

# MAXIMUM SOLUTIONS

## New Crimp Pins from Mill-Max



Mill-Max is pleased to announce the addition of new crimp pins to our selection of wire termination products. These new pins are commercial-off-the-shelf (COTS) equivalents to the popular Mil-Spec M39029 crimp pins. If your application does not require Mil-Spec components but demands the same reliability and form factor, then these pins will fit the bill perfectly.

There are five new terminals to choose from, all precision-machined to the highest quality and available in both gold and tin plating options. Each of the pins has an inspection hole for viewing the wire during the crimping process and for promoting plating coverage inside the crimp hole. Table 1 below provides details of the pin size, wire accommodation size, Mill-Max part numbers & the associated Mil-Spec part numbers. The Mill-Max part numbers in Table 1 specify 10 micro inch gold plating. These pins are also available with 50 micro inch gold or 200 micro inch tin plate finish. Each plating option has a nickel under-plate.

**Table 1**

Mill-Max Part #	Military Part #*	Wire Accommodation	Mating Pin Size
<a href="#">3922-0-01-15-00-00-08-0</a>	M39029/58-360	22 - 28 AWG	22
<a href="#">3920-0-01-15-00-00-08-0</a>	M39029/58-363	20 - 24 AWG	20
<a href="#">3916-0-01-15-00-00-08-0</a>	M39029/58-364	16 - 20 AWG	16
<a href="#">3914-0-01-15-00-00-08-0</a>	M39029/1-102	14 - 16 AWG	14
<a href="#">3912-0-01-15-00-00-08-0</a>	M39029/58-365	12- 14 AWG	12

\*The Mill-Max pins are dimensionally equivalent to the military parts but do not have color bands.

These crimp pins are ideal components for making up cable assemblies. Since they conform to the dimensions of the Mil-Spec parts, the same crimp tooling can be used to terminate the wires.

Table 2 provides the Daniels Manufacturing crimp tooling information for these pins.

**Table 2**

<b>Mill-Max Crimp Pin Part #</b>	<b>Wire Accommodation (AWG)</b>	<b>Daniels Crimp Tool #</b>	<b>Corresponding Daniels Positioner #</b>
3922-0-01-XX-00-00-08-0	22, 24, 26, 28	AFM8 MH860	K42 86-6
3920-0-01-XX-00-00-08-0	20, 22, 24	MH860 AFM8 AF8	86-7 K43 TH163 RED
3916-0-01-XX-00-00-08-0	16, 18, 20	AF8 MH860	TH163 BLUE 86-3
3914-0-01-XX-00-00-08-0	14, 16	AF8	TH163 BLUE / YELLOW
3912-0-01-XX-00-00-08-0	12, 14	AF8	TH163 YELLOW

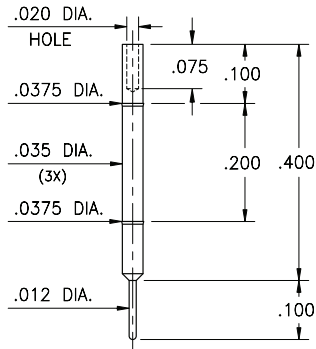
For more information, please visit [www.mill-max.com/PR644](http://www.mill-max.com/PR644).

# MALE PCB PINS

## TOOLING FOR CRIMP PINS

### 4194-0-00-XX-00-00-08-0

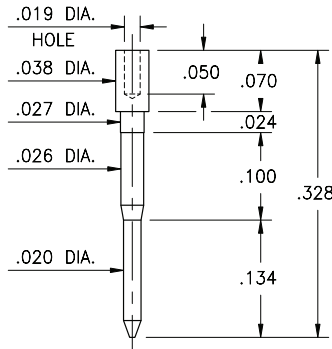
Wire termination and press-fit in .036 hole  
Accepts wire sizes 30 AWG Max. /34 AWG Min.



Daniels Crimp Tool #[AFM8](#)  
using Daniels Positioner #[K1566](#)

### 5556-0-00-XX-00-00-38-0

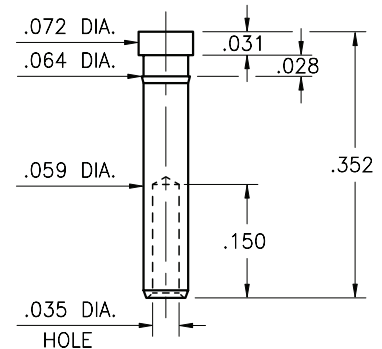
Wire termination  
Accepts wire sizes 30 AWG Max. /34 AWG Min.



Contact Daniels Manufacturing  
for Crimp Tool & Positioner

### 3000-0-00-XX-00-00-03-0

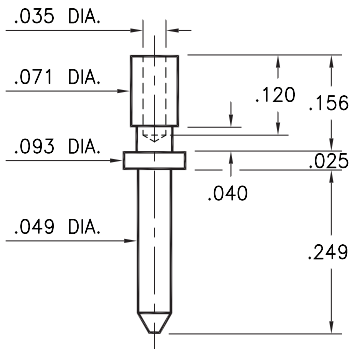
Press-fit in .061 mounting hole  
Accepts wire sizes 24 AWG Max. /28 AWG Min.



Contact Daniels Manufacturing  
for Crimp Tool & Positioner

### 3139-0-00-XX-00-00-08-0

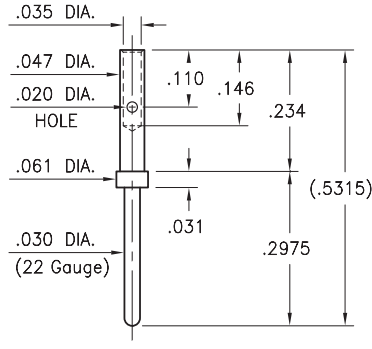
Wire crimp termination  
Accepts wire sizes 24 AWG Max. /28 AWG Min.



Daniels Crimp Tool #[AFM8](#)  
using Daniels Positioner #[K938](#)

### 3922-0-01-XX-00-00-08-0

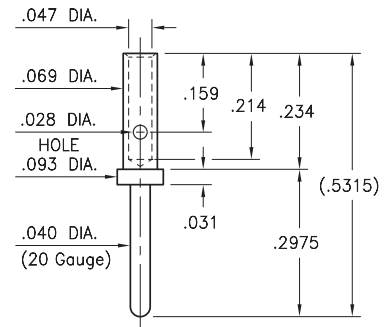
Wire crimp termination  
Accepts wire sizes 22 AWG Max. /28 AWG Min.



Daniels Crimp Tool #[AFM8](#)  
using Daniels Positioner #[K42](#)  
Daniels Crimp Tool #[MH860](#)  
using Daniels Positioner #[86-6](#)

### 3920-0-01-XX-00-00-08-0

Wire crimp termination  
Accepts wire sizes 20 AWG Max. /24 AWG Min.



Daniels Crimp Tool #[AFM8](#)  
using Daniels Positioner #[K43](#)  
Daniels Crimp Tool #[AF8](#)  
using Daniels Positioner #[TH163RED](#)  
Daniels Crimp Tool #[MH860](#)  
using Daniels Positioner #[86-7](#)

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm .005$   
Diameters:  $\pm .002$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - 00 - 00 - XX - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 200  $\mu$ " TIN/LEAD OVER NICKEL
- ◆ 80 200  $\mu$ " TIN OVER NICKEL (RoHS)
- ◆ 15 150  $\mu$ " GOLD OVER NICKEL (RoHS)
- ◆ 21 20  $\mu$ " GOLD OVER NICKEL (RoHS)
- ◆ 34 50  $\mu$ " GOLD OVER NICKEL (RoHS)

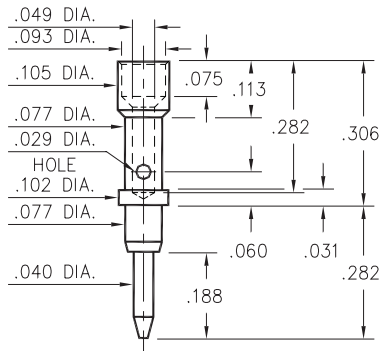


# MALE PCB PINS

## TOOLING FOR CRIMP PINS

### 3603-0-07-XX-00-00-08-0

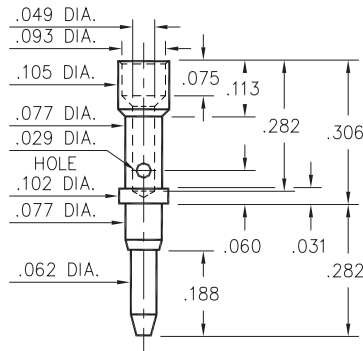
Wire crimp termination, Annealed  
Accepts wire sizes 20 AWG Max. /24 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH535

### 3602-0-07-XX-00-00-08-0

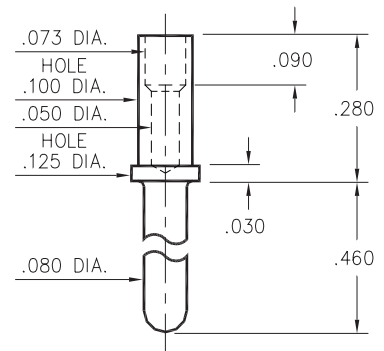
Wire crimp termination, Annealed  
Accepts wire sizes 20 AWG Max. /24 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH535

### 0520-0-00-XX-00-00-03-0

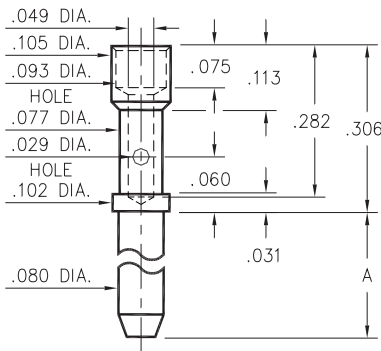
Wire crimp termination, Annealed  
Accepts wire sizes 20 AWG Max. /24 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH535

### 3601-X-07-XX-00-00-08-0

Wire crimp termination  
Accepts wire sizes 20 AWG Max. /24 AWG Min.

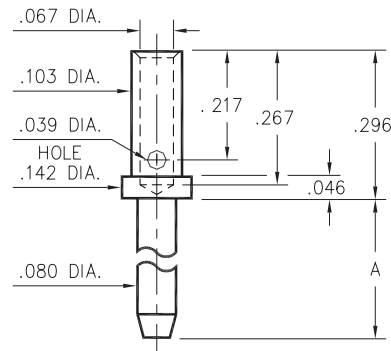


Daniels Crimp Tool #AF8  
using Daniels Positioner #TH535

Basic Part Number	Pin Length A
3601-1	.200
3601-2	.375
3601-3	.500

### 3609-X-07-XX-00-00-08-0

Wire crimp termination  
Accepts wire sizes 16 AWG Max. /20 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH535

Basic Part Number	Pin Length A
3609-1	.200
3609-2	.375
3609-3	.500

#### SPECIFICATIONS:

**Pin Material:** Brass Alloy 360, 1/2 Hard  
(Except where noted)

**Dimensions:** Inches

**Tolerances On:** Lengths:  $\pm .005$   
Diameters:  $\pm .002$   
Angles:  $\pm 2^\circ$



**ORDER CODE:** XXXX - X - XX - XX - 00 - 00 - XX - 0

**BASIC PART #**

**SPECIFY PIN FINISH:**

- 01 200  $\mu$ m TIN/LEAD OVER NICKEL
- ◆ 80 200  $\mu$ m TIN OVER NICKEL (RoHS)
- ◆ 15 10  $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 21 20  $\mu$ m GOLD OVER NICKEL (RoHS)
- ◆ 34 50  $\mu$ m GOLD OVER NICKEL (RoHS)

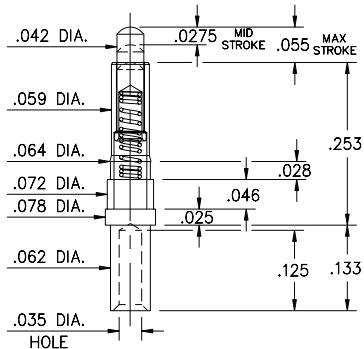


# MALE PCB PINS

## TOOLING FOR CRIMP PINS

### 0962-0-15-20-75-14-11-0

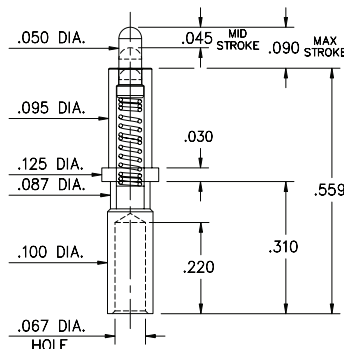
Standard stroke, Wire termination  
Accepts wire sizes 24 AWG Max. /28 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TP1740

### 0855-0-15-20-82-14-11-0

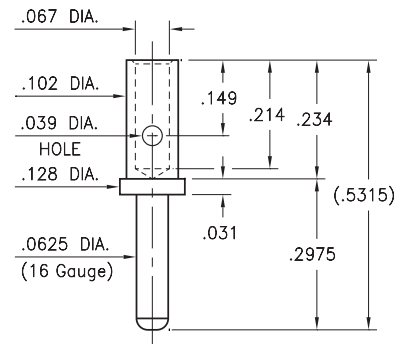
Power spring pin, Wire termination  
Accepts wire sizes 16 AWG Max. /20 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH534

### 3916-0-01-XX-00-00-08-0

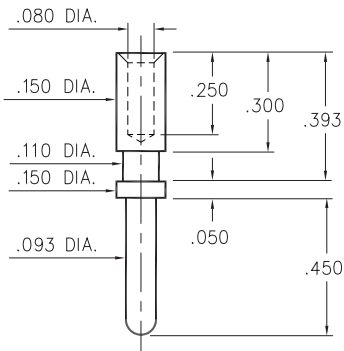
Wire crimp termination  
Accepts wire sizes 16 AWG Max. /20 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH163BLUE  
Daniels Crimp Tool #MH860  
using Daniels Positioner #86-3

### 9092-0-00-XX-00-00-38-0

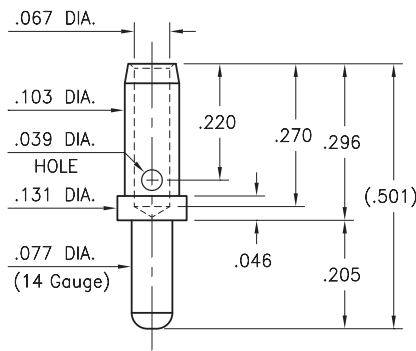
Wire termination  
Accepts wire sizes up to 14 AWG



Daniels Crimp Tool #M309  
using Daniels Positioner #TP1698

### 3914-0-01-XX-00-00-08-0

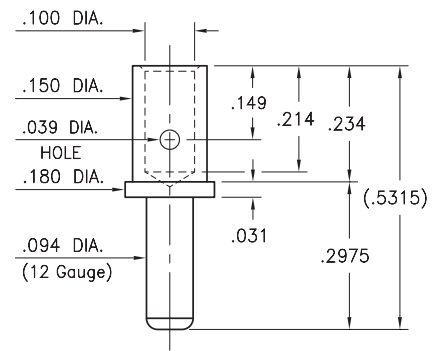
Wire crimp termination  
Accepts wire sizes 14 AWG Max. /16 AWG Min.



Daniels Crimp Tool #AF8  
Positioner #TH163BLUE for 16 AWG wire  
Positioner #TH163YELLOW for 14 AWG wire

### 3912-0-01-XX-00-00-08-0

Wire crimp termination  
Accepts wire sizes 12 AWG Max. /14 AWG Min.



Daniels Crimp Tool #AF8  
using Daniels Positioner #TH163YELLOW

#### Material Specifications:

**Sleeve & Plunger Material:** Copper Alloy  
**Spring Material:** Beryllium Copper or SS 302  
**Sleeve & Plunger Finish:** 20 μ" Gold over Nickel  
**Spring Finish:** 10 μ" Gold over Nickel  
**Dimensions:** Inches  
**Tolerances On:** Lengths: ±.006  
Diameters: ±.002  
Angles: ± 2°



#### Mechanical & Electrical Specifications:

**Durability:** 1,000,000 cycles  
**Rated Current (Free air):**  
Continuous 9 amps @ 10° C temperature rise  
**Contact Resistance:** 20 mΩ max.  
**Environmental Specifications:**  
**Operating temperature range:** -55/+125° C

**75, 82 Springs are not interchangeable**

**Order Code:** 0XXX - X - 15 - 20 - XX - 14 - 11 - 0

**Spring Number** ↑

Spring Number	Mid. Stroke	Max. Stroke	Force @ Mid. Stroke	Initial Force (Pre-Load)
75	.0275	.055	60 g	25 g
82	.045	.090	120 g	25 g

