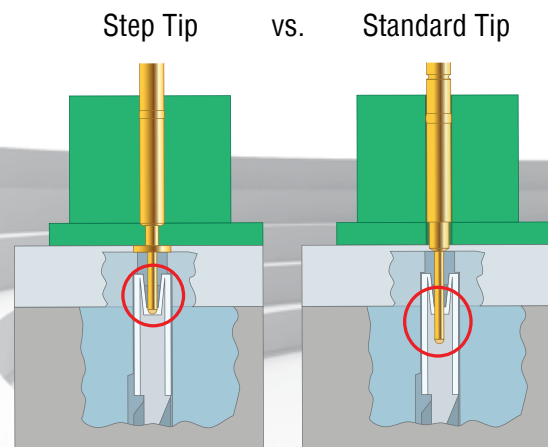
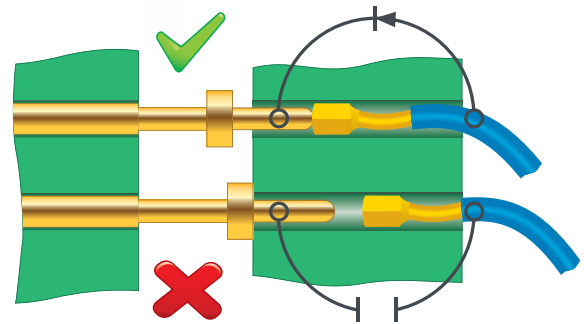


## STEP PROBE

A “Step” or “Hat” probe indicates the concept of using a “step” to control the distance of probe tip entry into a wire harness connector housing, thus allowing electrical contact to be made to a terminal without actually entering the terminal. The critical areas of the connector terminal remain virgin to assure proper conductivity and intermetallic relationships once the harness is assembled into its end use.

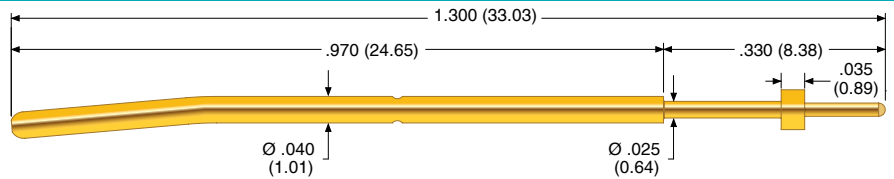
Depending on the customer preference, Step Probes can be either replaceable or non-replaceable. All replaceable Step Probes feature a Pylon Bend, to prevent walkout of the probes from the receptacle. Non-replaceable probes have a press ring, which holds the probe in place and keeps it from walking out of the mounting bracket.

Though used almost exclusively in the wire harness testing industry they can also be used in ICT / FCT testing. ECT offers a variety of pitches and step depths to accommodate most harness test requirements.



## STP-1

75 mil (1.91 mm)



### Mechanical

Recommended Travel: .120 (3.05)  
 Full Travel: min. .135 (3.43)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

Order Code	Preload	Rec. Travel
<b>Standard</b>	1.5 (43)	2.9 (82)

### Electrical (Static Conditions)

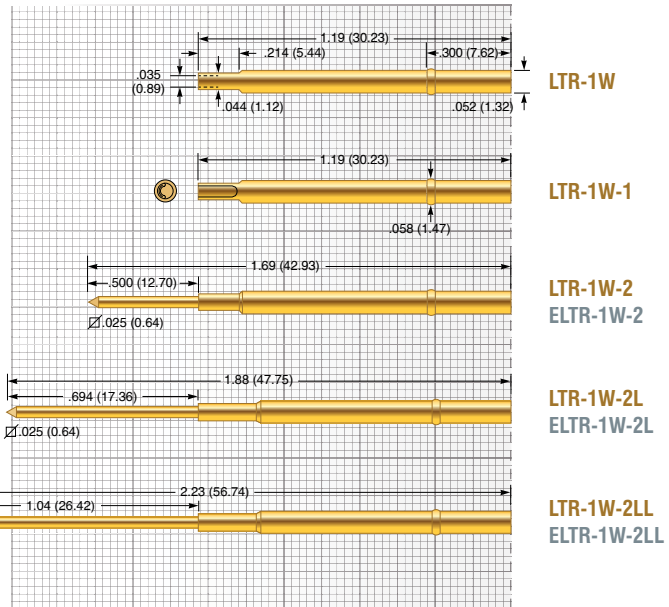
Current Rating: 3 amps  
 Average Probe Resistance: <35 mOhms

### Materials and Finishes

Plunger: Heat-treated BeCu, Gold plated over hard Nickel or Rhodium plated  
 Barrel: Work-hardened Phosphorous 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  
 • LTR Housing: Work-hardened Nickel Silver, Gold plated over hard Nickel  
 • ELTR Housing: Nickel Silver, unplated  
 Post: Phosphorous Bronze, Gold plated



### Gold plated Tip Style

J120-3G	J140-3G	J160-3G		
Ø .020 (0.51)	Ø .020 (0.51)	Ø .020 (0.51)		

### Rhodium plated Tip Style

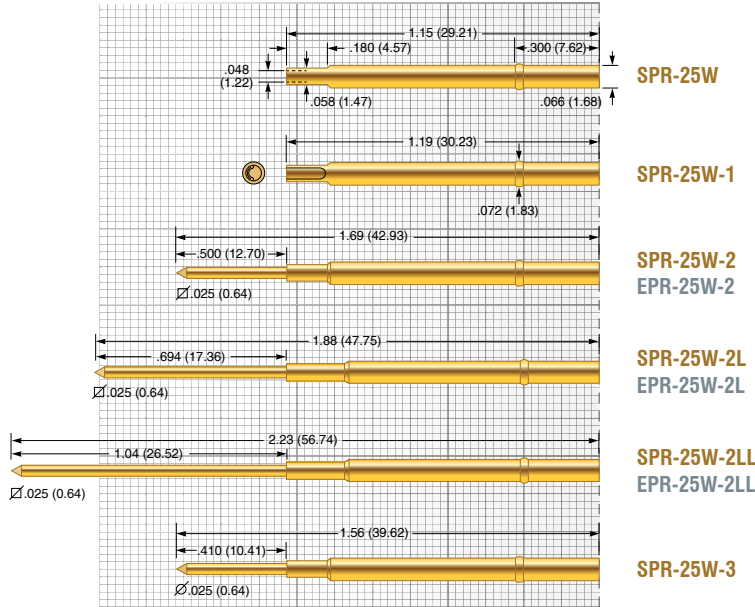
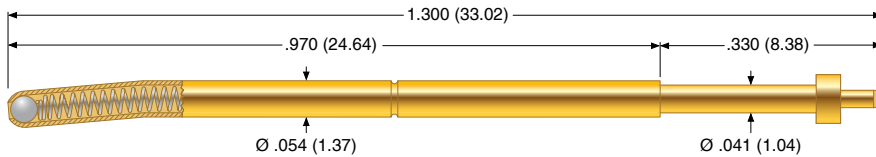
J120-3R	J140-3R	J160-3R		
Ø .020 (0.51)	Ø .020 (0.51)	Ø .020 (0.51)		

Series	Size	Tip Style	Plating	
STP	1	J120	3G	Gold
STP	1	J120	3R	Rhodium



## STP-25

100 mil (2.54 mm)



### Mechanical

Recommended Travel: .120 (3.05)  
 Full Travel: min. .135 (3.43)  
 Operating Temperature: -55°C to +150°C

### Spring Force in oz. (grams)

	Preload	Rec. Travel
STP-25	1.5 (43)	2.9 (82)

### Electrical (Static Conditions)

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

### Materials and Finishes

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

### Receptacle

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

### Material

- SPR Housing: Work-hardened Nickel Silver, Gold plated over hard Nickel
  - EPR Housing: Nickel Silver, unplated
- Post: Phosphorous Bronze, Gold plated

### Gold plated Tip Style

Gold plated Tip Style				
<b>C060-3G</b>				
Ø .030 (0.76)				
<b>J060-3G</b>	<b>J080-3G</b>	<b>J100-3G</b>	<b>J140-3G</b>	<b>J160-3G</b>
Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)

### Rhodium plated Tip Style

Rhodium plated Tip Style				
<b>C060-3R</b>				
Ø .030 (0.76)				
<b>J060-3R</b>	<b>J080-3R</b>	<b>J100-3R</b>	<b>J140-3R</b>	<b>J160-3R</b>
Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)	Ø .025 (0.64)

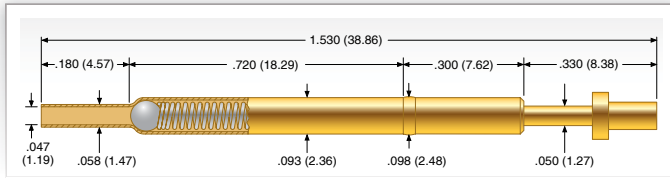
	Series	Size	Tip Style	Plating
Gold	STP	25	J100	3G
Rhodium	STP	25	J100	3R

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.



### SPL-03

125 mil (3.18 mm)



#### Mechanical

- Recommended Travel:
- SPL-03C-114 / -153 .127 (3.23)
  - SPL-03C-090 .220 (5.59)
- Operating Temperature
- SPL-03C-090 -55°C to +105°C
  - SPL-03C-114 / -153 -55°C to +85°C

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

	Preload	Rec. Travel
SPL-03C-090	0.8 (23)	2.3 (65)
SPL-03C-114	1.7 (48)	4.0 (113)
SPL-03C-153	1.6 (45)	4.0 (113)

#### Electrical (Static Conditions)

- Current Rating: 6 amps
- Average Probe Resistance: < 50 mOhms

#### Materials and Finishes

- Plunger: Heat-treated BeCu, Gold plated over hard Nickel  
Heat-treated BeCu, Rhodium plated over hard Nickel
- Barrel: Work-hardened Phosphor Bronze or Nickel Silver, Gold plated over hard Nickel
- Spring: Music Wire, Silver plated or BeCu, Silver plated
- Ball: Hardened Brass or hardened Brass, Gold plated

#### Mounting Options

- Hole diameter: Ø .094 to .096 (2.39 to 2.44)
- Recommended wire gauge: 22-26 AWG
- Recommended drill size: #41 or 2.40 mm

#### Gold plated Tip Style

C-090	C-114		
Ø .030 (0.76)	Ø .070 (1.78)		

#### Rhodium plated Tip Style

C-153			
Ø .060 (1.52)			
Rec. Travel .220 (5.59)			

Series	Size	Tip Style
SPL	25	J-372
SPL	03	C-090