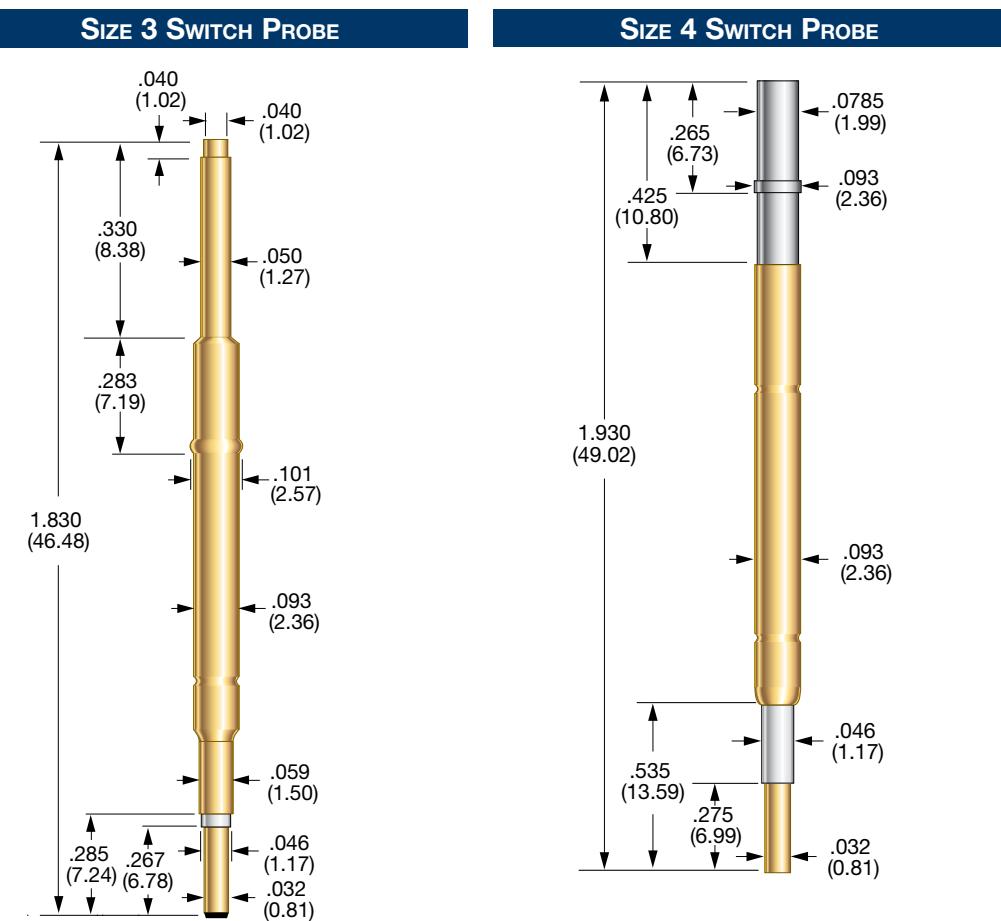


# Switch Probes

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 also checking the retention force. In addition, Switch Probes also verify the presence of non conductive 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.



## PROBE SPECIFICATIONS

**Minimum Centers:** .125 (3.18)  
**Current Rating:** 3 amps continuous  
**Maximum Travel:** .295 (7.49)  
**Working Travel:** .197 (5.00)  
**Travel to Switch Point:** .025 (0.64)  
**Spring Force at Switch Point:** 1.8 oz.

Rated Force oz. (g)	Rated Force @ Switch oz. (g)	Preload oz. (g)
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

## MOUNTING

**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.

## PROBE SPECIFICATIONS

**Minimum Centers:** .156 (3.96)  
**Current Rating:** 3 amps continuous  
**Maximum Travel:** .160 (4.06)  
**Working Travel:** .120 (3.05)  
**Travel to Switch Point:** .107 (2.72)  
**Spring Force at Switch Point:** 4.4 oz.

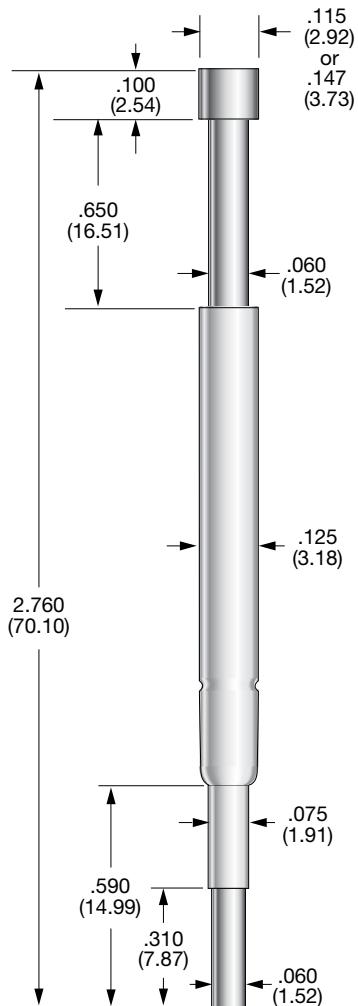
Rated Force oz. (g)	Rated Force @ Switch oz. (g)	Preload oz. (g)
4.8 (136)	4.4 (125)	2.5 (71)

## MATERIALS

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

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

## SIZE 5 SWITCH PROBE



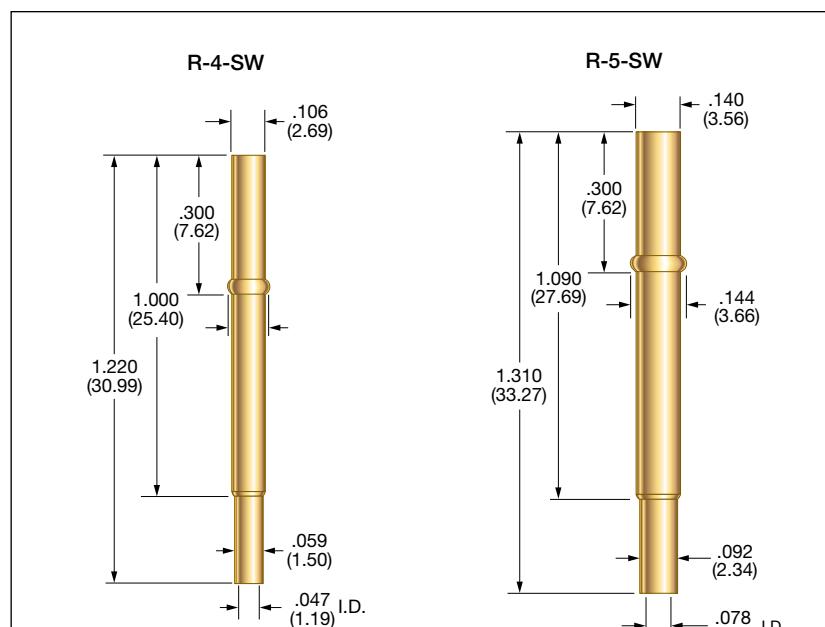
### PROBE SPECIFICATIONS

Minimum Centers: .187 (4.75)  
 Current Rating: 3 amps continuous  
 Maximum Travel: .190 (4.83)  
 Working Travel: .137 (3.48)  
 Travel to Switch Point: .030 (0.76)  
 Spring Force at Switch Point: 4.0 or 10.3 oz.

Rated Force oz. (g)	Force @ Switch oz. (g)	Preload oz. (g)	Material
8.6 (244)	4.0 (113)	1.8 (51)	SS
20.4 (579)	10.3 (293)	5.2 (148)	MW

### MATERIALS

Barrel: Nickel/silver, silver plated  
 Spring: Music wire or stainless steel  
 Plunger: Beryllium copper, nickel plated  
 Insulator: Delrin  
 Contact: Beryllium copper, nickel plated



### PROBE SPECIFICATIONS

Minimum Centers: .156 (3.96)  
 Drill Size: #35  
 Mounting Hole Size:  
 .108/.110 (2.74/2.79)

### MATERIALS

Nickel/silver, gold plated

### HOW TO ORDER

R-4-SW

### PROBE SPECIFICATIONS

Minimum Centers: .187 (4.75)  
 Drill Size: 3.6mm  
 Mounting Hole Size:  
 .141/.143 (3.58/3.63)

### MATERIALS

Nickel/silver, gold plated

### HOW TO ORDER

R-5-SW

How to Order					
SW	5	F	4.0	EN	115
SPRING CONTACT PROBE	SIZE	TIp STYLe	SPRING FORCE AT SWITCH	PLATING OPTIONS	HEAD DIAMETER
SIZE: 3, 4 OR 5	SIZE 3: CS SIZE 4: C SIZE 5: F	SIZE 3: 1.8 SIZE 4: 4.4 SIZE 5: 4.0,10.3	SIZE 3: G-GOLD SIZE 4: EN-NICKEL SIZE 5: EN-NICKEL	SIZE 5: 115 OR 147	

VIEW UPDATES OF THIS INFORMATION AT [WWW.IDINET.COM](http://WWW.IDINET.COM)

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



Interconnect Devices, Inc. • Tel: 913-342-5544 • Fax: 913-342-7043 • [www.idinet.com](http://www.idinet.com)

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Smiths Interconnect:](#)

[SW-5-F-4-EN-115](#) [SW-5-F-4-EN-147](#) [SW-5-F-10.3-E/N .147 2.762 OAL](#) [SW-3-CS-1.8-G](#) [SW-4-C-4.4-E/N-107](#)  
[101542-000](#) [100233-002](#) [100238-003](#) [100233-000](#)