break the electrical connection. Typical probe retention is achieved by detents in the receptacle or additionally with a “Pylon” bend in the probe itself to prevent anti walkout.

ECT offers an extensive selection of General Purpose Probes for a wide variety of application in various industries, making ECT spring probes the first choice of test engineers worldwide.

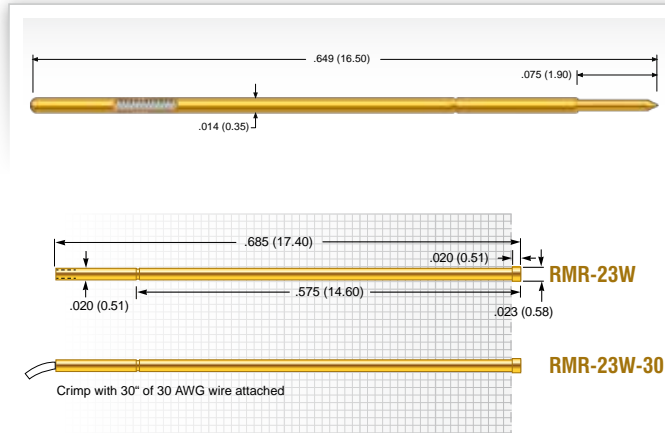
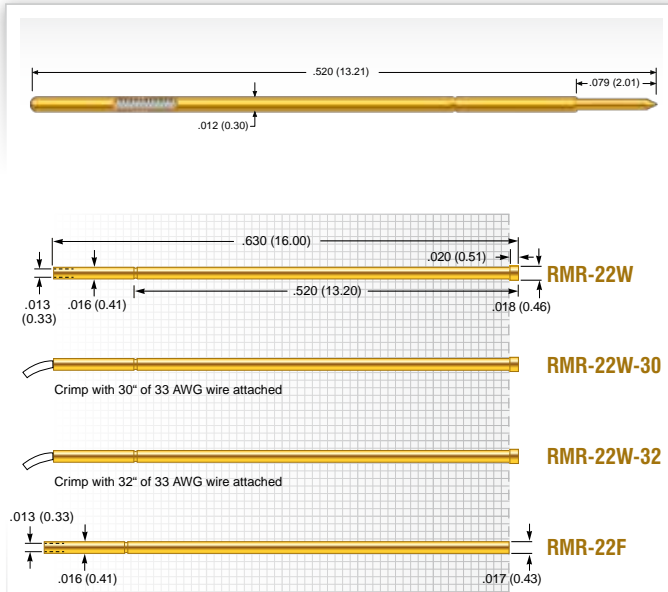


## RMP-22B

20 mil (0.51 mm)

## RMPJ-23B

30 mil (0.76 mm)



### Mechanical

Recommended Travel:	.050 (1.27)
Full Travel:	.079 (2.01)
Operating Temperature:	-35°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.51 (14)	1.5 (43)

### Electrical (Static Conditions)

Current Rating:	2 amps
Average Probe Resistance:	<125 mOhms


### Materials and Finishes

Plunger:	Heat-treated Steel, Nickel Boron plated
Barrel:	BeCu alloy, Gold plated
Spring:	Music Wire, Gold plated

### Receptacle

Hole diameter:	Ø .016 to .017 (0.41 to 0.43)
Suggested drill:	#78 or 0.42 mm
Material Housing:	Heat-treated BeCu, Gold plated over hard Nickel

### Tip Style

B				
Ø .008 (0.20)				
				

### Mechanical

Recommended Travel:	.050 (1.27)
Full Travel:	.075 (1.90)
Operating Temperature:	-50°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.23 (8)	1.1 (31)

### Electrical (Static Conditions)

Current Rating:	2 amps
Average Probe Resistance:	<125 mOhms


### Materials and Finishes

Plunger:	Heat-treated Steel, Nickel Boron plated
Barrel:	Phosphor Bronze, Gold plated
Spring:	Stainless Steel, Gold plated

### Receptacle

Hole diameter:	Ø .020 to .021 (0.52 to 0.54)
Suggested drill:	#76 or 0.52 mm
Material Housing:	Phosphor Bronze, Gold plated

### Tip Style

B				
Ø .009 (0.23)				
				

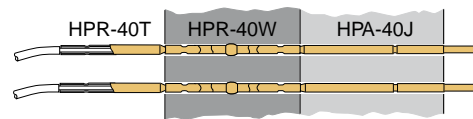
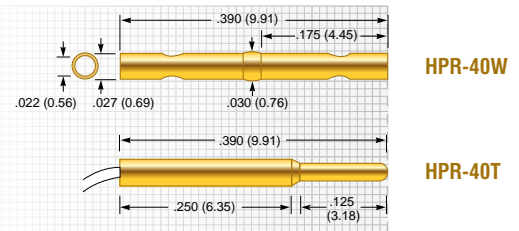
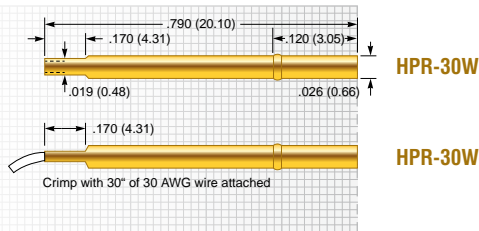
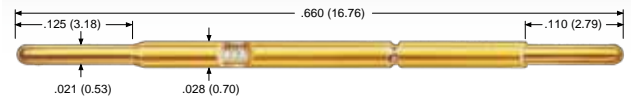
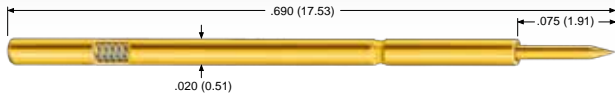


# MEP-30

25 mil (0.635 mm)

# HPA-40

39 mil (1.00 mm)



**Mechanical**

Recommended Travel: .050 (1.27)  
 Full Travel: .075 (1.91)  
 Operating Temperature: -55°C to +105°C

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

	Preload	Rec. Travel
<b>Standard</b>	0.41 (12)	1.39 (39)

**Electrical (Static Conditions)**

Current Rating: 2 amps  
 Average Probe Resistance: <50 mOhms

**Materials and Finishes**

Plunger: Heat-treated BeCu, Gold plated over hard Nickel  
 Barrel: Work hardened BeCu, Gold plated over hard Nickel  
 Spring: Music Wire, Silver plated

**Receptacle**

Hole diameter: Ø .0265 to .0276 (0.67 to 0.70)  
 Suggested drill: #71 or 0.70 mm  
 Material: Work hardened BeCu, Gold plated over hard Nickel

**Tip Style**

B	G	J	U
Ø .014 (0.36)	Ø .014 (0.36)	Ø .014 (0.36)	Ø .012 (0.30)

**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
<b>Standard</b>	0.79 (22)	1.75 (49)

**Electrical (Static Conditions)**

Current Rating: 2 amps  
 Average Probe Resistance: <35 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

**Receptacle**

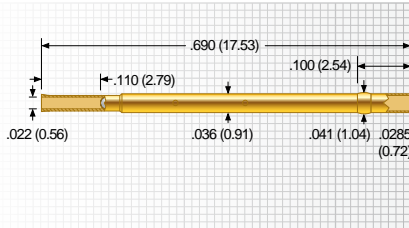
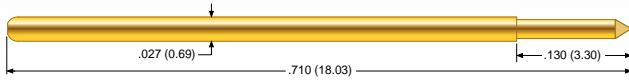
Hole diameter: Ø .0285 to .0295 (0.72 to 0.75)  
 Suggested drill: #69 or 0.75 mm  
 Material Housing: Work hardened Nickel Silver, Gold plated over hard Nickel

**Tip Style**

B	C	G	J
Ø .021 (0.53)	Ø .021 (0.53)	Ø .021 (0.53)	Ø .021 (0.53)

## P2662A

50 mil (1.27 mm)



**S2662A-3ED**  
Collar height  
= .040 (1.02)

### Mechanical

Recommended Travel: .067 (1.70)  
Full Travel: .090 (2.29)  
Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	0.70 (20)	1.7 (48)
<b>Alternate</b>	2	0.60 (17)	2.5 (71)

### Electrical (Static Conditions)

Current Rating: 3 amps  
Average Probe Resistance: <30 mOhms

### Materials and Finishes

Plunger: Hardened BeCu, Gold plated  
Barrel: Phosphorous Bronze, Gold plated  
Spring: BeCu, Silver plated  
Ball: Stainless Steel

### Receptacle

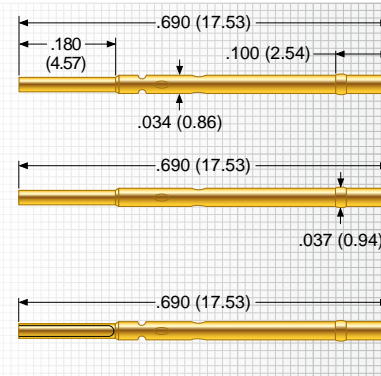
Hole diameter: Ø .0380 to .0395 (0.97 to 1.00)  
Suggested drill: #61 or 1.00 mm  
Material Housing: Brass, Gold plated

### Tip Style

1C	1Q	1R	2V
Ø .021 (0.53)	Ø .021 (0.53)	Ø .021 (0.53)	Ø .040 (1.02)

## P2662B

50 mil (1.27 mm)



**PR261-0**  
Collar height  
= .040 (1.02)

**PR261-0F**  
Flush Mount

**PR261-1**  
Collar height  
= .040 (1.02)

**PR261-1F**  
Flush Mount

### Mechanical

Recommended Travel: .050 (1.27)  
Full Travel: .068 (1.73)  
Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	1.00 (28)	1.8 (51)
<b>Alternate</b>	2	0.50 (14)	2.5 (71)

### Electrical (Static Conditions)

Current Rating: 3 amps  
Average Probe Resistance: <30 mOhms

### Materials and Finishes

Plunger: Hardened BeCu, Gold plated  
Barrel: Phosphorous Bronze, Gold plated  
Spring: BeCu, Silver plated  
Ball: Stainless Steel

### Receptacle

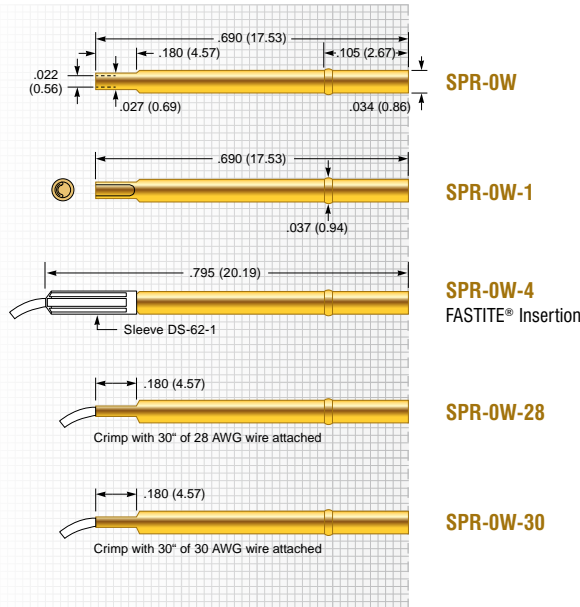
Hole diameter: Ø .0350 to .0365 (0.89 to 0.93)  
Suggested drill: #64 or 0.92 mm  
Material Housing: Nickel Silver, Gold plated

### Tip Style

1C	1Q	1R	2V
Ø .021 (0.53)	Ø .021 (0.53)	Ø .021 (0.53)	Ø .040 (1.02)

HPA-50

50 mil (1.27 mm)



**Mechanical**

Recommended Travel: .050 (1.27)  
 Full Travel: .050 (1.27)  
 Operating Temperature: -55°C to +105°C

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

	Preload	Rec. Travel
<b>Standard</b>	1.18 (33)	3.2 (91)

**Electrical (Static Conditions)**

Current Rating: 3 amps  
 Average Probe Resistance: <35 mOhms

**Materials and Finishes**

Plunger: Heat-treated BeCu, Gold plated over hard Nickel  
 Barrel: Work hardened Phosphor Bronze, Gold plated over hard Nickel  
 Spring: Music Wire, Gold plated

**Receptacle**

Hole diameter: Ø .035 to .0365 (0.89 to 0.93)  
 Suggested drill: #64 or 0.92 mm  
 Material Housing: Nickel Silver, Gold plated over hard Nickel

**Tip Style**

B	D	G	T	U		
Ø .021 (0.53)	Ø .035 (0.89)	Ø .021 (0.53)	Ø .035 (0.89)	Ø .018 (0.46)		

Series	Size	Tip Style
HPA	50	D

## HPA-0 / SPA-0

50 mil (1.27 mm)



### Mechanical

Recommended Travel:	.067 (1.70)
Full Travel:	.100 (2.54)
Operating Temperature	
• Standard Spring:	-55°C to +150°C
• Alternate Spring:	-55°C to +105°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.20 (34)	2.8 (79)
<b>Alternate</b>	- 1	0.91 (26)	3.7 (105)

### Electrical (Static Conditions)

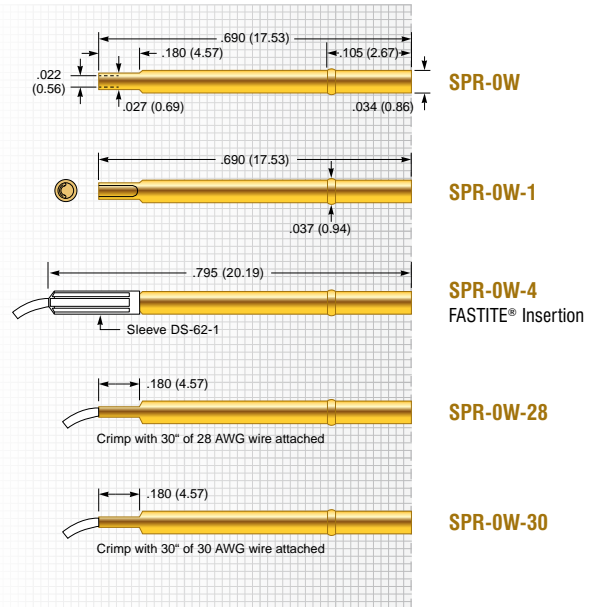
Current Rating:	3 amps
Average Probe Resistance HPA:	< 35 mOhms
Average Probe Resistance SPA:	< 50 mOhms

### Materials and Finishes

Plunger HPA:	Heat-treated BeCu, Gold plated over hard Nickel
Plunger SPA:	Heat-treated BeCu, Rhodium plated over hard Nickel
Barrel:	Work hardened Phosphor Bronze, Gold plated over hard Nickel
Spring	
• Standard:	Stainless Steel, Silver plated
• Alternate:	Music Wire, Silver plated

### Receptacle

Hole diameter:	Ø .035 to .0365 (0.89 to 0.93)
Suggested drill:	#64 or 0.92 mm
Material Housing:	Nickel Silver, Gold plated over hard Nickel



### HPA Tip Style

A	B	D	F	G12	G21	H
Ø .035 (0.89)	Ø .021 (0.53)	Ø .035 (0.89)	Ø .035 (0.89)	Ø .012 (0.31)	Ø .021 (0.53)	Ø .035 (0.89)
J	L	T				
Ø .021 (0.53)	Ø .035 (0.89)	Ø .035 (0.89)				

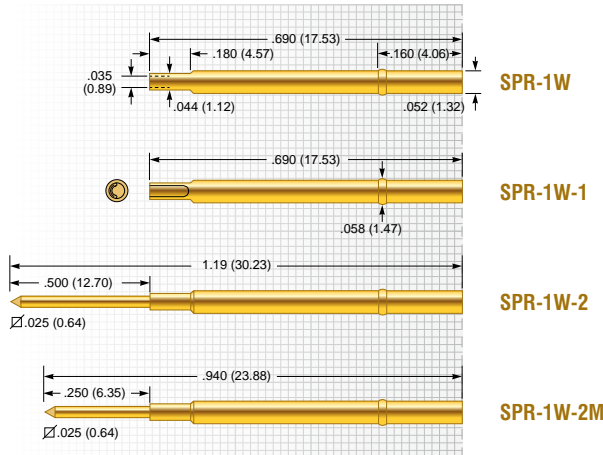
### SPA Tip Style

A	B	D	G12	G21	H	J
Ø .035 (0.89)	Ø .021 (0.53)	Ø .035 (0.89)	Ø .012 (0.31)	Ø .021 (0.53)	Ø .035 (0.89)	Ø .021 (0.53)
L	T					
Ø .035 (0.89)	Ø .035 (0.89)					

Series	Size	Tip Style	Spring Force
HPA	0	G12	1
SPA	0	G12	1



**HPA-1 / SPA-1**  
75 mil (1.91 mm)



**Mechanical**

Recommended Travel: .067 (1.70)  
Full Travel: .100 (2.54)  
Operating Temperature: -55°C to +150°C

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

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.35 (38)	2.5 (71)
<b>Alternate</b>	- 1	1.27 (36)	4.5 (128)

**Electrical (Static Conditions)**

Current Rating: 3 amps  
Average Probe Resistance HPA: < 35 mOhms  
Average Probe Resistance SPA: < 50 mOhms

**Materials and Finishes**

Plunger HPA: Heat-treated BeCu, Gold plated over hard Nickel  
Plunger SPA: Heat-treated BeCu, Rhodium plated over hard Nickel  
Barrel: Work hardened Phosphor Bronze, Gold plated over hard Nickel  
Spring: Stainless Steel, Silver plated

**Receptacle**

Hole diameter: ∅ .053 to .055 (1.35 to 1.40)  
Suggested drill: #54 or 1.40 mm  
Material Housing: Nickel Silver, Gold plated  
Material Post: Phosphorous Bronze, Gold plated

**HPA Tip Style**

A	B	C	D	E	F	G
∅ .060 (1.52)	∅ .021 (0.53)	∅ .021 (0.53)	∅ .040 (1.02)	∅ .060 (1.52)	∅ .060 (1.52)	∅ .021 (0.53)
H	J	L	T			
∅ .060 (1.52)	∅ .021 (0.53)	∅ .042 (1.07)	∅ .057 (1.45)			

**SPA Tip Style**

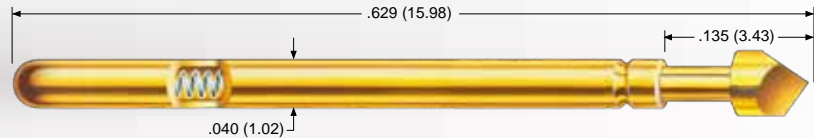
A	B	C	D	E	F	G
∅ .060 (1.52)	∅ .021 (0.53)	∅ .021 (0.53)	∅ .040 (1.02)	∅ .060 (1.52)	∅ .060 (1.52)	∅ .021 (0.53)
H	J	T				
∅ .060 (1.52)	∅ .021 (0.53)	∅ .057 (1.45)				

Series	Size	Tip Style	Spring Force
HPA	1	A	1
SPA	1	A	1



## HPA-52

75 mil (1.91 mm)



### Mechanical

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

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.68 (48)	3.22 (91)
<b>Alternate</b>	- 1	2.45 (69)	6.20 (176)

### Electrical (Static Conditions)

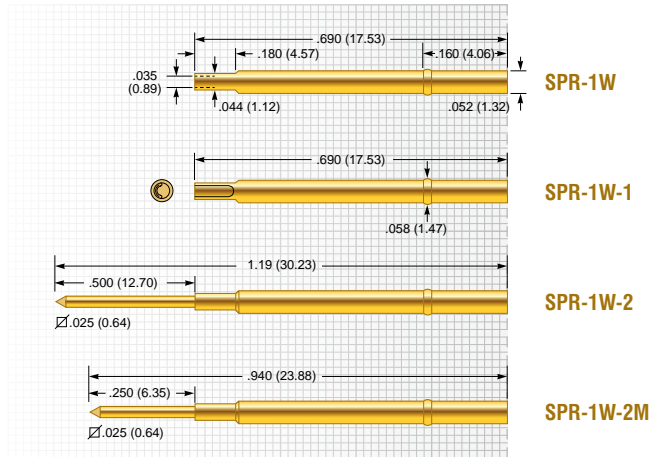
Current Rating: 3 amps  
 Average Probe Resistance: <15 mOhms

### Materials and Finishes

Plunger: Heat-treated BeCu, Gold plated over hard Nickel  
 Barrel: Work hardened Phosphor Bronze, Gold plated over hard Nickel  
 Spring: Stainless Steel, Silver plated

### Receptacle

Hole diameter: Ø .053 to .055 (1.35 to 1.40)  
 Suggested drill: #54 or 1.40 mm  
 Material Housing: Nickel Silver, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated



### HPA Tip Style

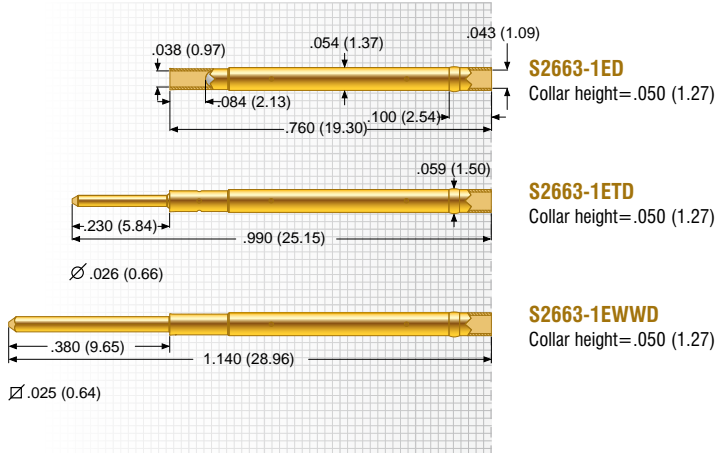
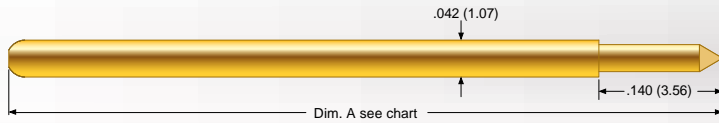
B	D	T				
Ø .021 (0.53)	Ø .040 (1.02)	Ø .057 (1.45)				

Series: HPA  
 Size: 52  
 Tip Style: B



**P2663**

75 mil (1.91 mm)



**Mechanical**

Recommended Travel: .067 (1.70)  
 Full Travel: .090 (2.29)  
 Operating Temperature: -55°C to +150°C

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

	Order Code	Preload	Rec. Travel
<b>Standard</b>	- 1	1.50 (42)	3.3 (94)
<b>Alternate</b>	- 2	1.00 (28)	2.0 (57)

**Electrical (Static Conditions)**

Current Rating: 3 amps  
 Average Probe Resistance: <10 mOhms

**Materials and Finishes**

Plunger: Hardened BeCu, Gold plated  
 Barrel: Phosphorous Bronze, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel

**Probe Overall Length**

Model No.	Overall Length (Dim. A)
<b>P2663G-...</b>	.810 (20.57)
<b>P2663G-3R...</b>	.770 (19.56)

**Receptacle**

Hole diameter: Ø .0561 to .0576 (1.43 to 1.46)  
 Suggested drill: 1.45 mm  
 Material Housing: Brass, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated

**Tip Style**

1C	1R	3R	1P	1V	1W
Ø .030 (0.76)	Ø .030 (0.76)	Ø .030 (0.76)	Ø .060 (1.52)	Ø .050 (1.27)	Ø .060 (1.52)

Series	Plating	Tip Style	Spring Force	Body
P2663	G	1P	1	S

## HPA-74

100 mil (2.54 mm)



### Mechanical

Recommended Travel:	.075 (1.91)
Full Travel:	.100 (2.54)
Operating Temperature	
• Standard Spring:	-55°C to +150°C
• Alternate Spring:	-55°C to +105°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.76 (50)	3.0 (85)
<b>Alternate</b>	- 1	2.82 (80)	5.0 (141)

### Electrical (Static Conditions)

Current Rating:	3 amps
Average Probe Resistance:	<35 mOhms

### Materials and Finishes

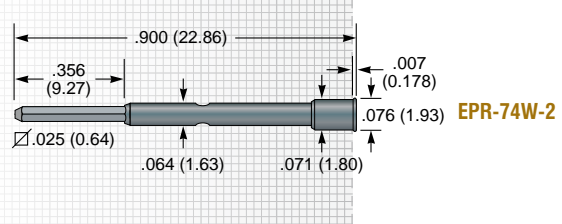
Plunger:	Heat-treated BeCu, Gold plated over hard Nickel
Barrel:	Work hardened Phosphor Bronze, Gold plated over hard Nickel
Spring	
• Standard:	Stainless Steel, Silver plated
• Alternate:	Music Wire, Silver plated

### Probe Overall Length

Model No.	Overall Length (Dim. A)
<b>HPA-74...</b>	.570 (14.48)
<b>HPA-74B</b>	.598 (15.19)
<b>HPA-74C</b>	.586 (14.88)

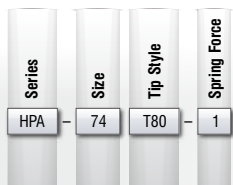
### Receptacle

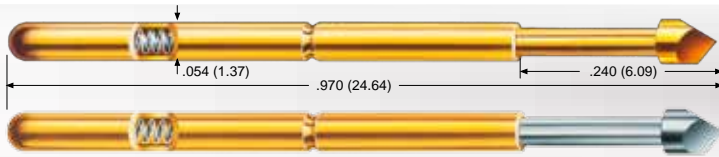
Hole diameter:	Ø .067 to .069 (1.70 to 1.75)
Suggested drill:	#51 or 1.70 mm
Material:	Nickel Silver alloy



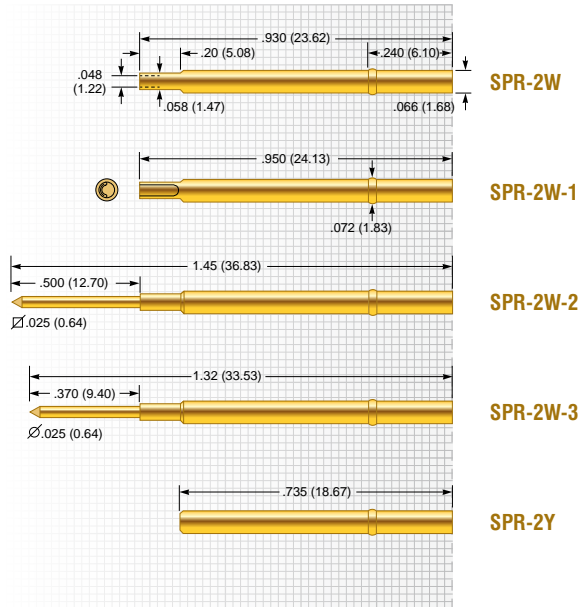
### HPA Tip Style

A	B	C	E	T65	T75
Ø .080 (2.03)	Ø .041 (1.04)	Ø .041 (1.04)	Ø .080 (2.03)	Ø .065 (1.65)	Ø .075 (1.91)
T80	T135	T156			
Ø .080 (2.03)	Ø .135 (3.43)	Ø .156 (3.96)			





**EPA-2 / SPA-2**  
100 mil (2.54 mm)



**Mechanical**

Recommended Travel: .107 (2.72)  
Full Travel: .160 (4.06)  
Operating Temperature: -55°C to +105°C

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

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.24 (35)	3.5 (99)
<b>Alternate</b>	- 1	2.64 (75)	6.5 (184)
<b>Ultra High</b>	- 2	4.41 (125)	10.0 (283)

**Electrical (Static Conditions)**

Current Rating: 5 amps  
Average Probe Resistance EPA: < 35 mOhms  
Average Probe Resistance SPA: < 50 mOhms

**Materials and Finishes**

Plunger EPA: Heat-treated BeCu, Gold plated over hard Nickel  
Plunger SPA: Heat-treated BeCu, Rhodium plated over hard Nickel  
Barrel: Work hardened Phosphor Bronze, Gold plated over hard Nickel  
Spring: Music Wire, Silver plated  
Ball: Stainless Steel, Gold plated

**Receptacle**

Hole diameter: Ø .067 to .069 (1.70 to 1.75)  
Suggested drill: #51 or 1.70 mm  
Material Housing: Nickel Silver, Gold plated  
Material Post: Phosphorous Bronze, Gold plated

**EPA / SPA Tip Style**

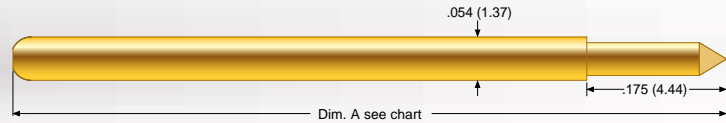
A	B30	B40	C30	C40	D	E
Ø .075 (1.91)	Ø .030 (0.76)	Ø .040 (1.02)	Ø .030 (0.76)	Ø .040 (1.02)	Ø .050 (1.27)	Ø .075 (1.91)
F	G30	G40	H	J30	J40	L
Ø .075 (1.91)	Ø .030 (0.76)	Ø .040 (1.02)	Ø .075 (1.91)	Ø .030 (0.76)	Ø .040 (1.02)	Ø .050 (1.27)
P	T	X				
Ø .075 (1.91)	Ø .075 (1.91)	Ø .050 (1.27)				

Series	Size	Tip Style	Spring Force	Special
EPA	2	J30	1	
EPA	2	J30	1	P

Pylon Bend

## P2664

100 mil (2.54 mm)



### Mechanical

Recommended Travel: .084 (2.13)  
 Full Travel: .114 (2.90)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	2.00 (57)	3.6 (102)
<b>Alternate</b>	2	3.00 (85)	5.7 (162)

### Electrical (Static Conditions)

Current Rating: 5 amps  
 Average Probe Resistance: <10 mOhms

### Materials and Finishes

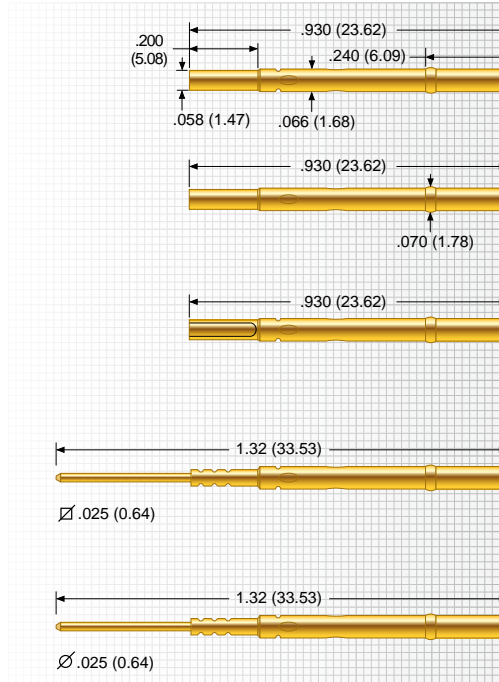
Plunger: Hardened BeCu, Gold plated  
 Barrel: Phosphorous Bronze, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel

### Probe Overall Length

Model No.	Overall Length (Dim. A)
<b>P2664G-...</b>	.895 (22.73)
<b>P2664G-1C...</b>	.845 (21.46)
<b>P2664G-2R...</b>	.935 (23.75)

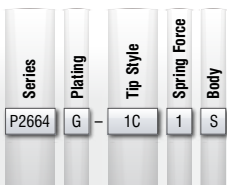
### Receptacle

Hole diameter: Ø .069 (1.75)  
 Suggested drill: 1.75 mm  
 Material Housing: Nickel Silver, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated



### Tip Style

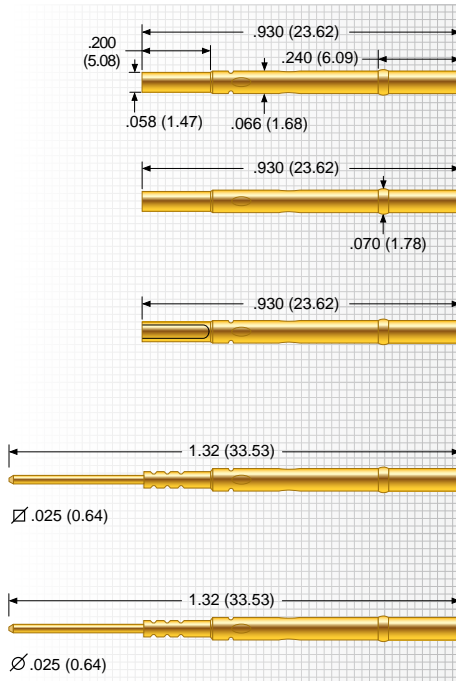
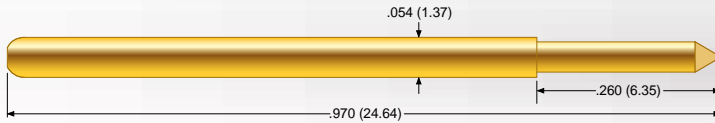
1C	1R	2R	4V	1W		
Ø .040 (1.02)	Ø .040 (1.02)	Ø .050 (1.27)	Ø .070 (1.78)	Ø .070 (1.78)		





# P3158

100 mil (2.54 mm)



**PR541-0**  
Collar height=.060 (1.52)

**PR541-0F**  
Flush Mount

**PR541-1**  
Collar height=.060 (1.52)

**PR541-1F**  
Flush Mount

**PR541-2**  
Collar height=.060 (1.52)

**PR541-2F**  
Flush Mount

**PR541-3**  
Collar height=.060 (1.52)

**PR541-3F**  
Flush Mount

**Mechanical**

Recommended Travel: .114 (2.90)  
Full Travel: .170 (4.32)  
Operating Temperature: -55°C to +105°C

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

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	2.70 (77)	6.9 (196)
<b>Alternate</b>	2	1.30 (37)	2.8 (79)

**Electrical (Static Conditions)**

Current Rating: 8 amps  
Average Probe Resistance: <10 mOhms

**Materials and Finishes**

Plunger: Hardened Steel or BeCu, Gold plated  
Barrel: Phosphorous Bronze, Gold plated  
Spring: Music Wire  
Ball: Stainless Steel

**Receptacle**

Hole diameter: Ø .069 (1.75)  
Suggested drill: 1.75 mm  
Material Housing: Nickel Silver, Gold plated  
Material Post: Phosphorous Bronze, Gold plated

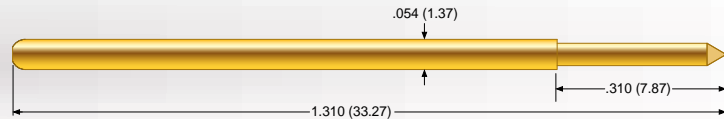
**Tip Style**

3C	1R	1Q	2Q	1V	1W
Ø .040 (1.02)	Ø .040 (1.02)	Ø .060 (1.52)	Ø .025 (0.64)	Ø .070 (1.78)	Ø .070 (1.78)
Steel	r = .023 (0.58)				

Series	Plating	Tip Style	Spring Force	Body
P3158	G	1Q	2	S

## P5160

100 mil (2.54 mm)



### Mechanical

Recommended Travel: .167 (4.24)  
 Full Travel: .230 (5.84)  
 Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	2.50 (71)	6.5 (184)
<b>Alternate</b>	2	1.70 (48)	3.5 (99)
<b>Elevated</b>	3	2.50 (71)	8.2 (232)

### Electrical (Static Conditions)

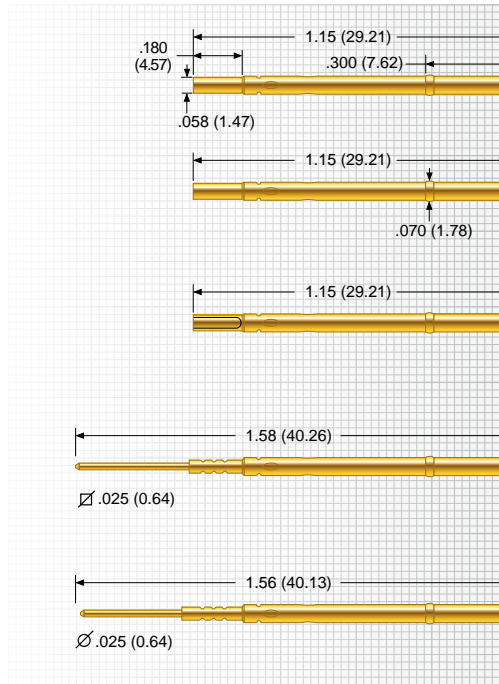
Current Rating: 8 amps  
 Average Probe Resistance: <10 mOhms

### Materials and Finishes

Plunger: Hardened Steel or BeCu, Gold plated  
 Barrel: Phosphorous Bronze, Gold plated  
 Spring: Music Wire  
 Ball: Stainless Steel

### Receptacle

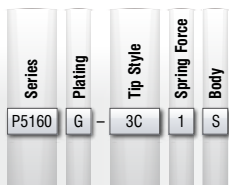
Hole diameter: Ø .069 (1.75)  
 Suggested drill: 1.75 mm  
 Material Housing: Nickel Silver, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated

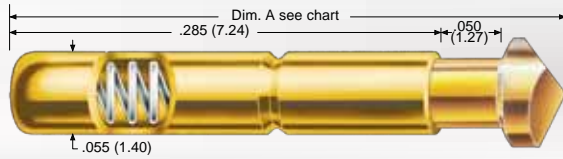


- PR54-0**  
Collar height = .060 (1.52)
- PR54-0F**  
Flush Mount
- PR54-1**  
Collar height = .060 (1.52)
- PR54-1F**  
Flush Mount
- PR54-2**  
Collar height = .060 (1.52)
- PR54-2F**  
Flush Mount
- PR54-3**  
Collar height = .060 (1.52)
- PR54-3F**  
Flush Mount

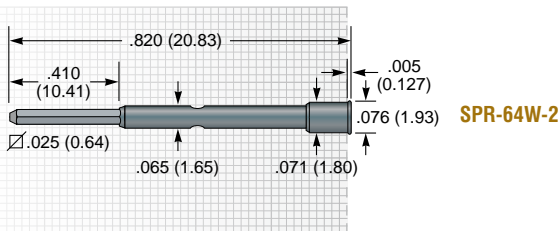
### Tip Style

2C	3C	1R	3P	1Q	1V	2W
Ø .040 (1.02)	Ø .040 (1.02)	Ø .030 (0.76)	Ø .060 (1.52)	Ø .060 (1.52)	Ø .060 (1.52)	Ø .060 (1.52)
	Steel	r = .018 (0.46)				





**HPA-64 / SPA-64**  
100 mil (2.54 mm)



**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
<b>Standard</b>	1.10 (31)	3.85 (109)

**Electrical (Static Conditions)**

- Current Rating: 3 amps
- Average Probe Resistance HPA / SPA: < 50 mOhms

**Materials and Finishes**

- Plunger: Heat-treated BeCu, Gold plated over hard Nickel
- Barrel HPA: Work hardened Nickel Silver, Gold plated over hard Nickel
- Barrel SPA: Work hardened Nickel Silver
- Spring: Stainless Steel, Silver plated

**Probe Overall Length**

Model No.	Overall Length (Dim. A)
<b>HPA/SPA-64-1, -4, -7</b>	.375 (9.53)
<b>HPA/SPA-64-2, -3</b>	.365 (9.27)
<b>HPA/SPA-64-8</b>	.385 (9.78)
<b>SPA-64-9, -10</b>	.363 (9.22)
<b>HPA-64-9, -10</b>	.365 (9.27)

**Receptacle**

- Hole diameter:  $\varnothing$  .067 to .069 (1.70 to 1.75)
- Suggested drill: #51 or 1.70 mm
- Material: Nickel Silver alloy

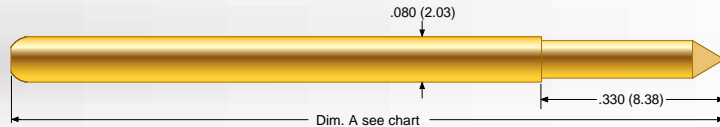
**HPA / SPA Tip Style**

-1	-2	-3	-4	-7	-8
$\varnothing$ .077 (1.96)	$\varnothing$ .077 (1.96)	$\varnothing$ .077 (1.96)	$\varnothing$ .065 (1.65)	$\varnothing$ .156 (3.96)	$\varnothing$ .075 (1.99)
-9	-10				
$\varnothing$ .047 (1.19)	$\varnothing$ .047 (1.19)				

Series	Size	Tip Style
HPA	64	-2

## P2665

125 mil (3.18 mm)



### Mechanical

Recommended Travel: .167 (4.24)  
 Full Travel: .230 (5.84)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	1.50 (43)	3.0 (85)
<b>Alternate</b>	2	2.50 (71)	5.8 (164)

### Electrical (Static Conditions)

Current Rating: 15 amps  
 Average Probe Resistance: <10 mOhms

### Materials and Finishes

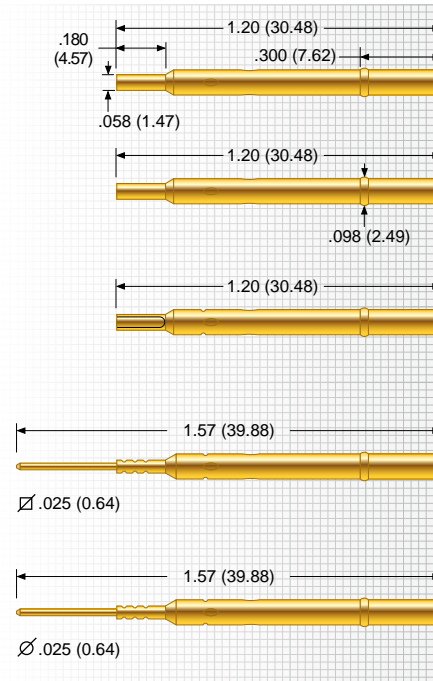
Plunger: Hardened BeCu, Gold plated  
 Barrel: Phosphorous Bronze, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel

### Probe Overall Length

Model No.	Overall Length (Dim. A)
<b>P2665G-...</b>	1.29 (32.77)
<b>P2665G-2W</b>	1.27 (32.26)

### Receptacle

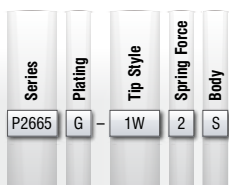
Hole diameter: Ø .094 to .096 (2.39 to 2.44)  
 Suggested drill: #41 or 2.40 mm  
 Material Housing: Nickel Silver, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated

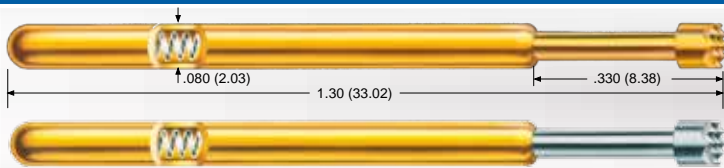


- PR80-0**  
Collar height=.090 (2.29)
- PR80-0F**  
Flush Mount
- PR80-1F**  
Flush Mount
- PR80-1**  
Collar height=.090 (2.29)
- PR80-2F**  
Flush Mount
- PR80-2**  
Collar height=.090 (2.29)
- PR80-3F**  
Flush Mount
- PR80-3**  
Collar height=.090 (2.29)

### Tip Style

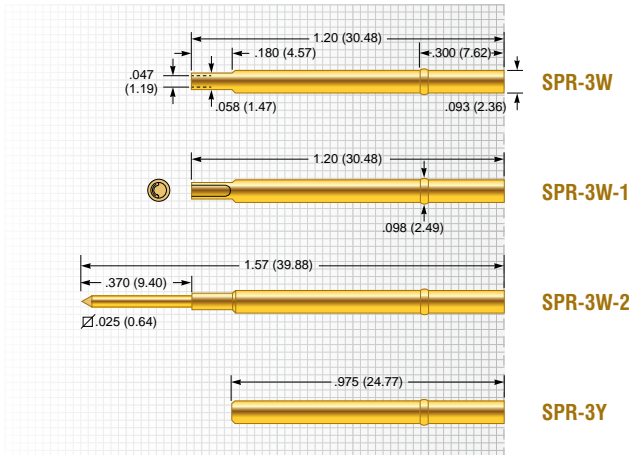
1C	1R	1V	1W	2W		
Ø .066 (1.68)	Ø .066 (1.68)	Ø .090 (2.29)	Ø .090 (2.29)	Ø .153 (3.89)		
	r = .036 (0.91)					





## EPA-3 / SPA-3

125 mil (3.18 mm)



### Mechanical

Recommended Travel:	.167 (4.24)
Full Travel:	.250 (6.35)
Operating Temperature	
• Standard Spring:	-55°C to +85°C
• Alternate Spring:	-55°C to +150°C
• Ultra High Spring:	-55°C to +150°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>		1.56 (44)	4.5 (128)
<b>Alternate</b>	- 1	3.02 (86)	6.5 (184)
<b>Ultra High</b>	- 2	4.18 (119)	11.7 (332)

SPA only

### Electrical (Static Conditions)

Current Rating:	6 amps
Average Probe Resistance EPA:	< 35 mOhms
Average Probe Resistance SPA:	< 50 mOhms

### Materials and Finishes

Plunger EPA:	Heat-treated BeCu, Gold plated over hard Nickel
Plunger SPA:	Heat-treated BeCu, Rhodium plated over hard Nickel
Barrel:	Work hardened Nickel Silver, Gold plated over hard Nickel
Spring	
• Standard:	BeCu, Silver plated
• Alternate:	Stainless Steel, Silver plated
• Ultra High:	Stainless Steel
Ball:	Brass, Gold plated

### Receptacle

Hole diameter:	Ø .094 to .096 (2.39 to 2.44)
Suggested drill:	#41 or 2.40 mm
Material Housing:	Nickel Silver, Gold plated over hard Nickel
Material Post:	Phosphorous Bronze, Gold plated

### EPA Tip Style

A	B	C	D	E	F	G
Ø .100 (2.54)	Ø .050 (1.27)	Ø .050 (1.27)	Ø .062 (1.58)	Ø .100 (2.54)	Ø .100 (2.54)	Ø .050 (1.27)
H	J	L5	P5	T		
Ø .100 (2.54)	Ø .050 (1.27)	Ø .050 (1.27)	Ø .050 (1.27)	Ø .100 (2.54)		

### SPA Tip Style

A	B	C	D	E	F	G
Ø .100 (2.54)	Ø .050 (1.27)	Ø .050 (1.27)	Ø .062 (1.58)	Ø .100 (2.54)	Ø .100 (2.54)	Ø .050 (1.27)
H	J	T				
Ø .060 (1.52)	Ø .021 (0.53)	Ø .057 (1.45)				

Dimensions in inches (millimeters)  
Specifications subject to change without notice

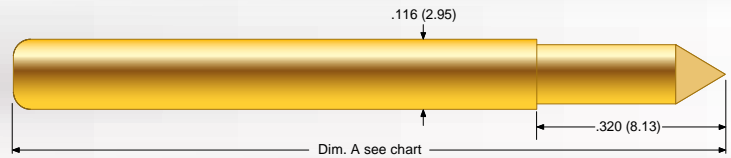
Series	Size	Tip Style	Spring Force	Special	
EPA	3	B	1	P	Pylon Bend
EPA	3	B	1		





## P2757

187 mil (4.75 mm)



### Mechanical

Recommended Travel: .167 (4.24)  
 Full Travel: .230 (5.84)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Standard</b>	1	2.00 (57)	4.0 (113)
<b>Alternate</b>	2	3.50 (99)	6.9 (194)

### Electrical (Static Conditions)

Current Rating: 20 amps  
 Average Probe Resistance: <10 mOhms

### Materials and Finishes

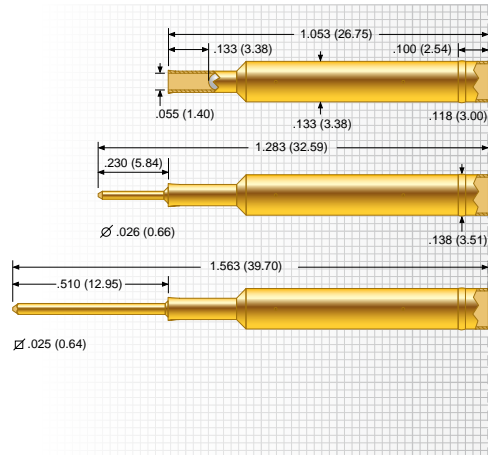
Plunger: Hardened BeCu, Gold or Silver plated  
 Barrel: Phosphorous Bronze, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel

### Probe Overall Length

Model No.	Overall Length (Dim. A)
<b>P2757G-...</b>	1.210 (30.73)
<b>P2757G-2C...</b>	1.140 (28.96)
<b>P2757G-1W...</b>	1.205 (30.61)
<b>P2757G-2W...</b>	1.205 (30.61)

### Receptacle

Hole diameter: Ø .1350 to .1365 (3.43 to 3.47)  
 Suggested drill: #29 or 3.45 mm  
 Material Housing: Brass, Gold plated  
 Material Post: Phosphorous Bronze, Gold plated



### S2757-2ED

Collar height = .090 (2.29)

### S2757-2ETD

Collar height = .090 (2.29)

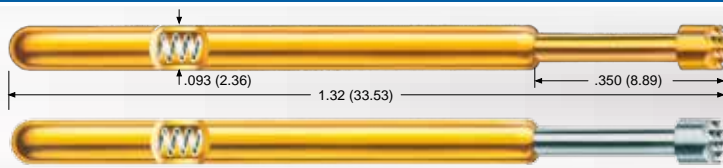
### S2757-2EWWD

Collar height = .090 (2.29)

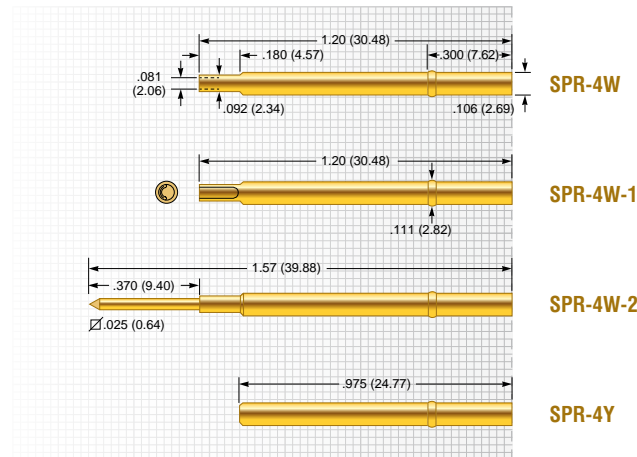
### Tip Style

1C	2C	1R	1V	1W	2W	3W
Ø .098 (2.49)	Ø .098 (2.49)	Ø .120 (3.05)	Ø .152 (3.86)	Ø .154 (3.91)	Ø .250 (6.35)	Ø .122 (3.10)





**EPA-4 / SPA-4**  
187 mil (4.75 mm)



**Mechanical**

- Recommended Travel: .167 (4.24)
- Full Travel: .250 (6.35)
- Operating Temperature
  - Standard Spring: -55°C to +85°C
  - Alternate Spring: -55°C to +150°C
  - Ultra High Spring: -55°C to +150°C

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

	Order Code	Preload	Rec. Travel
<b>Standard</b>		2.00 (57)	4.8 (136)
<b>Alternate</b>	- 1	3.07 (87)	6.9 (196)
<b>Ultra High</b> SPA only	- 2	6.18 (175)	11.8 (335)

**Electrical (Static Conditions)**

- Current Rating: 7 amps
- Average Probe Resistance EPA: < 35 mOhms
- Average Probe Resistance SPA: < 50 mOhms

**Materials and Finishes**

- Plunger EPA: Heat-treated BeCu, Gold plated over hard Nickel
- Plunger SPA: Heat-treated BeCu, Rhodium plated over hard Nickel
- Barrel: Work hardened Nickel Silver, Gold plated over hard Nickel
- Spring
  - Standard: BeCu, Silver plated
  - Alternate: Stainless Steel, Silver plated
  - Ultra High: Stainless Steel
- Ball: Brass, Gold plated

**Receptacle**

- Hole diameter: Ø .107 to .109 (2.72 to 2.77)
- Suggested drill: 2.75 mm
- Material Housing: Nickel Silver, Gold plated over hard Nickel
- Material Post: Phosphorous Bronze, Gold plated

**EPA Tip Style**

A	B	C	D	E	F	G
Ø .156 (3.96)	Ø .060 (1.53)	Ø .060 (1.53)	Ø .093 (2.36)	Ø .156 (3.96)	Ø .156 (3.96)	Ø .060 (1.53)
H	J	L6	P6			
Ø .156 (3.96)	Ø .060 (1.53)	Ø .060 (1.53)	Ø .060 (1.53)			

**SPA Tip Style**

A	B	C	D	E	F	G
Ø .156 (3.96)	Ø .060 (1.53)	Ø .060 (1.53)	Ø .093 (2.36)	Ø .156 (3.96)	Ø .156 (3.96)	Ø .060 (1.53)
H	J					
Ø .156 (3.96)	Ø .060 (1.53)					

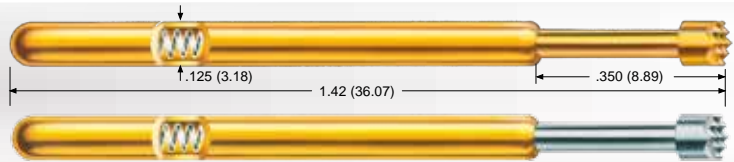
Dimensions in inches (millimeters)  
Specifications subject to change without notice

Series	Size	Tip Style	Spring Force	Special	
EPA	4	C	2	P	Pylon Bend
EPA	4	C	2	P	



## EPA-5 / SPA-5

187 mil (4.75 mm)



### Mechanical

Recommended Travel:	.167 (4.24)
Full Travel:	.250 (6.35)
Operating Temperature	
• Light Spring:	-55°C to +85°C
• Standard Spring:	-55°C to +150°C
• Ultra High Spring:	-55°C to +150°C

### Spring Force in oz. (grams)

	Order Code	Preload	Rec. Travel
<b>Light</b>	- 1	1.96 (56)	3.5 (99)
SPA only			
<b>Standard</b>		6.73 (171)	16.0 (454)
<b>Ultra High</b>	- 2	12.90 (366)	48.0 (1360)
SPA only			

### Electrical (Static Conditions)

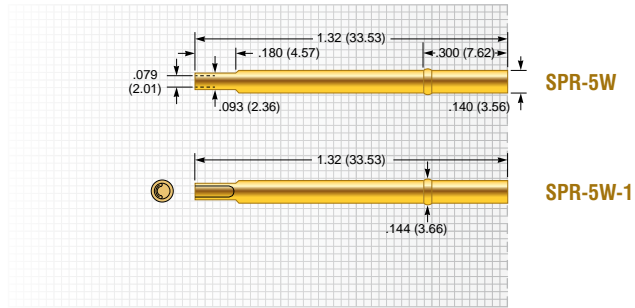
Current Rating:	8 amps
Average Probe Resistance EPA:	< 35 mOhms
Average Probe Resistance SPA:	< 50 mOhms

### Materials and Finishes

Plunger EPA:	Heat-treated BeCu, Gold plated over hard Nickel
Plunger SPA:	Heat-treated BeCu, Rhodium plated over hard Nickel
Barrel:	Work hardened Nickel Silver, Gold plated over hard Nickel
Spring	
• Light:	BeCu, Silver plated
• Standard:	Stainless Steel, Silver plated
• Ultra High:	Music Wire, Silver plated
Ball:	Brass, Gold plated

### Receptacle

Hole diameter:	Ø .141 to .143 (3.58 to 3.63)
Suggested drill:	3.60 mm
Material Housing:	Nickel Silver, Gold plated over hard Nickel



### EPA Tip Style

A	B	E	H			
Ø .156 (3.96)	Ø .080 (2.03)	Ø .156 (3.96)	Ø .156 (3.96)			

### SPA Tip Style

A	B	H				
Ø .156 (3.96)	Ø .080 (2.03)	Ø .156 (3.96)				

Series	Size	Tip Style	Spring Force	Special
EPA	5	A	1	
EPA	5	A	1	P

Pylon Bend

## GENERAL PURPOSE – EPOXY OR SOLDER MOUNT

The ECT / Pylon line of standard products includes non-replaceable Pogo Contacts. They differ from the replaceable contacts in that they do not require a socket or receptacle and are designed to be permanently mounted. Non-Replaceable Probes are designed for industrial applications where typical probe life meets or exceeds those of the end-use product. They are typically located inside the end product where probe replacement is either impossible or end-product damage would occur.

Electrical connections are typically made with a soldered connection for electrical and mechanical stability.

The probe is retained in the retention plate either with epoxy or solder on the outside of the probe body.

Non-replaceable Pogo Contacts are another example of ECT's and Pylon's quality and innovation and how it can work for you.

## Epoxy Mount

### EPOXY MOUNT INSTRUCTIONS

ECT non-replaceable products may be retained in mounting holes using solder or adhesives.

- Solder mount If conductivity is required, we recommends utilizing solder mounting for retention.
- Epoxy mount If conductivity is not required, utilizing epoxy adhesives for mounting is acceptable.

Adhesives used are typically two-part epoxies, and can be either conductive or non-conductive dependent upon the application. ECT does not recommend the use of fast setting Superglue® style adhesives as they can outgas and may put a nearly invisible barrier on contact surfaces. Epoxy mounting, when properly utilized, provides excellent holding or retention ability as compared to the traditional mounting techniques such as solder mounting.

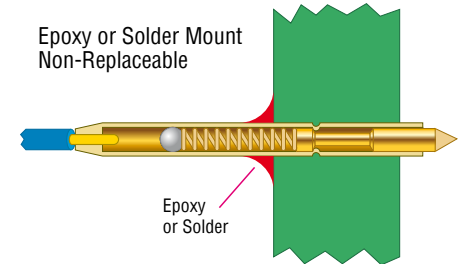
Several types of epoxies are available for use, dependent on whether conductivity is required, desired set time, temperature of application and the requirements and temperature in the end use.

Here are some recommendations for epoxy adhesives which are known to work well in typical customer applications:

- DEVCON #14277 Two-part epoxy
- Loctite 3140 Hysol Epoxy Resin
- Loctite 3164 Hysol Epoxy Hardener
- DURALCO #4525 Room temperature curing epoxy

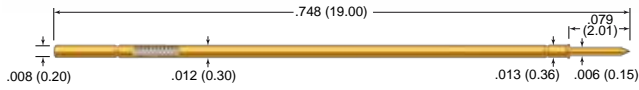
### EPOXY MOUNTING PROCEDURE

1. The probe barrel must be clean and free of any coatings, paint, or other materials.
2. Additionally, the plated through hole, or mounting hole must be clean and free of any coatings, paint, or other materials.
3. To install the probe, apply a thin layer of conductive epoxy to the clean inside area of the mounting hole, or to the clean outside of the probe barrel, according to manufacturer's directions.
4. If desired, apply a release agent, on all other surfaces to keep the epoxy from adhering to undesirable locations. Utilize a release agent which is compatible with your process.
5. If the depth of the mounting hole is sh low, ensure that a fixture is used to assure perpendicularity of the probe to the mounting plane.
6. Once the epoxy hardens, or sets up to an acceptable stiff plastic consistency, remove any fixturing or release agents.



## MEP-22B

20 mil (0.51 mm)



### Mechanical

Recommended Travel: .050 (1.27)  
 Full Travel: .079 (2.01)  
 Operating Temperature: -35°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.51 (14)	1.5 (43)

### Electrical (Static Conditions)

Current Rating: 2 amps  
 Average Probe Resistance: <125 mOhms

### Materials and Finishes

Plunger: Heat-treated Steel, Nickel Boron plated  
 Barrel: BeCu alloy, Gold plated  
 Spring: Music Wire, Gold plated

### Mounting

Hole diameter: Ø .0135 to .0140 (0.34 to 0.36)  
 Suggested drill: #80 or 0.35 mm

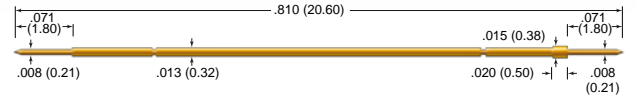
### Tip Style

B				
Ø .006 (0.15)				



## MEPJ-22BD

20 mil (0.51 mm)



### Mechanical

Recommended Travel: .052 (1.33)  
 Full Travel: .079 (2.01)  
 Operating Temperature: -35°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.38 (11)	1.7 (48)

### Electrical (Static Conditions)

Current Rating: 2 amps  
 Average Probe Resistance: <125 mOhms

### Materials and Finishes

Plunger: Heat-treated Steel, Nickel Boron plated  
 Barrel: Phosphor Bronze, Gold plated  
 Spring: Music Wire, Gold plated

### Mounting

Hole diameter: Ø .0135 to .0140 (0.34 to 0.36)  
 Suggested drill: #80 or 0.35 mm

### Tip Style

B				
Ø .008 (0.20)				



HIB & DUT

Series	Size	Tip Style
MEP	22	B
MEPJ	22	BD

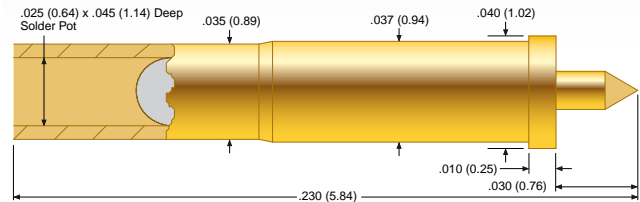
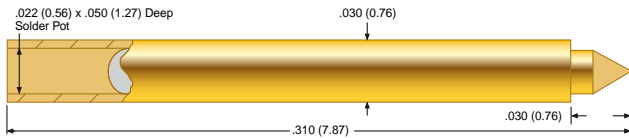


**A-A-S**

39 mil (1.00 mm)

**A-S**

50 mil (1.27 mm)



**Mechanical**

Recommended Travel: .020 (0.51)  
 Full Travel: .030 (0.76)  
 Operating Temperature: -55°C to +150°C

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

	Preload	Rec. Travel
<b>Standard</b>	0.5 (14)	2.0 (57)

**Electrical (Static Conditions)**

Current Rating: 2 amps  
 Average Probe Resistance: <30 mOhms

**Materials and Finishes**

Plunger: Work hardened BeCu, Gold plated  
 Barrel: Phosphor Bronze, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

**Epoxy Mounting**

Hole diameter: Ø .0315 (0.80)  
 Suggested drill: #68 or 0.79 mm

**Tip Style**

C	R			
Ø .021 (0.53)	Ø .021 (0.53)			

**Mechanical**

Recommended Travel: .020 (0.51)  
 Full Travel: .030 (0.76)  
 Operating Temperature: -55°C to +150°C

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

	Preload	Rec. Travel
<b>Standard</b>	0.7 (20)	1.3 (37)

**Electrical (Static Conditions)**

Current Rating: 2 amps  
 Average Probe Resistance: <30 mOhms

**Materials and Finishes**

Plunger: Work hardened BeCu or Brass, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

**Mounting**

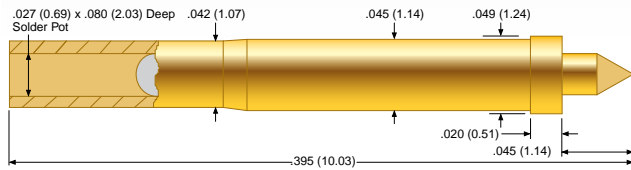
Hole diameter: Ø .0380 (0.97)  
 Suggested drill: #62 or 0.97 mm

**Tip Style**

C	R	V		
Ø .014 (0.36)	Ø .014 (0.36)	Ø .014 (0.36)		
	Brass			

## C-S

75 mil (1.91 mm)



### Mechanical

Recommended Travel: .030 (0.76)  
 Full Travel: .045 (1.14)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	0.5 (14)	3.4 (96)

### Electrical (Static Conditions)

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

### Materials and Finishes

Plunger: Work hardened BeCu, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

### Epoxy Mounting

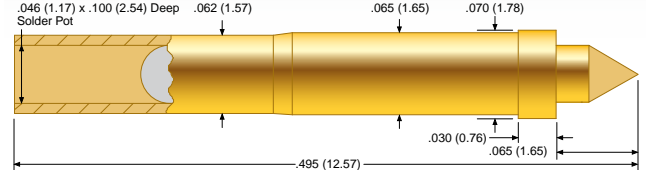
Hole diameter: Ø .0465 (1.18)  
 Suggested drill: #56 or 0.05 mm

### Tip Style

C	R			
Ø .026 (0.66)	Ø .026 (0.66)			

## E-S

100 mil (2.54 mm)



### Mechanical

Recommended Travel: .043 (1.09)  
 Full Travel: .065 (1.65)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	1.0 (29)	2.75 (78)

### Electrical (Static Conditions)

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

### Materials and Finishes

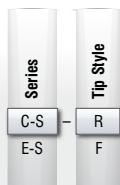
Plunger: Work hardened BeCu, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

### Epoxy Mounting

Hole diameter: Ø .0670 (1.70)  
 Suggested drill: #51 or 0.67 mm

### Tip Style

C	F	R	V	W
Ø .045 (1.14)	Ø .045 (1.14)	Ø .045 (1.14)	Ø .090 (2.29)	Ø .070 (1.78)

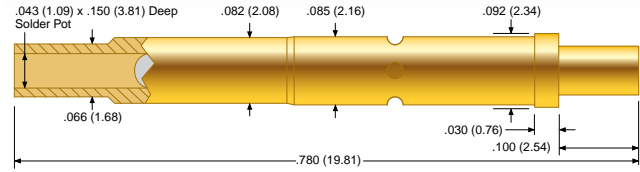
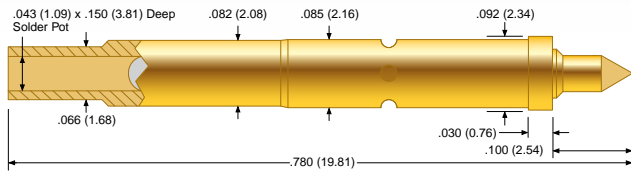


## F-S

125 mil (3.18 mm)

## G-S

125 mil (3.18 mm)



### Mechanical

Recommended Travel: .066 (1.68)  
 Full Travel: .100 (2.54)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	2.0 (57)	6.0 (170)

### Electrical (Static Conditions)

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

### Materials and Finishes

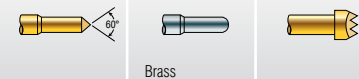
Plunger: Work hardened BeCu, Gold plated or  
 Work hardened Brass, Rhodium plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

### Epoxy Mounting

Hole diameter: Ø .0860 (2.18)  
 Suggested drill: #44 or 0.086 mm

### Tip Style

C	R	W		
Ø .045 (1.14)	Ø .045 (1.14)	Ø .090 (2.29)		



### Mechanical

Recommended Travel: .067 (1.68)  
 Full Travel: .100 (2.54)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	3.0 (85)	6.0 (170)

### Electrical (Static Conditions)

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

### Materials and Finishes

Plunger: Work hardened BeCu, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel, Gold plated  
 Ball: Stainless Steel, Gold plated

### Mounting

Hole diameter: Ø .0860 (2.18)  
 Suggested drill: #44 or 0.086 mm

### Tip Style

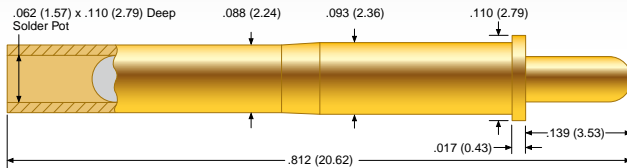
F	R			
Ø .061 (1.55)	Ø .061 (1.55)			



Series	Tip Style
F-S	C
G-S	F

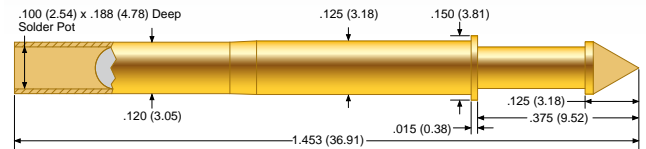
## P2532

156 mil (3.96 mm)



## P2550

187 mil (4.75 mm)



### Mechanical

Recommended Travel: .093 (2.36)  
 Full Travel: .139 (3.53)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	1.0 (28)	2.3 (65)

### Electrical (Static Conditions)

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

### Materials and Finishes

Plunger: Work hardened BeCu, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel, Gold plated

### Epoxy Mounting

Hole diameter: Ø .0945 (2.40)  
 Suggested drill: #41 mm or 2.40 mm

### Tip Style

1	2			
Ø .059 (1.50)	Ø .059 (1.50)			

### Mechanical

Recommended Travel: .167 (4.24)  
 Full Travel: .250 (6.35)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	1.20 (34)	3.10 (88)

### Electrical (Static Conditions)

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

### Materials and Finishes

Plunger: Work hardened BeCu, Gold plated  
 Barrel: Brass, Gold plated  
 Spring: Stainless Steel  
 Ball: Stainless Steel, Gold plated

### Epoxy Mounting

Hole diameter: Ø .126 (3.20)  
 Suggested drill: #30 or 3.20 mm

### Tip Style

8	0-8	6-8	9	
Ø .156 (3.96)	Ø .122 (3.10)	Ø .154 (3.91)	Ø .125 (3.18)	

Series	Tip Style
P2532	1
P2550	0-8

## Press Ring Mount

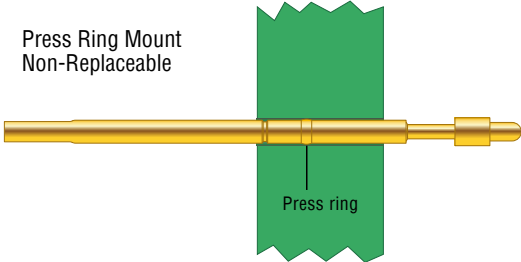
### GENERAL PURPOSE – PRESS RING MOUNT

The ECT / Pylon line of standard products include non-replaceable Pogo Contacts. They differ from the replaceable contacts in that they do not require a socket or receptacle and are designed to be permanently mounted. Non-Replaceable Probes are those designed for industrial applications where typical probe life meets or exceeds those of the end-use product. They are typically located inside the end product where probe replacement is either impossible or end-product damage would occur.

Electrical connections are typically made by crimping or soldering a wire at the terminal of the probe.

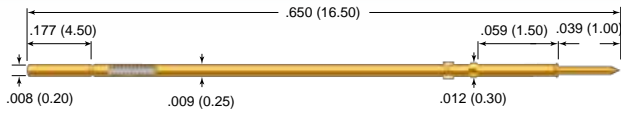
The probe is retained in the retention plate by its provided press ring, which will deform during the installation process and therefore provides a permanent mount.

Non-replaceable Pogo Contacts are another example of ECT's and Pylon's quality and innovation and how it can work for you.



## MEPJ-21

18 mil (0.45 mm)



### Mechanical

Recommended Travel: .026 (0.67)  
 Full Travel: .039 (1.00)  
 Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	.18 (5)	.53 (15)

### Electrical (Static Conditions)

Current Rating: 2 amps  
 Average Probe Resistance: <150 mOhms

### Materials and Finishes

Plunger: Heat-treated Steel, Gold plated  
 Barrel: Phosphor Bronze, Gold plated  
 Spring: Music Wire, Gold plated

### Mounting

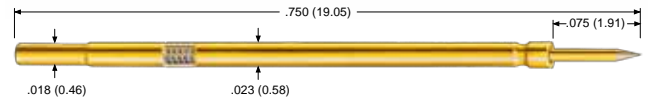
Hole diameter: Ø .0102 to .0106 (0.26 to 0.27)  
 Suggested drill: .0102 or 0.26 mm

### Termination

Crimp connection for 35 AWG or 0.016 mm<sup>2</sup>

## MEP-20

25 mil (0.635 mm)



### Mechanical

Recommended Travel: .050 (1.27)  
 Full Travel: .075 (1.91)  
 Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
Standard	.39 (11)	1.39 (39)

### Electrical (Static Conditions)

Current Rating: 2 amps  
 Average Probe Resistance: <50 mOhms

### Materials and Finishes

Plunger: Heat-treated BeCu, Gold plated over hard Nickel  
 Barrel: Work hardened BeCu, Gold plated over hard Nickel  
 Spring: Music Wire, Silver plated

### Mounting

Hole diameter: Ø .0205 to .0215 (0.52 to 0.55)  
 Suggested drill: #77 or 0.52 mm  
 Minimum mounting plate thickness: .250 (6.35)

### Order versions

MEP-20x Crimp  
 MEP-20x-30 Crimp with 30 inches of 30 AWG wire attached

### Application

- The MEP-20 can also be mounted in a staggered pattern to access test pads on centers less than .025".
- Recommended wire gauge 30 AWG, maximum insulation dia. .019 (0.48).
- Shrink tubing is recommended for use on alternating receptacles to reduce the possibility of electrical shorting.

### Tip Style

B
Ø .006 (0.15)



### Tip Style

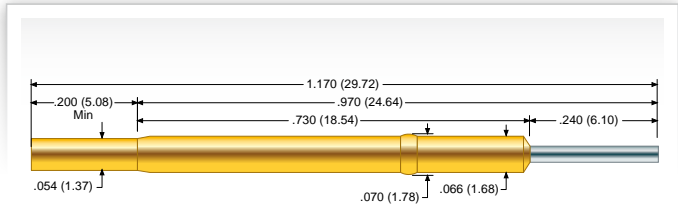
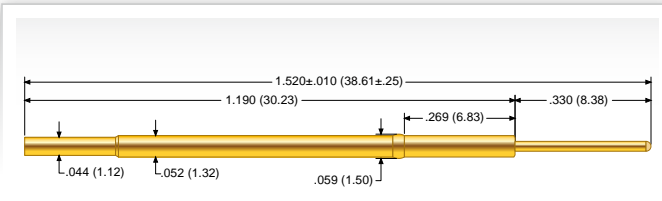
B	G	J	U	
Ø .010 (0.25)	Ø .010 (0.25)	Ø .010 (0.25)	Ø .006 (0.15)	



Series	Size	Tip Style
MEPJ	21	B
MEP	20	B

**SPG-01J-008**  
75 mil (1.91 mm)

**SPL-02C-170**  
100 mil (2.54 mm)



**Mechanical**

Recommended Travel: .167 (4.24)  
 Full Travel: .250 (6.35)  
 Operating Temperature: -55°C to +105°C

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

	Preload	Rec. Travel
<b>Standard</b>	0.94 (27)	2.0 (57)

**Electrical (Static Conditions)**

Current Rating: 6 amps  
 Average Probe Resistance: <10 mOhms

**Materials and Finishes**

Plunger: Heat-treated tool Steel, Gold plated over hard Nickel  
 Barrel: Work hardened Phosphor Bronze, Gold plated (I.D. and O.D.) over hard Nickel  
 Spring: Music Wire  
 Ball: Stainless Steel

**Epoxy Mounting**

Hole diameter: Ø .053 to .055 (1.35 to 1.40)  
 Suggested drill: #54 or 1.35 mm

**Mechanical**

Recommended Travel: .107 (2.72)  
 Operating Temperature: -55°C to +150°C

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

	Preload	Rec. Travel
<b>Standard</b>	1.68 (48)	3.75 (106)

**Electrical (Static Conditions)**

Current Rating: 5 amps  
 Average Probe Resistance: <35 mOhms

**Materials and Finishes**

Plunger: BeCu, Rhodium plated  
 Barrel: Nickel Silver, Gold plated  
 Spring: Music Wire, Silver plated  
 Ball: Stainless Steel

**Mounting**

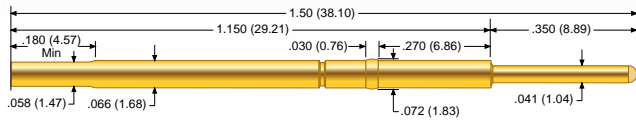
Hole diameter: Ø .067 to .069 (1.70 to 1.75)  
 Suggested drill: #51 or 1.75 mm

Series	Size	Tip Style
SPG	01	J-008
SPL	02	C-170



## SPL-25J-289

100 mil (2.54 mm)



### Mechanical

Recommended Travel: .167 (4.24)  
 Full Travel: .350 (8.89)  
 Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.25 (7)	1.16 (3)

### Electrical (Static Conditions)

Current Rating: 5 amps  
 Average Probe Resistance: <35 mOhms

### Materials and Finishes

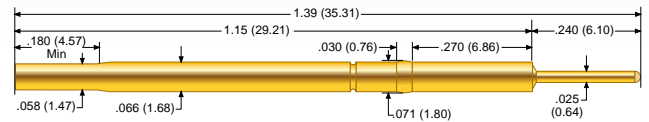
Plunger: BeCu, Gold plated hardened  
 Barrel: Nickel Silver, Gold plated  
 Spring: Music Wire, Silver plated  
 Ball: Stainless Steel

### Mounting

Hole diameter: Ø .067 to .069 (1.70 to 1.75)  
 Recommended wire gauge: 22-26 AWG  
 Suggested drill: #51 or 1.75 mm

## SPL-25J-392

100 mil (2.54 mm) / 125 mil (3.18 mm)



### Mechanical

Recommended Travel: .233 (5.92)  
 Full Travel: .240 (6.10)  
 Operating Temperature: -55°C to +105°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
<b>Standard</b>	0.28 (7.94)	2.5 (71)

### Electrical (Static Conditions)

Current Rating: 5 amps  
 Average Probe Resistance: <35 mOhms

### Materials and Finishes

Plunger: BeCu, Gold plated hardened  
 Barrel: BeCu, Gold plated  
 Spring: Music Wire, Silver plated  
 Ball: Stainless Steel

### Mounting

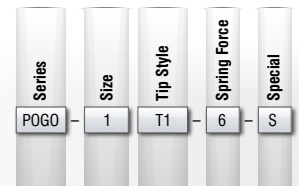
Hole diameter: Ø .067 to .069 (1.70 to 1.75)  
 Recommended wire gauge: 22-26 AWG  
 Suggested drill: #51 or 1.75 mm

Series	Size	Tip Style
SPL	25	J-289
SPL	25	J-392

## ORDER CODE EXAMPLE

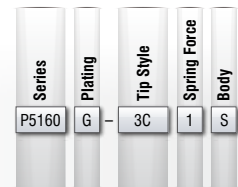
### ECT

- Series Probe Model number
- Size Probe Size (1-2 digit number)
- Tip Style Tip style (typical a letter)
- Spring Force Spring Force indicated in oz. or sometimes with an order cc number indicating standard to ultra-high spring forces.
- Special
  - S Offered on some probes for steel base material
  - SL Offered on the POGO-25135 Probe for a steel base ma and a 2mm longer shaft
  - P indicates the optional anti walkout feature. The probe includes a so called Pylon or Banana Bend



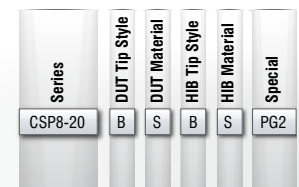
### Pylon

- Series Probe Model number
- Plating G Gold Plated Plunger
- Tip Style Tip style (typical a number and a letter)
- Spring Force
  - 1 Standard
  - 2 Alternate
  - 3 Elevated
- Body
  - Pylon Bend Body
  - S Straight Body



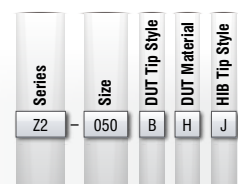
### Semiconductor Probe - CSP and BTM

- Series Probe Model number
- DUT Tip Style Tip style letter
- DUT Material Plunger base material
  - C BeCu
  - S Steel
- HIB Tip Style Tip style letter
- HIB Material Plunger base material
  - C BeCu
  - S Steel
- Special
  - PG1 Primeguard1 plating
  - PG2 Primeguard2 plating



### Semiconductor Probe - ZIP and SCP

- Series Probe Model number
- Size Pitch
- DUT Tip Style Tip style letter
- DUT Material Plunger base material (ZIP only)
  - S Steel
  - H Hypercore
- HIB Tip Style Tip style letter





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- Wertheim
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- Yokohama



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- Singapore
- Shenzhen



### Bareboard Tester

- Wertheim
- Pomona
- Shenzhen



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Ukraine  
United Kingdom

### Your ECT Contact is: