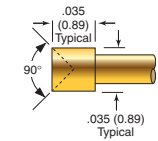
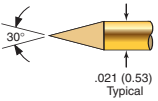


TO ORDER, CALL 909-625-9390

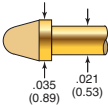
**HPA-OA  
SPA-OA**



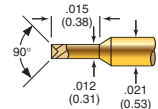
**HPA-OB  
SPA-OB**



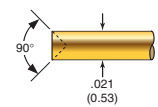
**HPA-OD  
SPA-OD**



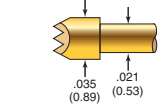
**HPA-OG12  
SPA-OG12**



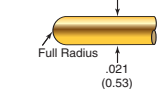
**HPA-OG21  
SPA-OG21**



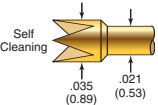
**HPA-OH  
SPA-OH**



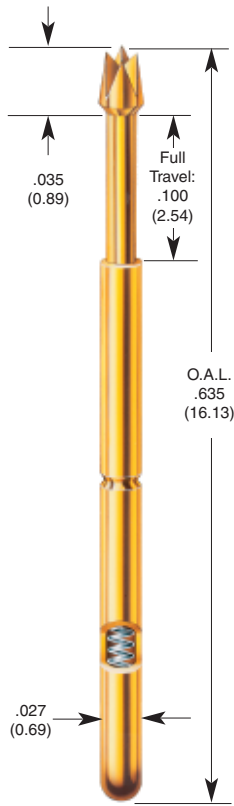
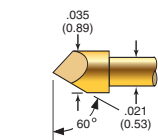
**HPA-OJ  
SPA-OJ**



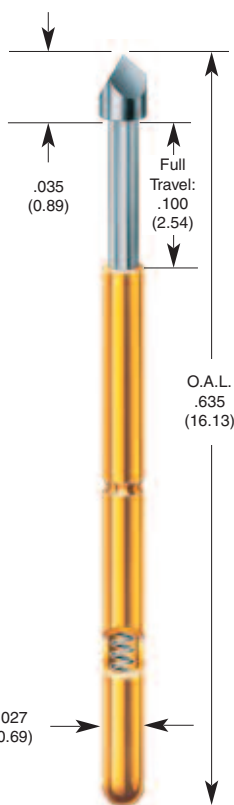
**HPA-OL  
SPA-OL**



**HPA-OT  
SPA-OT**



**HPA-O**



**SPA-O**

**Probe Specifications HPA-O**

**Mechanical**  
Full Travel: .100 (2.54)  
Recommended Working Travel: .067 (1.70)  
Mechanical Life Exceeds: 1 x 10<sup>6</sup> cycles

**Operating Temperature**

Standard spring: -55°C to +150°C  
Alternate spring: -55°C to +105°C  
Consult factory for other temperature requirements, and applications below -40° C.

**Electrical (Static Conditions)**

Current Rating: 3 amps  
Maximum continuous current, non-inductive at working travel

**Average Probe Resistance**

35 mΩ

**Materials and Finishes**

Plunger: Heat-treated beryllium copper, gold plated over hard nickel  
Barrel: Work-hardened phosphor bronze, HPA-GOLD™ plated (I.D. and O.D.) over hard nickel  
Spring: Standard: Stainless steel, silver plated  
Alternate: Music wire, silver plated

**SPA-O**

Full Travel: .100 (2.54)  
Recommended Working Travel: .067 (1.70)  
Mechanical Life Exceeds: 1 x 10<sup>6</sup> cycles

**Receptacle Specifications**

**Mounting Hole Size:** .035/.0365 (0.89/0.93)  
A #64 or 0.92 mm drill is most commonly used.

**Recommended Wire Gauge:** 28-30 AWG

**Connections:**

**SPR-0W** Crimp (To order with 30 inches of 28 AWG wire attached, add -28 to model number. For 30 AWG wire, add -30 to model number.)  
**SPR-0W-1** Solder cup  
**SPR-0W-4** FASTITE® wire termination (30 AWG only), maximum insulation diameter .019 (0.48), wire strip length = .125 (3.2)

**SPR-0W** Crimp (To order with 30 inches of 28 AWG wire attached, add -28 to model number. For 30 AWG wire, add -30 to model number.)  
**SPR-0W-1** Solder cup  
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**DS-62-1** Insulation sleeve (use with SPR-0W-4)  
**FWA-1-30** 30 AWG wire with DS-62-1 insulation sleeve attached

**DS-62-1** Insulation sleeve (use with SPR-0W-4)  
**FWA-1-30** 30 AWG wire with DS-62-1 insulation sleeve attached

**Materials and Finishes**

Work-hardened nickel silver, gold plated over hard nickel

One DS-62-1 sleeve is provided with each SPR-0W-4 receptacle at no charge. If additional quantities are required, please contact the factory for pricing and delivery.

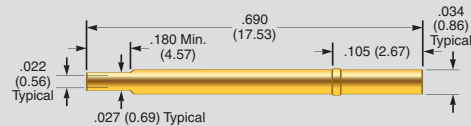
The HPA-O and SPA-O may be used to test bare PCBs on mixed test centers with the HPA-1 and HPA-74 probes, see pages 30 and 33.

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

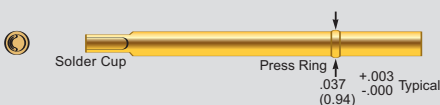
Spring Type	Preload	2/3 Travel
Standard	as shown .61 (17)	2.8 (79)
Alternate	-1 .78 (22)	3.7 (105)

Optional spring forces and materials are available.

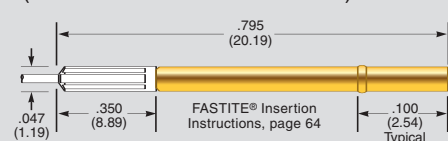
**SPR-0W**



**SPR-0W-1**



**SPR-0W-4 (Shown with DS-62-1 installed)**



Bare PCB Test Probes

Actual Size

# 25-05374

Dimensions in inches (millimeters)

Other applications: