



# A Series™ Contacts

## Machined and Stamped & Formed Contact Options

Amphenol Sine Systems is your trusted component source for precision connector contacts designed for increased reliability and reduced cost. Our **A Series™ Contacts** are readily available in a wide variety of materials and plating combinations and can be supplied with a number of different contact types. Also available are sealing plug and keying pin variations.

### Machined Contacts

Designed for heavy duty applications, these solid contacts will accommodate greater wire sizes

- Wire Size Range: 4AWG to 30AWG
- Available in Size 4, 8, 12, 16 and 20, in both Pin and Socket
- Current Ratings up to 100A
- Copper Alloy, Nickel-Plated
- Gold plating options available



### Stamped & Formed Contacts

Precision engineered stamped & formed design provides cost effective wire processing, while ensuring high reliability conductor termination and performance

- Wire Size Range: 10AWG to 30AWG
- Available in Size 12, 16 and 20, in both Pin and Socket
- Current Ratings up to 25A
- Copper Alloy, Nickel-Plated
- Gold and Tin plating options available
- Available in Loose Piece (-LP) Bag Packaging



Contact Crimp Specifications [can be found on pgs 10-11](#)

Application Specifications for Stamped & Formed Contacts [can be found on pgs 12-17](#)

## A Series™ Family

### Heavy Duty, Multi-Pin Plastic and Metal Connectors

Amphenol Sine Systems' **A Series™ Family** of sealed, heavy-duty, multi-pin plastic and metal connectors is made up of 20+ core product lines serving many industries and bridges the gap between controlled and harsh environmental conditions to keep you connected. The connectors were developed as a high-performance, cost-effective solution for use with Heavy Equipment, Agricultural, Automotive, Military, Alternate Energy, and other demanding interconnect architectures.



Standard products. Custom solutions  
Customer Service +1 800 394 7732

## A Series™ Contacts - Machined

**Note:** [Machined Crimp Specifications can be found on pgs 10-11.](#)

| Part Number                 | Type | Style    | Contact Size    | Amp  | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-----------------------------|------|----------|-----------------|------|-------------------|-------------------|---------------------|-----------------|
| SC000384-8                  | Pin  | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Gold-Plated     |
| SC000384-8-M1               | Pin  | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Gold-Plated     |
| SC000500-835                | Pin  | Machined | Size 8mm        | 180A | -                 | 35mm²             | -                   | Nickel-Plated   |
| SC000500-850                | Pin  | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Nickel-Plated   |
| SC000511                    | Pin  | Machined | Size 8mm        | 180A | -                 | -                 | -                   | Gold-Plated     |
| AT60-203-04141-4            | Pin  | Machined | Size 4          | 100A | 4AWG              | -                 | -                   | Nickel-Plated   |
| AT60-203-0431-4             | Pin  | Machined | Size 4          | 100A | 4AWG              | -                 | -                   | Gold-Plated     |
| AT60-204-0490               | Pin  | Machined | Size 4          | 100A | 6AWG              | -                 | -                   | Nickel-Plated   |
| SC000345                    | Pin  | Machined | Size 8          | 80A  | 7-10AWG           | -                 | -                   | Silver-Plated   |
| SC000345-141                | Pin  | Machined | Size 8          | 60A  | 7-10AWG           | -                 | -                   | Nickel-Plated   |
| AT60-204-08141-16           | Pin  | Machined | Size 8          | 60A  | 6AWG              | -                 | -                   | Nickel-Plated   |
| AT60-204-08141              | Pin  | Machined | Size 8          | 60A  | 8-10AWG           | -                 | -                   | Nickel-Plated   |
| MP10B23T                    | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Tin-Plated      |
| MP10B23S                    | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Silver-Plated   |
| MP10B23F                    | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold Flash      |
| MP10B23G5                   | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 5µ" Flash  |
| MP10B23G10                  | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 10µ" Flash |
| MP10B23G15                  | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 15µ" Flash |
| MS10B23G30                  | Pin  | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 30µ" Flash |
| SC000892F-10<br>(ATPH Only) | Pin  | Machined | Size 10 (3.0mm) | 30A  | 10-12AWG          | 6.0-4.0mm²        | -                   | Gold-plated     |
| SC000892F-14<br>(ATPH Only) | Pin  | Machined | Size 10 (3.0mm) | 30A  | 12-14AWG          | 4.0-2.0mm²        | -                   | Gold-plated     |
| SC000892S-10<br>(ATPH Only) | Pin  | Machined | Size 10 (3.0mm) | 30A  | 10-12AWG          | 6.0-4.0mm²        | -                   | Silver-plated   |
| SC000892S-14<br>(ATPH Only) | Pin  | Machined | Size 10 (3.0mm) | 30A  | 12-14AWG          | 4.0-2.0mm²        | -                   | Silver-plated   |
| AT60-204-12141-10           | Pin  | Machined | Size 12         | 25A  | 10-12AWG          | -                 | -                   | Nickel-Plated   |
| AT60-204-12141              | Pin  | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Nickel-Plated   |
| AT60-220-1231               | Pin  | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Gold-Plated     |
| AT60-204-12NKIT             | Pin  | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Nickel-Plated   |
| AT60-220-1231-1618          | Pin  | Machined | Size 12         | 25A  | 16-18AWG          | -                 | -                   | Gold-Plated     |
| AT60-220-1231-1820          | Pin  | Machined | Size 12         | 25A  | 18-20AWG          | -                 | -                   | Gold-Plated     |
| AT60-215-16141              | Pin  | Machined | Size 16         | 13A  | 14AWG             | -                 | -                   | Nickel-Plated   |
| AT60-215-1631               | Pin  | Machined | Size 16         | 13A  | 14AWG             | -                 | -                   | Gold-Plated     |
| AT60-202-16NKIT             | Pin  | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-16141              | Pin  | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-1631               | Pin  | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Gold-Plated     |
| AT60-202-16141-22           | Pin  | Machined | Size 16         | 13A  | 22-24AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-1631-22            | Pin  | Machined | Size 16         | 13A  | 22-24AWG          | -                 | -                   | Gold-Plated     |
| AT60-010-20141              | Pin  | Machined | Size 20         | 7.5A | 16-18AWG          | -                 | -                   | Nickel-Plated   |
| AT60-010-2031               | Pin  | Machined | Size 20         | 7.5A | 16-18AWG          | -                 | -                   | Gold-Plated     |
| AT60-202-20NKIT             | Pin  | Machined | Size 20         | 7.5A | 18-22AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-20141              | Pin  | Machined | Size 20         | 7.5A | 20-22AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-2031               | Pin  | Machined | Size 20         | 7.5A | 20-22AWG          | -                 | -                   | Gold-Plated     |
| AT60-202-20141-22           | Pin  | Machined | Size 20         | 7.5A | 22-26AWG          | -                 | -                   | Nickel-Plated   |
| AT60-202-2031-22            | Pin  | Machined | Size 20         | 7.5A | 22-26AWG          | -                 | -                   | Gold-Plated     |
| MP18W23F                    | Pin  | Machined | Size 20         | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold Flash      |
| MP18W23G10                  | Pin  | Machined | Size 20         | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 10µ" Flash |
| MP18W23G15                  | Pin  | Machined | Size 20         | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 15µ" Flash |
| MP18W23G30                  | Pin  | Machined | Size 20         | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 30µ" Flash |
| MP20W23F                    | Pin  | Machined | Size 20         | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold Flash      |
| MP20W23G5                   | Pin  | Machined | Size 20         | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 5µ" Flash  |

| Part Number                 | Type           | Style    | Contact Size    | Amp  | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-----------------------------|----------------|----------|-----------------|------|-------------------|-------------------|---------------------|-----------------|
| MP20W23G10                  | Pin            | Machined | Size 20         | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 10µ" Flash |
| MP20W23G15                  | Pin            | Machined | Size 20         | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 15µ" Flash |
| MP20W23G30                  | Pin            | Machined | Size 20         | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 30µ" Flash |
| MP24W23F                    | Pin            | Machined | Size 20         | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold Flash      |
| MP24W23G5                   | Pin            | Machined | Size 20         | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 5µ" Flash  |
| MP24W23G10                  | Pin            | Machined | Size 20         | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 10µ" Flash |
| MP24W23G15                  | Pin            | Machined | Size 20         | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 15µ" Flash |
| MP24W23G30                  | Pin            | Machined | Size 20         | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 30µ" Flash |
| MP28W23F                    | Pin            | Machined | Size 20         | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold Flash      |
| MP28W23G5                   | Pin            | Machined | Size 20         | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 5µ" Flash  |
| MP28W23G10                  | Pin            | Machined | Size 20         | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 10µ" Flash |
| MP28W23G15                  | Pin            | Machined | Size 20         | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 15µ" Flash |
| MP28W23G30                  | Pin            | Machined | Size 20         | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 30µ" Flash |
| AT60-202-2031-22            | Pin            | Machined | Size 20         | 5A   | 22-26AWG          | -                 | -                   | Gold-Plated     |
| AT60-202-20141-22           | Pin            | Machined | Size 20         | 5A   | 22-26AWG          | -                 | -                   | Nickel-Plated   |
|                             |                |          |                 |      |                   |                   |                     |                 |
| SC000383-8                  | Socket         | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Gold-Plated     |
| SC000445-8                  | Socket         | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Nickel-Plated   |
| SC000501-835                | Socket         | Machined | Size 8mm        | 180A | -                 | 35mm²             | -                   | Nickel-Plated   |
| SC000501-850                | Socket         | Machined | Size 8mm        | 180A | -                 | 50mm²             | -                   | Nickel-Plated   |
| AT62-203-04141              | Socket         | Machined | Size 4          | 100A | 6AWG              | -                 | -                   | Nickel-Plated   |
| AT62-203-04141-4            | Socket         | Machined | Size 4          | 100A | 4AWG              | -                 | -                   | Nickel-Plated   |
| AT62-203-0431-4             | Socket         | Machined | Size 4          | 100A | 4AWG              | -                 | -                   | Gold-Plated     |
| SC000346                    | RADSOK® Socket | Machined | Size 8          | 80A  | 7-10AWG           | -                 | -                   | Silver-Plated   |
| SC000379                    | Socket         | Machined | Size 8          | 60A  | 8-10AWG           | -                 | -                   | Nickel-Plated   |
| AT62-203-08141-16           | Socket         | Machined | Size 8          | 60A  | 6AWG              | -                 | -                   | Nickel-Plated   |
| AT62-203-08141              | Socket         | Machined | Size 8          | 60A  | 8-10AWG           | -                 | -                   | Nickel-Plated   |
| MS10B23T                    | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Tin-Plated      |
| MS10B23S                    | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Silver-Plated   |
| MS10B23F                    | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold Flash      |
| MS10B23G5                   | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 5µ" Flash  |
| MS10B23G10                  | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 10µ" Flash |
| MS10B23G15                  | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 15µ" Flash |
| MS10B23G30                  | Socket         | Machined | Size 2.5mm      | 35A  | 10-12AWG          | -                 | -                   | Gold 30µ" Flash |
| SC000893F-10<br>(ATPH Only) | Socket         | Machined | Size 10 (3.0mm) | 30A  | 10-12AWG          | 6.0-4.0mm²        | -                   | Gold-plated     |
| SC000893F-14<br>(ATPH Only) | Socket         | Machined | Size 10 (3.0mm) | 30A  | 12-14AWG          | 4.0-2.0mm²        | -                   | Gold-plated     |
| SC000893S-10<br>(ATPH Only) | Socket         | Machined | Size 10 (3.0mm) | 30A  | 10-12AWG          | 6.0-4.0mm²        | -                   | Silver-plated   |
| SC000893S-14<br>(ATPH Only) | Socket         | Machined | Size 10 (3.0mm) | 30A  | 12-14AWG          | 4.0-2.0mm²        | -                   | Silver-plated   |
| AT62-203-12141-10           | Socket         | Machined | Size 12         | 25A  | 10-12AWG          | -                 | -                   | Nickel-Plated   |
| AT62-203-12141              | Socket         | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Nickel-Plated   |
| AT62-203-12NKIT             | Socket         | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Nickel-Plated   |
| AT62-210-1231               | Socket         | Machined | Size 12         | 25A  | 12-14AWG          | -                 | -                   | Gold-Plated     |
| AT62-210-1231-1618          | Socket         | Machined | Size 12         | 25A  | 16-18AWG          | -                 | -                   | Gold-Plated     |
| AT62-210-1231-1820          | Socket         | Machined | Size 12         | 25A  | 18-20AWG          | -                 | -                   | Gold-Plated     |
| AT62-209-16141              | Socket         | Machined | Size 16         | 13A  | 14AWG             | -                 | -                   | Nickel-Plated   |
| AT62-209-1631               | Socket         | Machined | Size 16         | 13A  | 14AWG             | -                 | -                   | Gold-Plated     |
| AT62-201-16NKIT             | Socket         | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Nickel-Plated   |
| AT62-201-16141              | Socket         | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Nickel-Plated   |
| AT62-201-1631               | Socket         | Machined | Size 16         | 13A  | 16-20AWG          | -                 | -                   | Gold-Plated     |
| AT62-201-16141-22           | Socket         | Machined | Size 16         | 13A  | 22-24AWG          | -                 | -                   | Nickel-Plated   |

| Part Number       | Type   | Style    | Contact Size | Amp  | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-------------------|--------|----------|--------------|------|-------------------|-------------------|---------------------|-----------------|
| AT62-201-1631-22  | Socket | Machined | Size 16      | 13A  | 22-24AWG          | -                 | -                   | Gold-Plated     |
| AT62-005-20141    | Socket | Machined | Size 20      | 7.5A | 16-18AWG          | -                 | -                   | Nickel-Plated   |
| AT62-005-2031     | Socket | Machined | Size 20      | 7.5A | 16-18AWG          | -                 | -                   | Gold-Plated     |
| AT62-201-20NKIT   | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | -                 | -                   | Nickel-Plated   |
| AT62-201-20141    | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | -                 | -                   | Nickel-Plated   |
| AT62-201-20141-22 | Socket | Machined | Size 20      | 7.5A | 22-26AWG          | -                 | -                   | Nickel-Plated   |
| AT62-201-2031     | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | -                 | -                   | Gold-Plated     |
| AT62-201-203122   | Socket | Machined | Size 20      | 7.5A | 22-26AWG          | -                 | -                   | Gold-Plated     |
| AT62-20-0422      | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | -                 | -                   | Nickel-Plated   |
| AT62-20-0444      | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | -                 | -                   | Gold-Plated     |
| MS18W23F          | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold Flash      |
| MS18W23G10        | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 10µ" Flash |
| MS18W23G15        | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 15µ" Flash |
| MS18W23G30        | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Gold 30µ" Flash |
| MS20W23T          | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Tin-Plated      |
| MS20W23S          | Socket | Machined | Size 20      | 7.5A | 18-20AWG          | 0.75-0.50mm²      | -                   | Silver-Plated   |
| MS20W23F          | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold Flash      |
| MS20W23G5         | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 5µ" Flash  |
| MS20W23G10        | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 10µ" Flash |
| MS20W23G15        | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 15µ" Flash |
| MS20W23G30        | Socket | Machined | Size 20      | 7.5A | 20-22AWG          | 0.34-0.50mm²      | -                   | Gold 30µ" Flash |
| MS24W23T          | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Tin-Plated      |
| MS24W23S          | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Silver-Plated   |
| MS24W23F          | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold Flash      |
| MS24W23G5         | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 5µ" Flash  |
| MS24W23G10        | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 10µ" Flash |
| MS24W23G15        | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 15µ" Flash |
| MS24W23G30        | Socket | Machined | Size 20      | 7.5A | 24-26AWG          | 0.14-0.25mm²      | -                   | Gold 30µ" Flash |
| MS28W23F          | Socket | Machined | Size 20      | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold Flash      |
| MS28W23G5         | Socket | Machined | Size 20      | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 5µ" Flash  |
| MS28W23G10        | Socket | Machined | Size 20      | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 10µ" Flash |
| MS28W23G15        | Socket | Machined | Size 20      | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 15µ" Flash |
| MS28W23G30        | Socket | Machined | Size 20      | 7.5A | 28-30AWG          | 0.05-0.08mm²      | -                   | Gold 30µ" Flash |
| AT62-201-2031-22  | Socket | Machined | Size 20      | 5A   | 22-26AWG          | -                 | -                   | Gold-Plated     |
| AT62-201-20141-22 | Socket | Machined | Size 20      | 5A   | 22-26AWG          | -                 | -                   | Nickel-Plated   |

A Series™ Contacts - Stamped & Formed

**Note:** Stamped & Formed Crimp Specifications can be found on pgs 10-11.

| Part Number     | Type | Style | Contact Size | Amp | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-----------------|------|-------|--------------|-----|-------------------|-------------------|---------------------|-----------------|
| AT60-12-0222    | Pin  | S&F   | Size 12      | 25A | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Nickel-Plated   |
| AT60-12-0222-LP | Pin  | S&F   | Size 12      | 25A | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Nickel-Plated   |
| AT60-12-0244    | Pin  | S&F   | Size 12      | 25A | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Gold-Plated     |
| AT60-12-0244-LP | Pin  | S&F   | Size 12      | 25A | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Gold-Plated     |
| AT60-12-0144    | Pin  | S&F   | Size 12      | 25A | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Gold-Plated     |
| AT60-12-0144-LP | Pin  | S&F   | Size 12      | 25A | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Gold-Plated     |
| AT60-12-0166    | Pin  | S&F   | Size 12      | 25A | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Nickel-Plated   |
| AT60-12-0166-LP | Pin  | S&F   | Size 12      | 25A | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Nickel-Plated   |
| SP12AIT         | Pin  | S&F   | Size 2.5mm   | 23A | 12-14AWG          | -                 | 4.3mm               | Tin-Plated      |
| SP12AIT-10      | Pin  | S&F   | Size 2.5mm   | 23A | -                 | 4.0mm²            | 4.3mm               | Tin-Plated      |
| SP12AIF         | Pin  | S&F   | Size 2.5mm   | 23A | 12-14AWG          | -                 | 4.3mm               | Gold Flash      |
| SP12AIF-10      | Pin  | S&F   | Size 2.5mm   | 23A | -                 | 4.0mm²            | 4.3mm               | Gold Flash      |
| SP12AIG10       | Pin  | S&F   | Size 2.5mm   | 23A | 12-14AWG          | -                 | 4.3mm               | Gold 10µ" Flash |

| Part Number     | Type       | Style | Contact Size | Amp  | Wire Range<br>AWG | Wire Range<br>mm <sup>2</sup> | Insulation OD<br>mm | Plating         |
|-----------------|------------|-------|--------------|------|-------------------|-------------------------------|---------------------|-----------------|
| SP12A1G10-10    | Pin        | S&F   | Size 2.5mm   | 23A  | -                 | 4.0mm <sup>2</sup>            | 4.3mm               | Gold 10μ" Flash |
| SP12A1G15       | Pin        | S&F   | Size 2.5mm   | 23A  | 12-14AWG          | -                             | 4.3mm               | Gold 15μ" Flash |
| SP12A1G15-10    | Pin        | S&F   | Size 2.5mm   | 23A  | -                 | 4.0mm <sup>2</sup>            | 4.3mm               | Gold 15μ" Flash |
| SP12A1G30       | Pin        | S&F   | Size 2.5mm   | 23A  | 12-14AWG          | -                             | 4.3mm               | Gold 30μ" Flash |
| SP12A1G30-10    | Pin        | S&F   | Size 2.5mm   | 23A  | -                 | 4.0mm <sup>2</sup>            | 4.3mm               | Gold 30μ" Flash |
| AT60-14-0122    | Pin        | S&F   | Size 16      | 13A  | 14-18AWG          | 2.0-0.75mm <sup>2</sup>       | 2.40 - 3.81mm       | Nickel-Plated   |
| AT60-14-0122-LP | Pin        | S&F   | Size 16      | 13A  | 14-18AWG          | 2.0-0.75mm <sup>2</sup>       | 2.40 - 3.81mm       | Nickel-Plated   |
| AT60-14-0144    | Pin        | S&F   | Size 16      | 13A  | 14-18AWG          | 2.0-0.75mm <sup>2</sup>       | 2.40 - 3.81mm       | Gold-Plated     |
| AT60-14-0144-LP | Pin        | S&F   | Size 16      | 13A  | 14-18AWG          | 2.0-0.75mm <sup>2</sup>       | 2.40 - 3.81mm       | Gold-Plated     |
| AT60-16-0122    | Pin        | S&F   | Size 16      | 13A  | 16-18AWG          | 1.5-0.75mm <sup>2</sup>       | 1.91 - 3.55mm       | Nickel-Plated   |
| AT60-16-0122-LP | Pin        | S&F   | Size 16      | 13A  | 16-18AWG          | 1.5-0.75mm <sup>2</sup>       | 1.91 - 3.55mm       | Nickel-Plated   |
| AT60-16-0144    | Pin        | S&F   | Size 16      | 13A  | 16-18AWG          | 1.5-0.75mm <sup>2</sup>       | 1.91 - 3.55mm       | Gold-Plated     |
| AT60-16-0144-LP | Pin        | S&F   | Size 16      | 13A  | 16-18AWG          | 1.5-0.75mm <sup>2</sup>       | 1.91 - 3.55mm       | Gold-Plated     |
| AT60-16-0622    | Pin        | S&F   | Size 16      | 13A  | 16-20AWG          | 1.0-0.5mm <sup>2</sup>        | 1.40 - 2.54mm       | Nickel-Plated   |
| AT60-16-0622-LP | Pin        | S&F   | Size 16      | 13A  | 16-20AWG          | 1.0-0.5mm <sup>2</sup>        | 1.40 - 2.54mm       | Nickel-Plated   |
| AT60-16-0644    | Pin        | S&F   | Size 16      | 13A  | 16-20AWG          | 1.0-0.5mm <sup>2</sup>        | 1.40 - 2.54mm       | Gold-Plated     |
| AT60-16-0644-LP | Pin        | S&F   | Size 16      | 13A  | 16-20AWG          | 1.0-0.5mm <sup>2</sup>        | 1.40 - 2.54mm       | Gold-Plated     |
| AT60-16-0322    | Pin        | S&F   | Size 16      | 13A  | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.31 - 1.50mm       | Nickel-Plated   |
| AT60-16-0344    | Pin        | S&F   | Size 16      | 13A  | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.31 - 1.50mm       | Gold-Plated     |
| AT60-16-0377    | Pin        | S&F   | Size 16      | 13A  | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.31 - 1.50mm       | Tin-Plated      |
| AT60-16-0822    | Pin        | S&F   | Size 16      | 13A  | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.31 - 1.50mm       | Nickel-Plated   |
| AT60-16-0844    | Pin        | S&F   | Size 16      | 13A  | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.31 - 1.50mm       | Gold-Plated     |
| SP14M2T         | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Tin-Plated      |
| SP14M2N         | 2 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Nickel-Plated   |
| SP14M2F         | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Gold 1μ" Flash  |
| SP14M2G5        | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Gold 5μ" Flash  |
| SP14M2G10       | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Gold 10μ" Flash |
| SP14M2G15       | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Gold 15μ" Flash |
| SP14M2G30       | 3 Tang Pin | S&F   | Size 16      | 13A  | 14-16AWG          | -                             | 3.2mm               | Gold 30μ" Flash |
| SP16M2T         | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Tin-Plated      |
| SP16M2N         | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Nickel-Plated   |
| SP16M2F         | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Gold Flash      |
| SP16M2G5        | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Gold 5μ" Flash  |
| SP16M2G10       | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Gold 10μ" Flash |
| SP16M2G15       | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Gold 15μ" Flash |
| SP16M2G30       | 3 Tang Pin | S&F   | Size 16      | 13A  | 16-18AWG          | -                             | 3.2mm               | Gold 30μ" Flash |
| SP20M2T         | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Tin-Plated      |
| SP20M2F         | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Gold 1μ" Flash  |
| SP20M2G5        | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Gold 5μ" Flash  |
| SP20M2G10       | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Gold 10μ" Flash |
| SP20M2G15       | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Gold 15μ" Flash |
| SP20M2G30       | 3 Tang Pin | S&F   | Size 16      | 13A  | 20-22AWG          | -                             | 2.5mm               | Gold 30μ" Flash |
| AT60-20-0122    | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.91 - 3.15mm       | Nickel-Plated   |
| AT60-20-0122-LP | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.91 - 3.15mm       | Nickel-Plated   |
| AT60-20-0144    | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.91 - 3.15mm       | Gold-Plated     |
| AT60-20-0144-LP | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.91 - 3.15mm       | Gold-Plated     |
| AT60-20-0222    | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Nickel-Plated   |
| AT60-20-0222-LP | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Nickel-Plated   |
| AT60-20-0244    | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Gold-Plated     |
| AT60-20-0244-LP | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Gold-Plated     |
| AT60-20-0277    | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Tin-Plated      |
| AT60-20-0277-LP | Pin        | S&F   | Size 20      | 7.5A | 16-22AWG          | 1.5-0.35mm <sup>2</sup>       | 1.30 - 2.16mm       | Tin-Plated      |
| AT60-20-0422    | Pin        | S&F   | Size 20      | 7.5A | 20-22AWG          | 0.5-0.35mm <sup>2</sup>       | 1.25 - 1.8mm        | Nickel-Plated   |

| Part Number     | Type       | Style | Contact Size        | Amp  | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-----------------|------------|-------|---------------------|------|-------------------|-------------------|---------------------|-----------------|
| AT60-20-0444    | Pin        | S&F   | Size 20             | 7.5A | 20-22AWG          | 0.5-0.35mm²       | 1.25 - 1.8mm        | Gold-Plated     |
| SP20W2T         | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Tin-Plated      |
| SP20W2N         | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Nickel-Plated   |
| SP20W2F         | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Gold Flash      |
| SP20W2G5        | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Gold 5µ"        |
| SP20W2G10       | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Gold 10µ"       |
| SP20W2G15       | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Gold 15µ"       |
| SP20W2G30       | 3 Tang Pin | S&F   | Size 20             | 5A   | 18-22AWG          | -                 | 2.6mm               | Gold 30µ"       |
| SP24W2T         | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Tin-Plated      |
| SP24W2N         | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Nickel-Plated   |
| SP24W2F         | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Gold Flash      |
| SP24W2G5        | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Gold 5µ" Flash  |
| SP24W2G10       | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Gold 10µ" Flash |
| SP24W2G15       | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Gold 15µ" Flash |
| SP24W2G30       | 3 Tang Pin | S&F   | Size 20             | 5A   | 24-26AWG          | -                 | 2.2mm               | Gold 30µ" Flash |
| SP28W2T         | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Tin-Plated      |
| SP28W2N         | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Nickel-Plated   |
| SP28W2F         | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Gold Flash      |
| SP28W2G5        | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Gold 5µ" Flash  |
| SP28W2G10       | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Gold 10µ" Flash |
| SP28W2G15       | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Gold 15µ" Flash |
| SP28W2G30       | 3 Tang Pin | S&F   | Size 20             | 5A   | 28-30AWG          | -                 | 1.8mm               | Gold 30µ" Flash |
| SC000571T       | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Tin-Plated      |
| SC000571N       | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Nickel-Plated   |
| SC000571F       | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Gold 1µ" Flash  |
| SC000571G5      | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Gold 5µ" Flash  |
| SC000571G10     | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Gold 10µ" Flash |
| SC000571G15     | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Gold 15µ" Flash |
| SC000571G30     | Pin        | S&F   | Size 1.0mm x 0.64mm | 5A   | 20-22AWG          | -                 | 1.8mm               | Gold 30µ" Flash |
|                 |            |       |                     |      |                   |                   |                     |                 |
| AT62-12-0222    | Socket     | S&F   | Size 12             | 25A  | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Nickel-Plated   |
| AT62-12-0222-LP | Socket     | S&F   | Size 12             | 25A  | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Nickel-Plated   |
| AT62-12-0244    | Socket     | S&F   | Size 12             | 25A  | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Gold-Plated     |
| AT62-12-0244-LP | Socket     | S&F   | Size 12             | 25A  | 10-12AWG          | 6.0-4.0mm²        | 3.56 - 5.18mm       | Gold-Plated     |
| AT62-12-0144    | Socket     | S&F   | Size 12             | 25A  | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Gold-Plated     |
| AT62-12-0144-LP | Socket     | S&F   | Size 12             | 25A  | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Gold-Plated     |
| AT62-12-0166    | Socket     | S&F   | Size 12             | 25A  | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Nickel-Plated   |
| AT62-12-0166-LP | Socket     | S&F   | Size 12             | 25A  | 12-14AWG          | 4.0-2.0mm²        | 2.87 - 4.47mm       | Nickel-Plated   |
| SS12A1T         | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Tin-Plated      |
| SS12A1T-10      | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Tin-Plated      |
| SS12A1F         | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold-Flash      |
| SS12A1F-10      | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold-Flash      |
| SS12A1G10       | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 10µ" Flash |
| SS12A1G10-10    | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 10µ" Flash |
| SS12A1G15       | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 15µ" Flash |
| SS12A1G15-10    | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 15µ" Flash |
| SS12A1G30       | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 30µ" Flash |
| SS12A1G30-10    | Socket     | S&F   | Size 2.5mm          | 23A  | 12-14AWG          | -                 | 4.3mm Insul OD      | Gold 30µ" Flash |
| AT62-14-0122    | Socket     | S&F   | Size 16             | 13A  | 14-18AWG          | 2.0-0.75mm²       | 2.40 - 3.81mm       | Nickel-Plated   |
| AT62-14-0122-LP | Socket     | S&F   | Size 16             | 13A  | 14-18AWG          | 2.0-0.75mm²       | 2.40 - 3.81mm       | Nickel-Plated   |
| AT62-14-0144    | Socket     | S&F   | Size 16             | 13A  | 14-18AWG          | 2.0-0.75mm²       | 2.40 - 3.81mm       | Gold-Plated     |
| AT62-14-0144-LP | Socket     | S&F   | Size 16             | 13A  | 14-18AWG          | 2.0-0.75mm²       | 2.40 - 3.81mm       | Gold-Plated     |
| AT62-16-0122    | Socket     | S&F   | Size 16             | 13A  | 16-18AWG          | 1.5-0.75mm²       | 1.91 - 3.55mm       | Nickel-Plated   |



| Part Number     | Type          | Style | Contact Size | Amp  | Wire Range AWG | Wire Range mm² | Insulation OD mm | Plating         |
|-----------------|---------------|-------|--------------|------|----------------|----------------|------------------|-----------------|
| AT62-16-0122-LP | Socket        | S&F   | Size 16      | 13A  | 16-18AWG       | 1.5-0.75mm²    | 1.91 - 3.55mm    | Nickel-Plated   |
| AT62-16-0144    | Socket        | S&F   | Size 16      | 13A  | 16-18AWG       | 1.5-0.75mm²    | 1.91 - 3.55mm    | Gold-Plated     |
| AT62-16-0144-LP | Socket        | S&F   | Size 16      | 13A  | 16-18AWG       | 1.5-0.75mm²    | 1.91 - 3.55mm    | Gold-Plated     |
| AT62-16-0622    | Socket        | S&F   | Size 16      | 13A  | 16-20AWG       | 1.0-0.5mm²     | 1.40 - 2.54mm    | Nickel-Plated   |
| AT62-16-0622-LP | Socket        | S&F   | Size 16      | 13A  | 16-20AWG       | 1.0-0.5mm²     | 1.40 - 2.54mm    | Nickel-Plated   |
| AT62-16-0644    | Socket        | S&F   | Size 16      | 13A  | 18-20AWG       | 1.0-0.5mm²     | 1.40 - 2.54mm    | Gold-Plated     |
| AT62-16-0644-LP | Socket        | S&F   | Size 16      | 13A  | 18-20AWG       | 1.0-0.5mm²     | 1.40 - 2.54mm    | Gold-Plated     |
| AT62-16-0822    | Socket        | S&F   | Size 16      | 13A  | 20-22AWG       | 0.5-0.35mm²    | 1.31 - 1.50mm    | Nickel-Plated   |
| AT62-16-0844    | Socket        | S&F   | Size 16      | 13A  | 20-22AWG       | 0.5-0.35mm²    | 1.31 - 1.50mm    | Gold-Plated     |
| SS14M2T         | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Tin-Plated      |
| SS14M2N         | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Nickel-Plated   |
| SS14M2F         | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Gold Flash      |
| SS14M2G5        | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Gold 5µ" Flash  |
| SS14M2G10       | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Gold 10µ" Flash |
| SS14M2G15       | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Gold 15µ" Flash |
| SS14M2G30       | 3 Tang Socket | S&F   | Size 16      | 13A  | 14-16AWG       | -              | 3.2mm Insul OD   | Gold 30µ" Flash |
| SS16M2T         | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 30µ" Flash |
| SS16M2N         | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Nickel-Plated   |
| SS16M2F         | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 1µ" Flash  |
| SS16M2G5        | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 5µ" Flash  |
| SS16M2G10       | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 10µ" Flash |
| SS16M2G15       | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 15µ" Flash |
| SS16M2G30       | 3 Tang Socket | S&F   | Size 16      | 13A  | 16-18AWG       | -              | 3.2mm Insul OD   | Gold 30µ" Flash |
| SS20M2T         | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Tin-Plated      |
| SS20M2N         | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Nickel-Plated   |
| SS20M2F         | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Gold 1µ" Flash  |
| SS20M2G5        | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Gold 5µ" Flash  |
| SS20M2G10       | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Gold 10µ" Flash |
| SS20M2G15       | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Gold 15µ" Flash |
| SS20M2G30       | 3 Tang Socket | S&F   | Size 16      | 13A  | 20-22AWG       | -              | 2.5mm Insul OD   | Gold 30µ" Flash |
| AT62-20-0122    | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.91 - 3.15mm    | Nickel-Plated   |
| AT62-20-0122-LP | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.91 - 3.15mm    | Nickel-Plated   |
| AT62-20-0144    | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.91 - 3.15mm    | Gold-Plated     |
| AT62-20-0144-LP | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.91 - 3.15mm    | Gold-Plated     |
| AT62-20-0222    | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.30 - 2.16mm    | Nickel-Plated   |
| AT62-20-0222-LP | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.30 - 2.16mm    | Nickel-Plated   |
| AT62-20-0244    | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.30 - 2.16mm    | Gold-Plated     |
| AT62-20-0244-LP | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.30 - 2.16mm    | Gold-Plated     |
| AT62-20-0277    | Socket        | S&F   | Size 20      | 7.5A | 16-22AWG       | 1.5-0.35mm²    | 1.30 - 2.16mm    | Tin-Plated      |
| AT62-20-0422    | Socket        | S&F   | Size 20      | 7.5A | 20-22AWG       | 0.5-0.35mm²    | 1.25 - 1.8mm     | Nickel-Plated   |
| AT62-20-0444    | Socket        | S&F   | Size 20      | 7.5A | 20-22AWG       | 0.5-0.35mm²    | 1.25 - 1.8mm     | Gold-Plated     |
| SS20W2T         | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Tin-Plated      |
| SS20W2N         | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Nickel-Plated   |
| SS20W2F         | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Gold Flash      |
| SS20W2G5        | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Gold 5µ"        |
| SS20W2G10       | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Gold 10µ"       |
| SS20W2G15       | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Gold 15µ"       |
| SS20W2G30       | 3 Tang Socket | S&F   | Size 20      | 5A   | 18-22AWG       | -              | 2.6mm            | Gold 30µ"       |
| SS24W2T         | 3 Tang Socket | S&F   | Size 20      | 5A   | 24-26AWG       | -              | 2.2mm            | Tin-Plated      |
| SS24W2N         | 3 Tang Socket | S&F   | Size 20      | 5A   | 24-26AWG       | -              | 2.2mm            | Nickel-Plated   |
| SS24W2F         | 3 Tang Socket | S&F   | Size 20      | 5A   | 24-26AWG       | -              | 2.2mm            | Gold Flash      |
| SS24W2G5        | 3 Tang Socket | S&F   | Size 20      | 5A   | 24-26AWG       | -              | 2.2mm            | Gold 5µ"        |
| SS24W2G10       | 3 Tang Socket | S&F   | Size 20      | 5A   | 24-26AWG       | -              | 2.2mm            | Gold 10µ"       |

| Part Number | Type          | Style | Contact Size        | Amp | Wire Range<br>AWG | Wire Range<br>mm² | Insulation OD<br>mm | Plating         |
|-------------|---------------|-------|---------------------|-----|-------------------|-------------------|---------------------|-----------------|
| SS24W2G15   | 3 Tang Socket | S&F   | Size 20             | 5A  | 24-26AWG          | -                 | 2.2mm               | Gold 15µ"       |
| SS24W2G30   | 3 Tang Socket | S&F   | Size 20             | 5A  | 24-26AWG          | -                 | 2.2mm               | Gold 30µ"       |
| SS28W2T     | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Tin-Plated      |
| SS28W2N     | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Nickel-Plated   |
| SS28W2F     | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Gold Flash      |
| SS28W2G5    | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Gold 5µ"        |
| SS28W2G10   | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Gold 10µ"       |
| SS28W2G15   | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Gold 15µ"       |
| SS28W2G30   | 3 Tang Socket | S&F   | Size 20             | 5A  | 28-30AWG          | -                 | 1.8mm               | Gold 30µ"       |
| SC000572T   | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Tin-Plated      |
| SC000572N   | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Nickel-Plated   |
| SC000572F   | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Gold 1µ" Flash  |
| SC000572G5  | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Gold 5µ" Flash  |
| SC000572G10 | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Gold 10µ" Flash |
| SC000572G15 | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Gold 15µ" Flash |
| SC000572G30 | Socket        | S&F   | Size 1.0mm x 0.64mm | 5A  | 20-22AWG          | -                 | 1.8mm Insul OD      | Gold 30µ" Flash |

A Series™ Contacts - Tooling

| Part Number     | Tool Name                                       | Style    | Contact Size      | Wire Range   | Material       | Color  |
|-----------------|-------------------------------------------------|----------|-------------------|--------------|----------------|--------|
| QXRT08          | Contact Extraction Tool                         | Machined | Size 3.6mm        | -            | Aluminum Alloy | Black  |
| QXRT08-ATPH3    | Contact Extraction Tool, ATPH Series™ Only      | Machined | Size 10 (3.0mm)   | -            | Aluminum Alloy | Black  |
| AT11-027-0405   | Contact Extraction Tool                         | Machined | Size 4            | 4AWG         | Plastic        | Black  |
| AT114008        | Contact Extraction Tool                         | Machined | Size 8            | 8-10AWG      | Plastic        | Green  |
| QXATHP-50       | Contact Extraction Tool                         | Machined | Size 8mm          | -            | -              | -      |
| MF3-3966        | Contact Locator for Hand Crimp Tool M300-25A    | Machined | Size 12           | 10AWG        | -              | -      |
| 96-978-22       | Crimper and Die                                 | Machined | Size 3.6mm-10mm   | 10mm²-185mm² | -              | -      |
| M300BT          | Hand Crimp Tool                                 | Machined | -                 | 6-14AWG      | -              | -      |
| AUTK-12         | Hand Crimp Tool                                 | Machined | Size 12           | 10-18AWG     | -              | -      |
| AUTK-16         | Hand Crimp Tool                                 | Machined | Size 16           | -            | -              | -      |
| AUTK-20         | Hand Crimp Tool                                 | Machined | Size 20           | 12-26AWG     | -              | -      |
| MF3-3959        | Hand Crimp Tool                                 | Machined | Size 20           | 12-26AWG     | -              | -      |
| M300-25A        | Hand Crimp Tool w MF3-3966 Locator              | Machined | Size 12           | 10-18AWG     | -              | -      |
| FT-ATS26P       | ATS Series™ Instalation Fixture for ATS04-26P   | Machined | -                 | -            | Resin          | White  |
| WA23            | Pneumatic Crimp Tool                            | Machined | -                 | 8-0000AWG    | -              | -      |
| CA-5E12         | Pneumatic Crimp Tool                            | Machined | Size 12/16/20     | 12-26AWG     | -              | -      |
| MF3-3960        | Pneumatic Crimp Tool                            | Machined | Size 12/16/20     | 12-26AWG     | -              | -      |
| WA27-300BT-EP   | Pneumatic Crimp Tool for M300BT                 | Machined | -                 | -            | -              | -      |
| TP968           | Single Position Head for M300BT Hand Crimp Tool | Machined | Size 8/10/12/14   | -            | -              | -      |
| CA-5D12         | Universal Hand Crimp Tool                       | Machined | Size 12/16/20     | 12-26AWG     | -              | -      |
| AUTK-100        | Universal Heavy Duty Contact Crimping Tool Kit  | Machined | Size 12/16/20     | 12-26AWG     | -              | -      |
| WA23-138DA      | WA23 Die Assembly for Pneumatic Crimp Tool      | Machined | Size 4            | 4AWG         | -              | Silver |
| WA23-184DA      | WA23 Die Assembly for Pneumatic Crimp Tool      | Machined | Size 2            | 2AWG         | -              | -      |
| WA23-2          | WA23 Die Assembly for Pneumatic Crimp Tool      | Machined | Size 8            | 8AWG         | -              | Silver |
| WA23-3          | WA23 Die Assembly for Pneumatic Crimp Tool      | Machined | Size 6            | 6AWG         | -              | -      |
| WA23-8          | WA23 Die Assembly for Pneumatic Crimp Tool      | Machined | Size 1            | 1AWG         | -              | -      |
| WA23-10         | WA23 Locator for Pneumatic Crimp Tool           | Machined | Size 6            | 6AWG         | -              | Blue   |
| WA23-11         | WA23 Locator for Pneumatic Crimp Tool           | Machined | Size 4            | 4AWG         | -              | Blue   |
|                 |                                                 |          |                   |              |                |        |
| QXRT16          | Contact Extraction Tool (Size 16 Contacts Only) | S&F      | Size 16           | -            | Aluminum Alloy | Black  |
| MF3-3990        | Crimp Die                                       | S&F      | Size 16           | 20-22AWG     | -              | -      |
| MF3-3957        | Crimp Die Press Applicator                      | S&F      | Size 16/20        | 16-20AWG     | -              | -      |
| MF3-4017-G or K | Crimp Die Press Applicator                      | S&F      | Size 1.0 x 0.64mm | 20-22AWG     | -              | -      |
| MF3-4018-G or K | Crimp Die Press Applicator                      | S&F      | Size 1.0 x 0.64mm | 20-22AWG     | -              | -      |



| Part Number     | Tool Name                  | Style | Contact Size | Wire Range                          | Material | Color |
|-----------------|----------------------------|-------|--------------|-------------------------------------|----------|-------|
| MF3-3973-G or K | Crimp Die Press Applicator | S&F   | Size 12      | 12AWG                               | -        | -     |
| MF3-3985-G or K | Crimp Die Press Applicator | S&F   | Size 12      | 10-12AWG                            | -        | -     |
| MF3-3950-G or K | Crimp Die Press Applicator | S&F   | Size 16      | 18-20AWG                            | -        | -     |
| MF3-3953-G or K | Crimp Die Press Applicator | S&F   | Size 16      | 16-18AWG                            | -        | -     |
| MF3-3975-G or K | Crimp Die Press Applicator | S&F   | Size 16      | 14-16AWG                            | -        | -     |
| MF3-3964-G or K | Crimp Die Press Applicator | S&F   | Size 16/20   | 16-20AWG                            | -        | -     |
| MF3-3974-G or K | Crimp Die Press Applicator | S&F   | Size 20      | 20AWG                               | -        | -     |
| MF3-3976-G or K | Crimp Die Press Applicator | S&F   | Size 20      | 20-22AWG                            | -        | -     |
| MF3-3978-G or K | Crimp Die Press Applicator | S&F   | Size 20      | 20-22AWG                            | -        | -     |
| ATT-8M-01       | Contact Crimp Tool         | S&F   | Size 8       | 6mm <sup>2</sup> /10mm <sup>2</sup> | -        | -     |
| ATT-8M-02       | Contact Crimp Tool         | S&F   | Size 8       | 16mm <sup>2</sup> Wire              | -        | -     |
| ATT-12-00       | Contact Crimp Tool         | S&F   | Size 12      | 12-14AWG                            | -        | -     |
| ATT-12-01       | Contact Crimp Tool         | S&F   | Size 12      | 10AWG/6mm <sup>2</sup> /12AWG       | -        | -     |
| ATT-16-00       | Contact Crimp Tool         | S&F   | Size 16      | 14AWG/16AWG/18AWG                   | -        | -     |
| ATT-16-01       | Contact Crimp Tool         | S&F   | Size 16      | 16AWG/18AWG/20AWG                   | -        | -     |
| ATT-1612-03     | Contact Crimp Tool         | S&F   | Size 12/16   | 14AWG/20AWG/22AWG                   | -        | -     |
| ATT-20-00       | Contact Crimp Tool         | S&F   | Size 20      | 16AWG/18AWG/20AWG                   | -        | -     |
| MF3-3954        | Contact Crimp Tool         | S&F   | Size 16      | 14-20AWG                            | -        | -     |
| MF3-3962        | Contact Crimp Tool         | S&F   | Size 2.5mm   | -                                   | -        | -     |
| MF3-3958        | Contact Crimp Tool         | S&F   | Size 20      | 20-28AWG                            | -        | -     |

|                   |                                      |           |            |   |                |         |
|-------------------|--------------------------------------|-----------|------------|---|----------------|---------|
| ATRT-100          | Contact and Wedglock Extraction Tool | Universal | -          | - | Steel          | Silver  |
| AT11-337-1205     | Contact Extraction Tool              | Universal | Size 12    | - | Plastic        | Orange  |
| AT11-310-1605     | Contact Extraction Tool              | Universal | Size 16    | - | Plastic        | Lt Blue |
| AT11-240-2005     | Contact Extraction Tool              | Universal | Size 20    | - | Plastic        | Red     |
| QXRT20-ATS26P     | ATS Series™ Contact Extraction Tool  | Universal | Size 20    | - | Aluminum Alloy | Black   |
| ISRT20            | Contact Insertion Tool               | Universal | Size 20    | - | Plastic        | Red     |
| AT13-215-1605     | Keying Pin                           | Universal | Size 16    | - | Thermoplastic  | White   |
| AT13-216-2005     | Keying Pin                           | Universal | Size 20    | - | Thermoplastic  | Red     |
| AT13-217-1605     | Locking Seal Plug                    | Universal | Size 16    | - | Thermoplastic  | Grey    |
| AT13-217-1605-SR  | Locking Seal Plug                    | Universal | Size 16    | - | Thermoplastic  | Red     |
| ATM13-217-2005    | Locking Seal Plug                    | Universal | Size 20    | - | Thermoplastic  | Grey    |
| ATM13-217-2005-SR | Locking Seal Plug                    | Universal | Size 20    | - | Thermoplastic  | Blue    |
| A114017           | Seal Plug                            | Universal | Size 12/16 | - | Thermoplastic  | White   |
| A114017-SR        | Seal Plug                            | Universal | Size 16    | - | Thermoplastic  | Black   |
| CA-4020-59        | Seal Plug                            | Universal | Size 16/20 | - | Plastic        | White   |
| AT13-204-2005     | Seal Plug                            | Universal | Size 20    | - | Thermoplastic  | White   |
| AT13-204-2005-SR  | Seal Plug                            | Universal | Size 20    | - | Thermoplastic  | Black   |
| A114019           | Seal Plug                            | Universal | Size 4     | - | Thermoplastic  | Red     |
| A114018           | Seal Plug                            | Universal | Size 8     | - | Thermoplastic  | White   |

A Series™ Contacts - Machined Crimp Specifications

| Product Series                                    | Position                                                            | Contact Size         | Pin PN             | Socket PN          | Plating       | Wire Range | Recommended Strip Length mm | Crimp Tensile Reference N | Max Rated Amperage |
|---------------------------------------------------|---------------------------------------------------------------------|----------------------|--------------------|--------------------|---------------|------------|-----------------------------|---------------------------|--------------------|
| ATM<br>Duramate AHDP                              | All<br>20, 21, 29, 33, 35, 47                                       | Size 20              | AT60-010-2031      | AT62-005-2031      | Gold-Plated   | 16-18AWG   | 3.96-5.54mm                 | 89N                       | 7.5A               |
|                                                   |                                                                     |                      | AT60-010-20141     | AT62-005-20141     | Nickel-Plated | 16-18AWG   | 3.96-5.54mm                 | 89N                       | 7.5A               |
|                                                   |                                                                     |                      | AT60-202-2031      | AT62-201-2031      | Gold-Plated   | 20AWG      | 3.96-5.54mm                 | 89N                       | 7.5A               |
|                                                   |                                                                     |                      | AT60-202-20141     | AT62-201-20141     | Nickel-Plated | 20AWG      | 3.96-5.54mm                 | 89N                       | 7.5A               |
|                                                   |                                                                     |                      | AT60-202-2031-22   | AT62-202-2031-22   | Gold-Plated   | 20AWG      | 4.50-5.50mm                 | 35-22N                    | 7.5A               |
|                                                   |                                                                     |                      | AT60-202-20141-22  | AT62-201-20141-22  | Nickel-Plated | 20AWG      | 4.50-5.50mm                 | 35-22N                    | 7.5A               |
| AHD<br>AT<br>ATV<br>Duramate AHDP/AHDM            | 9<br>All<br>All<br>6, 7, 14, 18, 19, 20, 21, 23, 27, 29, 31, 35, 47 | Size 16              | AT60-215-1631      | AT62-209-1631      | Gold-Plated   | 14AWG      | 6.35-7.92mm                 | 311N                      | 13A                |
|                                                   |                                                                     |                      | AT60-215-16141     | AT62-209-16141     | Nickel-Plated | 14AWG      | 6.35-7.92mm                 | 311N                      | 13A                |
|                                                   |                                                                     |                      | AT60-202-1631      | AT62-201-1631      | Gold-Plated   | 16-20AWG   | 6.35-7.92mm                 | 156-89N                   | 13A                |
|                                                   |                                                                     |                      | AT60-202-16141     | AT62-201-16141     | Nickel-Plated | 16-20AWG   | 6.35-7.92mm                 | 156-89N                   | 13A                |
|                                                   |                                                                     |                      | AT60-202-1631-20   | AT62-201-1631-20   | Gold-Plated   | 18-20AWG   | 6.35-7.92mm                 | 89N                       | 13A                |
|                                                   |                                                                     |                      | AT60-202-16141-22  | AT62-201-16141-22  | Nickel-Plated | 22-24AWG   | 6.35-7.92mm                 | 35-22N                    | 13A                |
| AHD<br>ATP<br>ATHD-12P/-12S<br>Duramate AHDP/AHDM | 6<br>All<br>1<br>7, 8, 9, 14, 16, 18, 19, 21, 27, 29                | Size 12              | AT60-204-12141-10  | AT62-203-12141-10  | Nickel-Plated | 10-12AWG   | 5.64-7.21mm                 | 400-334N                  | 25A                |
|                                                   |                                                                     |                      | AT60-220-1231      | AT62-220-1231      | Gold-Plated   | 12-14AWG   | 5.64-7.21mm                 | 334-311N                  | 25A                |
|                                                   |                                                                     |                      | AT60-204-12141     | AT62-203-12141     | Nickel-Plated | 12-14AWG   | 5.64-7.21mm                 | 334-311N                  | 25A                |
|                                                   |                                                                     |                      | AT60-220-1231-1618 | AT62-210-1231-1618 | Gold-Plated   | 16-18AWG   | 5.64-7.21mm                 | 156-111N                  | 25A                |
|                                                   |                                                                     |                      |                    |                    |               |            |                             |                           |                    |
| ATHD-8P/-8S<br>Duramate AHDP/AHDM                 | 1<br>9, 18                                                          | Size 8               | AT60-204-08141     | AT62-203-08141     | Nickel-Plated | 8-10AWG    | 10.92-12.5mm                | 556-400N                  | 60A                |
|                                                   |                                                                     |                      |                    |                    |               |            |                             |                           |                    |
| ATHD-4P/-4S<br>Duramate AHDP/AHDM                 | 1<br>6, 7, 9, 14                                                    | Size 4               | AT60-204-0490      | AT62-203-04141     | Nickel-Plated | 6AWG       | 10.92-12.5mm                | 1334N                     | 100A               |
|                                                   |                                                                     |                      |                    |                    |               |            |                             |                           |                    |
| Duramate AHDP/AHDM                                | 7 (CL22) Only<br>7 Only                                             | Size 4<br>Size 3.6mm | AT60-204-04141-4   | AT62-203-04141-4   | Nickel-Plated | 4AWG       | 10.92-12.5mm                | 1334N                     | 100A               |
|                                                   |                                                                     |                      | SC000345           | SC000346           | Silver Plated | 7-10AWG    | 10.92-12.5mm                | 556-400N                  | 80A                |

A Series™ Contacts - Stamped & Formed Crimp Specifications

| Contact Size | Pin PN       | Socket PN    | Insulation Dia Range mm (in) | Wire Size | Crimp Height mm (+/-0.12) | Crimp Width mm (+/-0.18) | Crimp Tensile Reference Lbs (N) |
|--------------|--------------|--------------|------------------------------|-----------|---------------------------|--------------------------|---------------------------------|
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 4.0mm²    | 2.24mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 12AWG     | 2.03mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 3.0mm²    | 2.03mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 2.5mm²    | 1.88mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 14AWG     | 1.78mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-01xx | AT62-12-01xx | 2.87-4.47mm (0.113-0.176in)  | 2.0mm²    | 1.78mm                    | 3.18mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-02xx | AT62-12-02xx | 3.56-5.18mm (0.140-0.204in)  | 6.0mm²    | 2.72mm                    | 3.56mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-02xx | AT62-12-02xx | 3.56-5.18mm (0.140-0.204in)  | 10AWG     | 2.51mm                    | 3.56mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-02xx | AT62-12-02xx | 3.56-5.18mm (0.140-0.204in)  | 5.0mm²    | 2.51mm                    | 3.56mm                   | 70Lbs (311N)                    |
| Size 12      | AT60-12-02xx | AT62-12-02xx | 3.56-5.18mm (0.140-0.204in)  | 4.0mm²    | 2.16mm                    | 3.56mm                   | 70Lbs (311N)                    |
|              |              |              |                              |           |                           |                          |                                 |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 14AWG     | 1.40mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 2.0mm²    | 1.40mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 1.5mm²    | 1.35mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 16AWG     | 1.27mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 1.0mm²    | 1.27mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 18AWG     | 1.24mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 2.41-3.81mm (0.095-0.150in)  | 0.75mm²   | 1.22mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 14AWG     | 1.40mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 2.0mm²    | 1.40mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 1.5mm²    | 1.35mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 16AWG     | 1.27mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 1.0mm²    | 1.27mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 18AWG     | 1.24mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-01xx | AT62-16-01xx | 1.90-3.5mm (0.075-0.140in)   | 0.75mm²   | 1.22mm                    | 2.39mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 16AWG     | 1.27mm                    | 2.01mm                   | 25Lbs (111N)                    |

| Contact Size | Pin PN       | Socket PN    | Insulation Dia Range mm (in) | Wire Size           | Crimp Height mm (+/-0.12) | Crimp Width mm (+/-0.18) | Crimp Tensile Reference Lbs (N) |
|--------------|--------------|--------------|------------------------------|---------------------|---------------------------|--------------------------|---------------------------------|
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 1.0mm <sup>2</sup>  | 1.27mm                    | 2.01mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 18AWG               | 1.24mm                    | 2.01mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 0.75mm <sup>2</sup> | 1.22mm                    | 2.01mm                   | 25Lbs (111N)                    |
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 20AWG               | 1.22mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 16      | AT60-16-06xx | AT62-16-06xx | 1.40-2.54mm (0.055-0.100in)  | 0.50mm <sup>2</sup> | 1.14mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 16      | AT60-16-08xx | AT62-16-08xx | 1.20-2.10mm (0.047-0.083in)  | 20AWG               | 1.01mm                    | 1.80mm                   | 13Lbs (60N)                     |
| Size 16      | AT60-16-08xx | AT62-16-08xx | 1.20-2.10mm (0.047-0.083in)  | 0.50mm <sup>2</sup> | 1.01mm                    | 1.80mm                   | 13Lbs (60N)                     |
| Size 16      | AT60-16-08xx | AT62-16-08xx | 1.20-2.10mm (0.047-0.083in)  | 22AWG               | 0.95mm                    | 1.80mm                   | 9Lbs (40N)                      |
| Size 16      | AT60-16-08xx | AT62-16-08xx | 1.20-2.10mm (0.047-0.083in)  | 0.35mm <sup>2</sup> | 0.95mm                    | 1.80mm                   | 9Lbs (40N)                      |
|              |              |              |                              |                     |                           |                          |                                 |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 1.5mm <sup>2</sup>  | 1.47mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 16AWG               | 1.27mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 1.0mm <sup>2</sup>  | 1.27mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 18AWG               | 1.24mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 0.75mm <sup>2</sup> | 1.22mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 0.60mm <sup>2</sup> | 1.07mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 20AWG               | 0.99mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 0.50mm <sup>2</sup> | 0.97mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 22AWG               | 0.94mm                    | 2.01mm                   | 10Lbs (45N)                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 1.91-3.15mm (0.075-0.125in)  | 0.35mm <sup>2</sup> | 0.94mm                    | 2.01mm                   | 10Lbs (45N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 1.5mm <sup>2</sup>  | 1.47mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 16AWG               | 1.27mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 1.0mm <sup>2</sup>  | 1.27mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 18AWG               | 1.24mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 0.75mm <sup>2</sup> | 1.22mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 0.60mm <sup>2</sup> | 1.07mm                    | 2.01mm                   | 20Lbs (89N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 20AWG               | 0.99mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 0.50mm <sup>2</sup> | 0.97mm                    | 2.01mm                   | 15Lbs (67N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 22AWG               | 0.94mm                    | 2.01mm                   | 10Lbs (45N)                     |
| Size 20      | AT60-20-02xx | AT62-20-02xx | 1.30-2.16mm (0.051-0.085in)  | 0.35mm <sup>2</sup> | 0.94mm                    | 2.01mm                   | 10Lbs (45N)                     |

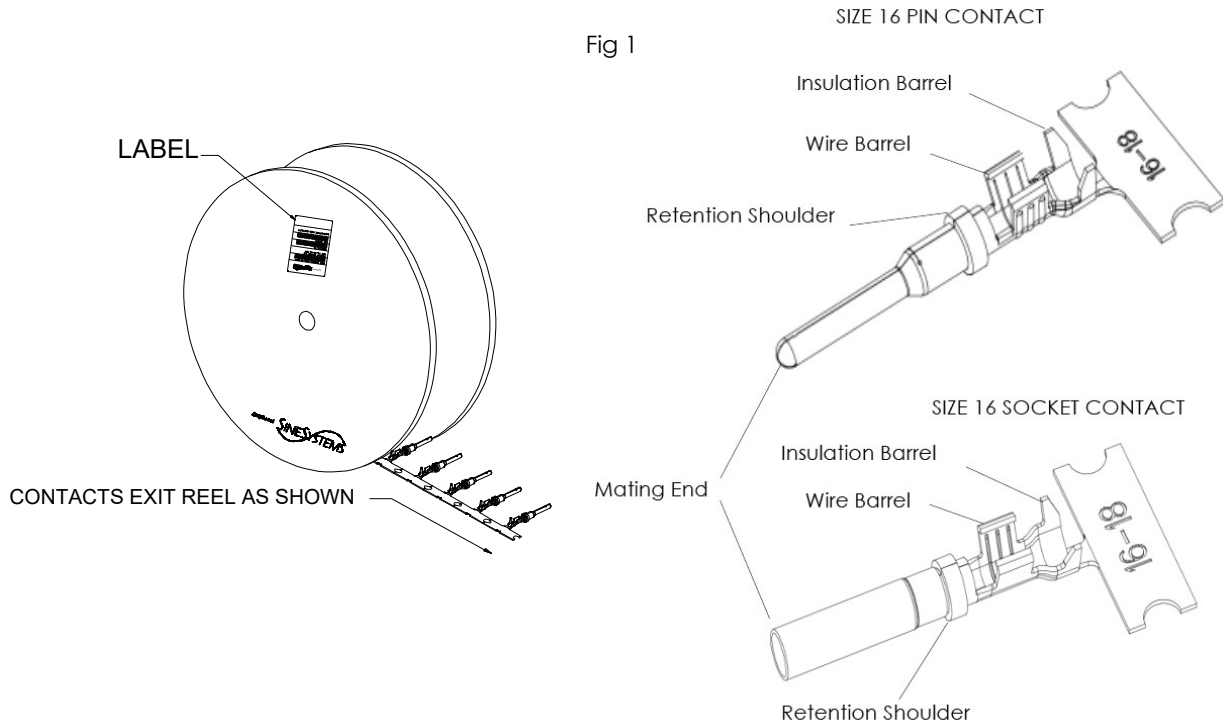
# Application Specification for Stamped & Formed Contacts

Precision engineered stamped & formed design provides cost effective wire processing, while ensuring high reliability conductor termination and performance

- Wire Size Range: 10AWG to 22AWG (6.0 - 0.35mm<sup>2</sup>)
- Available in Size 12, 14, 16 and 20 contacts, in both Pin and Socket
- Current Ratings up to 25A
- Copper Alloy, Nickel-Plated
- Gold plating options available



Fig 1



## 1. Introduction

This documentation covers requirements for use of Amphenol size 16 stamped and formed pin and socket contacts. These contacts are used in any Amphenol connectors having cavities that fit size 16 contacts. **(See Fig 1)** Each contact consists of a wire barrel, insulation barrel, retention shoulder, and mating end. The socket features a protective sleeve. The contacts are available strip-fed form for crimping using a hand tool or automatic machine.

## 2. Reference Material

### 2.1. Customer Assistance

Part Numbers (listed below) are representative of Amphenol size 12, 16 and 20 stamped & formed pin and socket contacts. Use of these numbers will identify the product line and help you to obtain product and tooling information. This information is available on our website at [www.amphenol-sine.com](http://www.amphenol-sine.com)

**Pin:** AT60-12-01xx, AT60-12-02xx, AT60-14-01xx, AT60-16-01xx, AT60-16-06xx, AT60-16-08xx, AT60-20-01xx, AT60-20-02xx

**Socket:** AT62-12-01xx, AT62-12-02xx, AT62-14-01xx, AT62-16-01xx, AT62-16-06xx, AT62-16-08xx, AT62-20-01xx, AT62-20-02xx

### 2.2. DRAWINGS

Customer drawings for product part numbers are available from [www.amphenol-sine.com](http://www.amphenol-sine.com). The information contained in the customer drawings takes priority.

### 3. Requirements

#### 3.1. Storage

##### A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the product material.

##### B. Shelf Life

The product should remain in the shipping containers until ready for use to prevent deformation to components. The product should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

##### C. Reeled Contacts

When using reeled contacts, store coil wound reels horizontally and traverse wound reels vertically.

##### D. Chemical Exposure

Do not store product near any chemical listed below as they may cause stress corrosion cracking in the material.

- Alkalies Ammonia Citrates Phosphates Citrates Sulfur Compounds
- Amines Carbonates Nitrites Sulfur Nitrites Tartrates

#### 3.2. Operating Temperature

These contacts are designed to operate in a temperature range of -55 to 125°C [-67°F to 257°F].

#### 3.3. Material

The contacts are made of copper alloy. Plating material is provided on the contact-specific customer drawing.

#### 3.4. Wire Size And Preparation

The contacts accept stranded wire sizes and insulation diameters using wire standards in **Table 1**. For insulation diameter per contact, refer to the customer drawing for the contact. The wire must be stripped within the dimensions given in the table below. Special wire type which may require special applicator tooling settings, crimp requirements are not covered in this specification.

Table 1

| Contact Size | Pin PN       | Socket PN    | Wire Size AWG (mm <sup>2</sup> )         | Insulation Dia Range mm (in)    | Recomm. Strip Length mm (in)     |
|--------------|--------------|--------------|------------------------------------------|---------------------------------|----------------------------------|
| Size 12      | AT60-12-01xx | AT62-12-01xx | 12-14 AWG (4.0 - 2.0mm <sup>2</sup> )    | 2.87 - 4.47mm (0.113 - 0.176in) | 5.72 - 7.00mm (0.225 - 0.275in)  |
|              | AT60-12-02xx | AT62-12-02xx | 10AWG (6.0 - 4.0mm <sup>2</sup> )        | 3.56 - 5.18mm (0.140 - 0.204in) | 5.72 - 7.00mm (0.225 - 0.275in)  |
| Size 16      | AT60-14-01xx | AT62-14-01xx | 14 - 18AWG (2.0 - 0.75mm <sup>2</sup> )  | 2.41 - 3.81mm (0.095 - 0.150in) | 3.81 - 5.08mm (0.150 - 0.200in)  |
|              | AT60-16-01xx | AT62-16-01xx | 14 - 18AWG (2.0 - 0.75mm <sup>2</sup> )  | 1.90 - 3.55mm (0.075 - 0.140in) | 3.81 - 5.08mm (0.150 - 0.200in)  |
|              | AT60-16-06xx | AT62-16-06xx | 16 - 20 AWG (1.0 - 0.5mm <sup>2</sup> )  | 1.40 - 2.54mm (0.055 - 0.100in) | 3.81 - 5.08mm (0.150 - 0.200in)  |
|              | AT60-16-08xx | AT62-16-08xx | 20 - 22AWG (0.5 - 0.35mm <sup>2</sup> )  | 1.20 - 2.10mm (0.047 - 0.083in) | 3.81 - 5.08 mm (0.150 - 0.200in) |
| Size 20      | AT60-20-01xx | AT62-20-01xx | 16 - 22AWG (1.5 - 0.35mm <sup>2</sup> )  | 1.91 - 3.15mm (0.075 - 0.125in) | 3.81 - 5.08mm (0.150 - 0.200in)  |
|              | AT60-20-02xx | AT62-20-02xx | 16 - 22 AWG (1.5 - 0.35mm <sup>2</sup> ) | 1.30 - 2.16mm (0.051 - 0.085in) | 3.81 - 5.08mm (0.150 - 0.200in)  |
|              | AT60-20-04xx | AT62-20-04xx | 20 - 22 AWG (1.5 - 0.35mm <sup>2</sup> ) | 1.25 - 1.8mm (0.049 - 0.071in)  | 3.81 - 5.08mm (0.150 - 0.200in)  |

#### 3.5. Crimp

The contact must be crimped to the wire according to instructions packaged with the tooling. These requirements apply equally to the pin contact and the socket contact.

#### BELLMOUTH

The flare that is formed on the edge of the conductor crimp acts as a funnel for the wire strands. This funnel reduces the possibility that a sharp edge on the conductor crimp will cut or nick the wire strands. A rear bellmouth is required on the conductor crimp. A front bellmouth is optional. Caution: Excessively large bellmouths will reduce crimp area and reduce pull forces. See [Fig 2](#) for bellmouth specifications.

**A. Cutoff Tab**

This is the material that protrudes outside the insulation crimp after the terminal is separated from the carrier strip. A cut-off tab that is too long may expose a terminal outside the housing and it may fail electrical spacing requirements. In most situations, a tool is setup to provide a cut-off tab that shall not exceed the value indicated in [Fig 2](#).

**CAUTION:** Burrs on the cut-off tab are not allowed as they have the potential to cut mat seals.

**B. Wire Barrel Seam**

The wire barrel crimp must form a closed seam over the entire length of the wire barrel. (See [Fig 3](#))

**C. Wire Barrel Crimp**

The crimp applied to the wire barrel portion of the contact must be the most compressed area. All conductors within the wire barrel crimp must show evidence of compression. Good compression is guaranteed by following the given crimp dimensions, Figure 3. The crimp barrel is filled with the conductor strands. All conductor strands within the wire crimp must show evidence of compression. Voids due to unequal roll-in of the crimp barrel legs, uneven distribution of strands or unfavorable tolerance set of wire cross section area, crimp height and material thickness, are permissible. The crimped area must be symmetrical on both sides of the wire barrel. The thickness of the wall must be uniform. See 114-18022-10 for more information on how to make and evaluate F-crimp cross sections. The crimp barrel inside wall is formed to the shape of the strands for intimate contact. All existing wire strands are enclosed within the wire barrel. Any stranding outside the crimp barrel or broken strands outside the wire crimp are not permissible.

If low compression occurs, the number of strands has to be checked. To avoid over compression, which would favor wire barrel flash, the wire crimp height may not be beyond the limitation. All conductors must be centered within and held firmly inside the wire barrel. No strands can be folded back over the wire insulation. There must be no evidence of loose wire strands or wire strands visible in the seam. The wire insulation must not enter the contact wire barrel. (See [Fig 3](#)) For wire sizes, equal to or less than 14 AWG, the crimp is acceptable when each tip of the wire barrel wraps inward to form a curl that touches the inside of the wire barrel. (See [Fig 3](#))

The wire barrel crimp height and width must be within the dimensions provided in the [A Series™ Contacts - Stamped & Formed Crimp Specifications chart on page 10](#).

**D. Insulation Barrel Crimp**

The insulation barrel shall not have burrs. The insulation barrel crimp shall grip the wire insulation firmly.

The insulation barrel crimp (including the cutoff tab) must be equal to or less than the wire insulation outside diameter.

The wire stripping tool may leave corrugated indentations on the surface of the wire insulation. This is especially severe with cross-linked polyethylene (high-temperature) wire insulation. If the wire is positioned with these indentations at the connector wire seal, leakage may result. The wire insulation surface must be smooth and free of indentations within the area described in [Fig 3](#).

There may be a slight deformation of the wire insulation. There may be skewing of the wire insulation.

**Wire Barrel Flash**

Wire barrel flash is the formation that may appear on one side of the wire barrel as the result of the crimping process. It must not exceed the dimension provided in [Fig 2](#).

There must be no cracking at the bottom of the wire barrel—independent of the size of the flash.

**Bend Allowance**

The force applied during crimping may cause some bending between the crimped wire barrel and the mating portion of the contact. Such deformation is acceptable within the limits provided in [Fig 2](#).

The up-and-down bend of the crimped portion of the contact, including the cutoff tab and burr, and the side-to-side bend of the crimped contact must not be bent beyond the limits given.



Fig 2

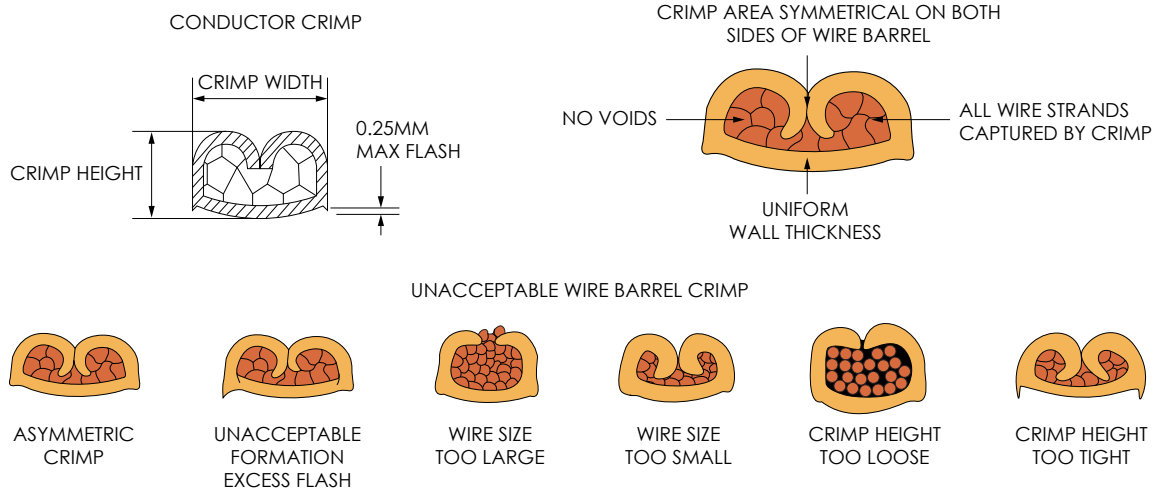
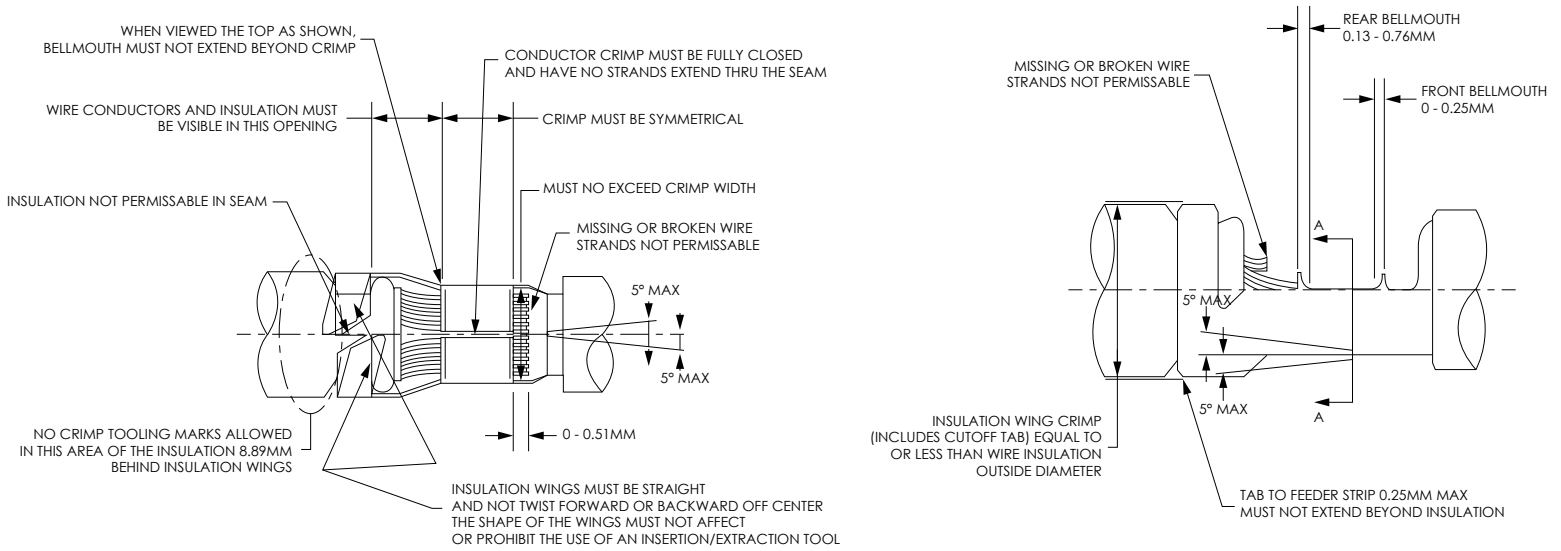
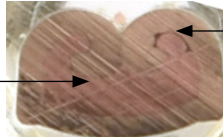
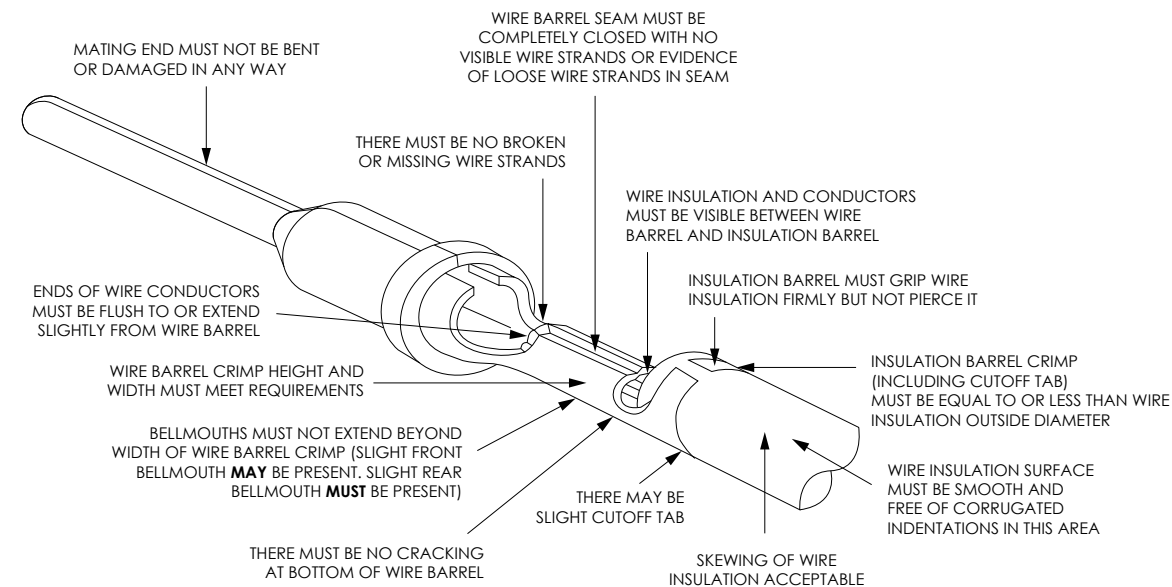


Fig 3

| Contact Size | Pin PN       | Socket PN    | Wire Size AWG / mm² |                                                                                                                                                                                         |                                                                                                                                                                                                     |
|--------------|--------------|--------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Size 12      | AT60-12-01xx | AT62-12-01xx | < 14AWG             |                                                                                                                                                                                         |                                                                                                                                                                                                     |
| Size 16      | AT60-14-01xx | AT62-14-01xx | < 18AWG             | <div><div>NO VOIDS IN CRIMP COMPRESSION AREA</div><div><div>SMALL VOIDS ACCEPTABLE</div></div></div> |                                                                                                                                                                                                     |
|              | AT60-16-01xx | AT62-16-01xx |                     |                                                                                                                                                                                         |                                                                                                                                                                                                     |
|              | AT60-16-06xx | AT62-16-06xx |                     |                                                                                                                                                                                         |                                                                                                                                                                                                     |
| Size 20      | AT60-20-01xx | AT62-20-01xx |                     |                                                                                                                                                                                         | <div><div>TIPS WRAP INWARD AND TOUCH INSIDE OF WIRE BARREL (ALL OTHER REQUIREMENTS APPLY)</div><div></div></div> |
|              | AT60-20-02xx | AT62-20-02xx |                     |                                                                                                                                                                                         |                                                                                                                                                                                                     |
| Size 20      | AT60-20-04xx | AT62-20-04xx |                     |                                                                                                                                                                                         |                                                                                                                                                                                                     |



## 5. Procedure

General Measurement and Evaluation Requirements. See **Fig 4**

Crimp Height Measurement (Anvil Flash Evaluation)

**Step 1.** Complete tool set-up procedure.

**Step 2.** Crimp a minimum of 5 samples.

**Step 3.** Place the flat blade of the crimp micrometer across the center of the dual radii of the conductor crimp. Do not take the measurement near the conductor bell mouth (see Figure 4 5).

**Step 4.** Rotate the micrometer dial until the point contacts the bottom most radial surface. If using a calliper, be certain not to measure the conductor anvil flash (extrusions) of the crimp.

Fig 4

