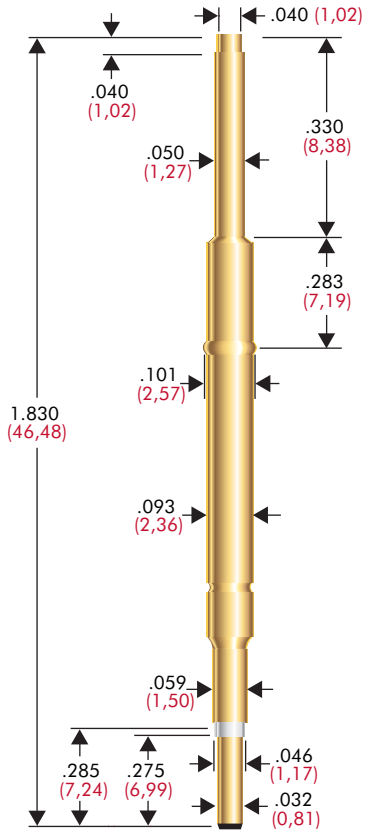
Switch Probes

A Switch Probe is a spring contact probe and receptacle combination that is normally open, and after a designated travel the switch probe closes. The most common use for switch probes is in the cable harness testing industry. The switch probe is used to verify the correct location of a terminal in a connector while checking the retention force as well.

Switch probes also verify the presence of nonconductive components such as caps for connectors or devices on a circuit board.

There are two separate current paths in a switch probe. From the plunger tip to the tail is normally open and closes only after the probe deflects to the designated travel. The second path, from the plunger tip to the outside of the receptacle, is always closed.

Size 3 Switch Probe



Probe Specifications

Minimum Centers: .125 (3,18)
Current Rating: 3 amps continuous
Working Travel: .197 (5,00)
Maximum Travel: .295 (7,49)
Travel to Switch Point: .025 (0,64)
Spring Force at Switch Point: 1.8 oz.

Rated Force oz (gms)	Rated Force @ Switch oz (gms)	Preload oz (gms)
4.0 (114)	1.8 (51)	1.4 (40)

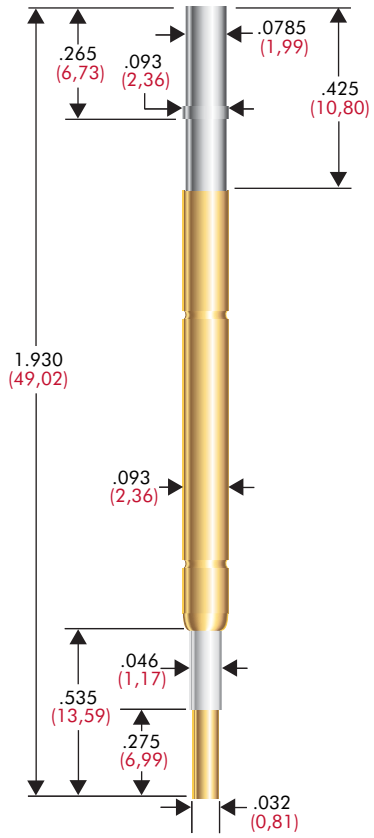
Materials

Barrel: Nickel/silver, gold plated
Spring: Music wire
Plungers: Full-hard beryllium copper, gold plated
Insulator: Delrin
Contact: Beryllium copper, gold plated

Receptacle Specifications

Drill Size: #41
Mounting Hole Size: .094/.096 (2,39/2,44)
The Size 3 Switch Probe shown does not require a receptacle. The barrel of the switch probe is designed to mount directly in the mounting plate.

Size 4 Switch Probe



Probe Specifications

Minimum Centers: .156 (3,96)
Current Rating: 3 amps continuous
Working Travel: .120 (3,05)
Maximum Travel: .160 (4,06)
Travel to Switch Point: .107 (2,72)
Spring Force at Switch Point: 4.4 oz.

Rated Force oz (gms)	Rated Force @ Switch oz (gms)	Preload oz (gms)
4.8 (136)	4.4 (125)	2.5 (71)

Materials

Barrel: Nickel/silver, gold plated
Spring: Stainless steel
Plunger: Beryllium copper, gold plated
Insulator: Delrin
Contact: Beryllium copper, gold plated