



# Terminals, Kits and Tools

|                                        |          |              |           |
|----------------------------------------|----------|--------------|-----------|
| <b>Glossary of Product Terminology</b> | <b>2</b> | <b>Kits</b>  | <b>79</b> |
| <b>Terminals</b>                       | <b>6</b> | <b>Tools</b> | <b>81</b> |

For more than 30 years, 3M has been a leading supplier of Scotchlok terminals, disconnects, connectors and tools for use in the assembly and maintenance of electrical systems. Thousands of satisfied customers know our products for:

- Effective and reliable performance, being UL Listed and CSA Certified, where appropriate;
- A variety of types, sizes and materials meeting a broad application range, including the demands of temperature and weather;
- Design features assuring easy installation of 3M products — positive and easy wire insertion, elimination of strand hang-ups and wire twisting, and easy insulation entry.

These are a few of the characteristics that make the installer's job easier.



## ? Frequently Asked Questions

**What does the insulation grip do?**

The insulation grip provides a “second” crimp on the wire insulation. It provides additional wire strain relief. It's excellent for high-vibration applications.

**Which 3M tools can I use with 3M terminals?**

The handy reference guide on page 81 gives you a variety of choices of tools to use with 3M terminals.

**What's the difference between insulated and fully-insulated disconnects?**

Insulated disconnects have barrel insulation only, and fully-insulated disconnects are insulated from the barrel to the receptacle/tab.

**What temperatures do 3M terminals withstand?**

Non-insulated 3M terminals withstand temperatures up to 347°F (175°C). Insulated 3M terminals withstand temperatures up to 221°F (105°C).

# Glossary of Product Terminology

**Adapters** - To interconnect two connectors already attached to wires.

**Block Fork** - Designed to use in terminal block because sides lie flat against barrier portion of terminal block.

**Bullet Style** - Similar advantages as disconnects but are rounded. Gives reliable in-line connection because parts are made to have holding friction when joined. Usually for automotive use.

**Butt** - Uses chamfered barrel ends to provide fast, easy wire insertion from both ends and a built-in wire stop for correct positioning. Must be crimped at both ends.

**Closed-End** - Used in situations requiring pigtail of two or more wires.

**Flanged Fork** - Gives the benefit of both the block and locking forks. Stays secure should screw loosen. Has tipped-up ends.

**Fork** - Allows rapid connection of wire. Usually used on free-standing studs.

**Heavy-Duty** - Products of heavier than normal gauge material. Commonly used by railroads.

**Hook** - Combines the security of the ring with the convenience of the forks.

**Locking Fork** - The spring-like tongue locks in place around the stud even when mount screw is not tightened. Extra force is required to remove from stud.

**Parallel** - Similar to butt with overlapped wires and single crimp in center of connector. Used where space is limited.

**Pins** - For installation in compression blocks. Used in Europe for terminating stranded wire.

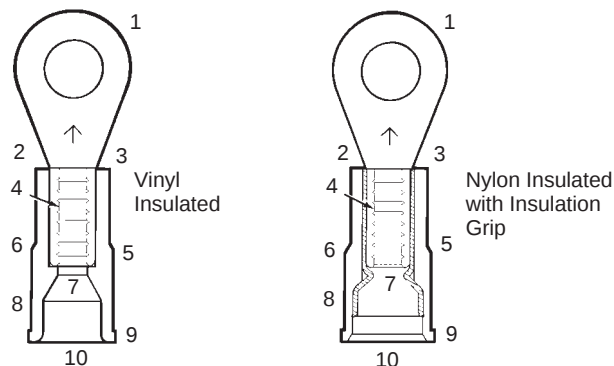
**Quick Connect (Disconnect)** - Attached to mating part by tongue of female part slipping over male tab. Use of dents and rolled edges on female part provides excellent holding force, while allowing easy and quick disconnect. They are flat.

**Ring** - The standard style of tongue; the safest and most reliable. It cannot be removed unless mounting screw is removed.

**Tab** - Uses mounting hole for rivet or screw.

**Tap** - No wire stripping is necessary; just lay wire in connector and crimp. Connection is made.

## Standard Terminal Construction



3M Terminals provide a variety of design features assuring consistently effective, reliable performance and easy installation.

Please refer to the illustrations at the numbered locations for the attributes described below.

1. One-piece, burr-free construction provides maximum electrical conductivity. Electrical bright-tin plating gives maximum corrosion resistance. Annealing relieves stress points and assures maximum installed strength.
2. Barrel-to-pad transition design minimizes flexing and bending.
3. Open-end design permits visual inspection of wire location before and after crimping.
4. Maximum hold on wire comes from multiple "V" grooves in #26-4 AWG parts, resulting in excellent current flow.
5. Injection-molded insulations on terminals are the highest quality in the industry.
  - 221°F (105°C) rated, tough, resistant electrical grade materials
  - Molding ensures consistent wall thickness for maximum reliability after crimping
  - Molding allows funnel barrel construction for easier installation
  - Molding offers the crimp ridge and non-slip ridge
6. Crimp ridge designed for positive location of tool on terminal barrel, resulting in few miscrimps.
7. Funnel barrel construction provides:
  - Positive, easy wire insertion
  - No hang-ups of wire strands
  - Wire twisting not necessary
8. Nylon-insulated terminals, with grip, feature a brass sleeve. Sleeve provides optimum grip on insulation, strain relief and vibration protection. Brass sleeve is recessed, which provides excellent flash-over protection.
9. Non-slip ridge so tool slides to correct position for a proper crimp and better workmanship.
10. Beveled leading edge for easy wire insulation entry.

## Barrel Styles

### Non-insulated butted seam

The most economical terminal, it is used where special performance or installation characteristics are not needed. Beveled mouth facilitates wire insertion. Maximum temperature for bare terminals: 347°F (175°C).



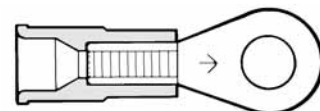
### Non-insulated brazed seam

Beveled mouth facilitates wire insertion. Can be crimped anywhere on barrel surface. Silver brazed seam will not open under crimping pressure or operating stresses. Unlike butted seam parts, stranded wire cannot escape barrel confines during, or after, crimping. Maximum temperature for bare terminals: 347°F (175°C).



### Vinyl insulated brazed and butted seams

Used where insulated barrel is necessary and desirable. Terminal consists of brazed or butted part with flared, rigid molded polyvinyl chloride sleeve, securely attached and funneled for easy wire entry. Wire insulation positions itself against funnel portion of vinyl sleeve, eliminating strand hang-up. Crimping barrel and flared portion of sleeve provide excellent electrical contact plus mechanical stress relief at junction of insulation and barrel. Insulation has a non-slip ridge for ease of positioning crimping tool.

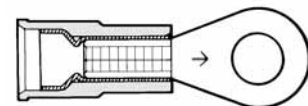


Industry standard color coding indicates wire range. Insulators are rated at a continuous operating temperature range from -40°F to 221°F (-40°C to 105°C).

**UL Listed and CSA Certified for 600V building wire and 1,000V signs and lighting fixtures (luminaries).**

### Nylon insulated butted seam with insulation grip

Used where insulated barrel and positive insulation grip are necessary or desirable. Terminal consists of butted seam part with flared, seamless brass sleeve securely attached and covered with flared, molded nylon sleeve. Wire insulation positions itself against funnel portion of brass sleeve. Crimping barrel and flared portion of sleeve provide excellent electrical contact plus mechanical stress relief at junction of insulation and barrel. Positioning crimp tool is nearly mistake proof due to a "step" in nylon insulation.



Industry standard color coding indicates wire range. Insulators are rated at a continuous operating temperature range from -40°F to 221°F (-40°C to 105°C).

**UL Listed and CSA Certified for 600V building wire and 1,000V signs and lighting fixtures (luminaries).**

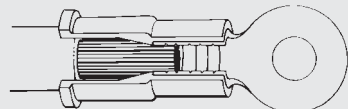
## Installation Procedure

**Funnel Barrel Feature** provides an excellent electrical and mechanical connection.

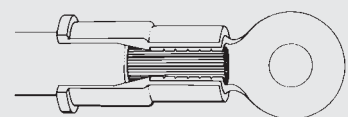
- Funnel design guides wire into position.



- No wire strand hang-up as the wire is inserted, giving a fast, positive installation.

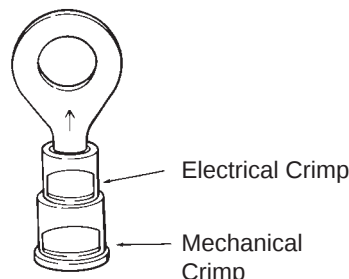


- Wire is in place, ready for crimping.



For maximum crimping performance, barrel of connector must be properly indexed in the crimp tool station.

Correct crimping is important to assure a strong connection



### Insulated Terminals and Connectors:

### Non-Insulated Terminals and Connectors:

Indent should be opposite the barrel seam.



Correct



Incorrect

## Heat Shrink Terminals, Connectors and Disconnects

3M Heat Shrink pre-insulated terminals, connectors and disconnects protect against the most challenging of environments, making the best moisture protection available. They offer several advantages over conventional unsealed products.

**Corrosion Resistance** – The adhesive-lined heat shrink material, when properly crimped and shrunk, provides a seal that is resistant to water, salt, steam and other related contaminants.

**Improved Mechanical Performance** – The adhesive-lined heat shrink tubing adheres, when shrunk, to both the connector and the wire insulation, providing improved pullout strength and strain relief.

**Durable Heat Shrink Tubing** – Tough heat shrink

tubing effectively resists abrasion, scoring, cut-through, and the effects of long term aging.

**Versatile and Easy to Use** – 3M heat shrink terminals, splices and disconnects are available in wire sizes 22–10 AWG, and can be installed easily with a recommended tool and heat source. The connectors are color-coded for wire range identification, and the transparent tubing allows for visual inspection.

## High Temperature Terminals and Connectors

3M high temperature terminals and connectors are constructed of steel with a nickel plating. Their temperature rating for continuous use at 900°F (482°C) makes them perfect for use in ovens, motors, light fixtures and other applications where other connectors would corrode or melt.

**There is no applicable UL or CSA standard for high temperature steel parts.**

### Application Procedure for Heat Shrink Products:

1. Strip wires to appropriate length as indicated on package label.
2. Insert wire into terminal and crimp with correct station of a recommended tool.
3. Apply heat with a recommended heat source.



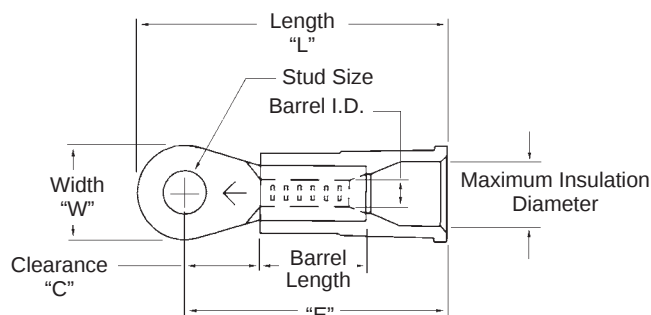
## Standard Crimp Terminal and Connector Specifications

### Materials

Crimp terminals and connectors are to be burr-free, annealed and bright-tin plated ETP copper. Barrels shall be 0.25" long with brazed seams where specified. Insulation grip sleeves are to be tin-plated brass and attached securely to the barrel. Terminal insulators are to be **molded** polyvinyl chloride or nylon, UL Listed and CSA Certified for 600V in building wire and 1,000V in signs and lighting fixtures (luminaries). Connector insulators are to be **extruded** polyvinyl chloride or nylon with a temperature rating of 221°F (105°C).

### Construction

All insulated terminals are to have funnel entry construction to prevent strand hang-up and a crimp ridge for proper tool location. Nylon insulated terminals and connectors are to have butted seam barrels with insulation grip sleeves. All terminal barrels are to have multiple "V" grooves for maximum conductor retention.



**Note:** All dimensions are measured in inches.

# 3M™ Terminal Numbering System

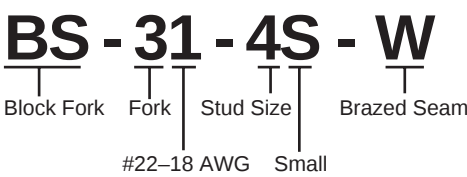
## Terminal Numbering System

| Features                                                                                 |                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                             |                                                                                                                                                                                                     |           |                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prefix —                                                                                 | Terminal Style                                                                                                                                                                                                                                            | Wire Gauge                                                                                                                                                                                                                                                                                                                                        | Additions —                                                                                                                                                                                                                 | Stud Size                                                                                                                                                                                           | Pattern   | Diameter or Blade Size —                                                                                                                                                                                                                                                           | Terminal Construction                                                                                                                                                                                                                                      |
| BS = Block Fork<br>HT = High Temperature<br>L = Long Neck<br>SS = Snap Fork<br>T = T-Tap | 1 = Ring Tongue<br>2 = Flanged Fork<br>3 = Fork or 3-Way<br>4 = Hook or 4-Way<br>5 = Flag Ring<br>6 = Butt<br>7 = Disconnect or Closed End<br>8 = Bullet Style or Pin<br>9 = Parallel<br>17 = Ring Tongue Tab<br>75 = Disconnect Flag<br>77 = Multi-Stack | 0 = #26–24 AWG, Yellow<br>1 = #22–18 AWG, Red<br>2 = #16–14 AWG, Blue<br>3 = #12–10 AWG, Yellow<br>4 = #8 AWG, Red<br>5 = #6 AWG, Blue<br>6 = #4 AWG, Yellow<br>12 = #12–10, Yellow<br>16 = #16–14, Blue<br>18 = #18–10, White<br>22 = #22–18, Red or #22–14, White<br>23 = #16–12 AWG, Yellow or #14–12 AWG, Red<br>0-3 = #16–14, 0.156 diameter | C = Locking Clip<br>F = Female<br>FF = Double Female<br>I = Interlock Barrel<br>M = Male<br>MF = Male Female<br>MM = Double Male<br>O = Open Barrel<br>SC = Semi-Closed<br>WN = Brazed Seam Nylon<br>WP = Brazed Seam Vinyl | 0 = #0<br>2 = #2<br>4 = #4<br>6 = #6<br>8 = #8<br>10 = #10<br>14 = #1/4"<br>26 = #2, 4, 6<br>38 = #3/8"<br>56 = #5/16<br>58 = #5/8"<br>75 = #3/4"<br>500 = #1/2"<br>610 = #6, 8, 10<br>716 = #7/16" | S = Small | 110-20 = 0.110 Blade 0.020 Stock<br>110-32 = 0.110 Blade 0.032 Stock<br>156 = 0.156 Bullet Diameter<br>180 = 0.180 Bullet Diameter<br>187-20 = 0.187 Blade 0.020 Stock<br>187-32 = 0.187 Blade 0.032 Stock<br>250-32 = 0.250 Blade 0.032 Stock<br>375-50 = 0.375 Blade 0.050 Stock | No Code = Butted Seam<br>B = Insulation Grip<br>L = Fully Insulated<br>M = Moisture Resistant<br>N = Nylon Insulation<br>NS = Nylon w/Steel Sleeve<br>P = Vinyl Insulated<br>S = Seamless<br>SN = Seamless Nylon<br>SP = Seamless Vinyl<br>W = Brazed Seam |

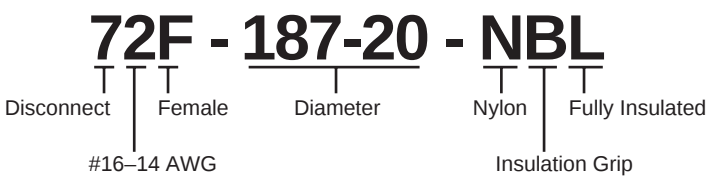
## Map of Numbering System

### Examples:

Catalog Number: BS-31-4S-W  
Non-Insulated Brazed Seam Block Fork



Catalog Number: 71F-187-20-NBL  
Nylon Insulated with Insulation Grip Female Disconnect



## Insulator Color Coding

- Yellow (26-24 AWG)
- Red (22-18 AWG)
- Blue (16-14 AWG)
- Yellow (12-10 AWG)
- Red (8 AWG)
- Blue (6 AWG)
- Yellow (4 AWG)

## Non-Insulated Brazed Seam Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|------|-----------|---------------|-------------|
| 64-W           | 29099         | 8                | 0.81 | 0.050     | 0.38          | 0.175       |
| 65-W           | 29127         | 6                | 1.02 | 0.050     | 0.47          | 0.250       |
| 66-W           | 29151         | 4                | 1.13 | 0.075     | 0.53          | 0.280       |



64-W  
8

Wire Range



65-W  
6



66-W  
4

## Nylon Insulated Seamless Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 61-S           | 28262         | 22-18            | 1.02 | 0.031     | 0.28          | 0.062       | 0.125                       |
| 62-S           | 28660         | 16-14            | 1.02 | 0.031     | 0.30          | 0.095       | 0.155                       |
| 63-S           | 28869         | 12-10            | 1.20 | 0.038     | 0.38          | 0.142       | 0.218                       |

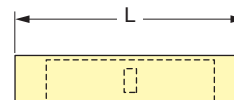


61-S  
22-18

Wire Range



62-S  
16-14



63-S  
12-10

## Nylon Insulated with Insulation Grip Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 60-NB*         | 27857         | 26-24            | 0.88 | 0.020     | 0.12          | 0.030       | 0.093                       |
| 61-NB          | 28258         | 22-18            | 1.00 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 62-NB          | 28656         | 16-14            | 1.00 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 63-NB          | 28865         | 12-10            | 1.15 | 0.040     | 0.25          | 0.135       | 0.250                       |

\*Not UL Listed or CSA Certified

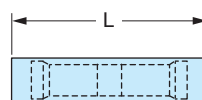


60-NB  
26-24

Wire Range



61-NB  
22-18



62-NB  
16-14



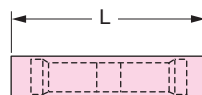
63-NB  
12-10

## Nylon Insulated with Insulation Grip, Moisture-Resistant Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 61-NBM         | 34197         | 22-18            | 1.00 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 62-NBM         | 34198         | 16-14            | 1.00 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 63-NBM         | 34199         | 12-10            | 1.15 | 0.040     | 0.25          | 0.135       | 0.250                       |

Note: Connectors are filled with moisture-resistant grease

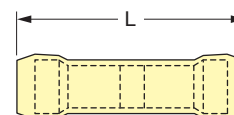


61-NBM  
22-18

Wire Range



62-NBM  
16-14

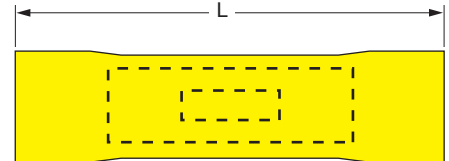
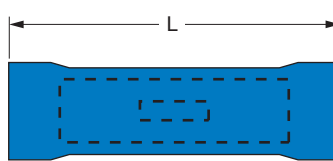
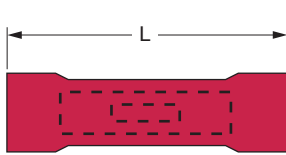


63-NBM  
12-10

## Vinyl Insulated Brazed Seam Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 64-WP          | 29849         | 8                | 1.40 | 0.050     | 0.38          | 0.175       | 0.385                       |
| 65-WP          | 29850         | 6                | 1.69 | 0.050     | 0.47          | 0.250       | 0.440                       |
| 66-WP          | 29851         | 4                | 2.12 | 0.075     | 0.53          | 0.280       | 0.515                       |

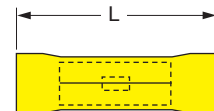
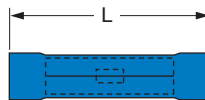
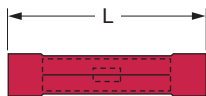


Wire Range      **64-WP**      **65-WP**      **66-WP**  
                             8                                6                                4

## Vinyl Insulated Butted Seam Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 61-P           | 28259         | 22-18            | 1.00 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 62-P           | 28657         | 16-14            | 1.00 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 63-P           | 28866         | 12-10            | 1.02 | 0.040     | 0.25          | 0.135       | 0.250                       |

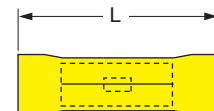
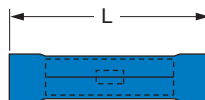
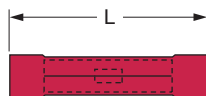


Wire Range      **61-P**      **62-P**      **63-P**  
                             22-18                                16-14                                12-10

## Vinyl Insulated Seamless Butt Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 61-SP          | 29686         | 22-18            | 1.06 | 0.031     | 0.28          | 0.062       | 0.145                       |
| 62-SP          | 29452         | 16-14            | 1.12 | 0.031     | 0.30          | 0.095       | 0.170                       |
| 63-SP          | 29453         | 12-10            | 1.26 | 0.038     | 0.38          | 0.142       | 0.250                       |



Wire Range      **61-SP**      **62-SP**      **63-SP**  
                             22-18                                16-14                                12-10

# Vinyl Insulated Butted Seam Parallel Connectors

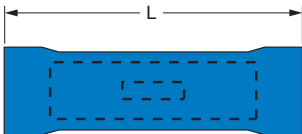


| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 91-P           | 28263         | 22-18            | 0.69 | 0.030     | 0.31          | 0.070       | 0.145                       |
| 92-P           | 28661         | 16-14            | 0.69 | 0.030     | 0.31          | 0.090       | 0.170                       |
| 93-P           | 28870         | 12-10            | 0.77 | 0.040     | 0.31          | 0.135       | 0.250                       |

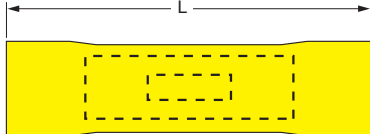


**91-P**  
22-18

Wire Range



**92-P**  
16-14



**93-P**  
12-10

## Non-Insulated Seamless Parallel Connectors

| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 92-S           | 29479         | 16-14            | 0.31 | 0.024     | 0.25          | 0.091       | 0.170                       |
| 93-S           | 29476         | 12-10            | 0.34 | 0.024     | 0.25          | 0.152       | 0.250                       |



**92-S**  
16-14

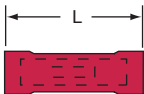
Wire Range



**93-S**  
12-10

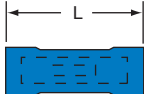
## Non-Insulated Butted Seam Parallel Connectors

| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 91             | 28264         | 22-18            | 0.31 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 92             | 28662         | 16-14            | 0.31 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 93             | 28871         | 12-10            | 0.31 | 0.040     | 0.25          | 0.135       | 0.250                       |

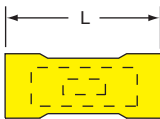


**91**  
22-18

Wire Range



**92**  
16-14



**93**  
12-10

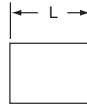
## Non-Insulated Brazed Seam Parallel Connectors

| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 94-W           | 29101         | 8                | 0.40 | 0.050     | 0.25          | 0.075       | 0.145                       |
| 95-W           | 29129         | 6                | 0.45 | 0.050     | 0.25          | 0.250       | 0.170                       |
| 96-W           | 29594         | 4                | 0.53 | 0.075     | 0.25          | 0.280       | 0.250                       |



94-W  
8

Wire Range



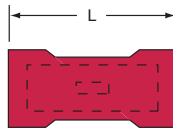
95-W  
6



96-W  
4

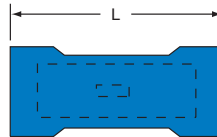
## Vinyl Insulated Brazed Seam Parallel Connectors

| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 94-WP          | 29852         | 8                | 0.98 | 0.050     | 0.40          | 0.175       | 0.385                       |
| 95-WP          | 29853         | 6                | 1.20 | 0.050     | 0.45          | 0.250       | 0.440                       |
| 96-WP          | 29854         | 4                | 1.45 | 0.075     | 0.54          | 0.280       | 0.515                       |

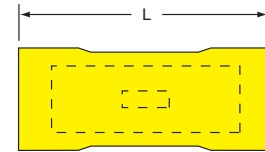


94-WP  
8

Wire Range



95-WP  
6



96-WP  
4

## Recommended Stranded Wire Combinations

91 and 91P  
1 #22 to 1 #22, 20, 18, 16  
1 #20 to 1 #20, 18, 16  
1 #18 to 1 #18  
Min. CMA: 1280, Max. CMA: 3600

93-S  
1 #18 to 1 #18, 16, 14, 12, 10  
1 #16 to 1 #16, 14, 12, 10  
1 #14 to 1 #14, 12, 10  
1 #12 to 1 #12  
Min. CMA: 3240, Max. CMA: 14490

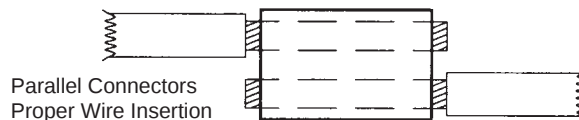
96-W and 96-WP  
1 #12 to 1 #12, 10, 8, 6, 4  
1 #10 to 1 #10, 8, 6, 4  
1 #8 to 1 #8, 6  
Min. CMA: 13060, Max. CMA: 52020

92, 92-S and 92-P  
1 #22 to 1 #22, 20, 18, 16, 14  
1 #20 to 1 #20, 18, 16, 14  
1 #18 to 1 #18, 16, 14  
1 #16 to 1 #16  
Min. CMA: 1280, Max. CMA: 5730

94-W and 94-WP  
1 #18 to 1 #18, 16, 14, 12, 10, 8  
1 #16 to 1 #16, 14, 12, 10, 8  
1 #14 to 1 #14, 12, 10, 8  
1 #12 to 1 #12, 10  
Min. CMA: 3240, Max. CMA: 20620

93 and 93-P  
1 #18 to 1 #18, 16, 14, 12, 10  
1 #16 to 1 #16, 14, 12, 10  
1 #14 to 1 #14, 12  
Min. CMA: 3240, Max. CMA: 12860

95-W and 95-WP  
1 #14 to 1 #14, 12, 10, 8, 6  
1 #12 to 1 #12, 10, 8, 6  
1 #10 to 1 #10, 8, 6  
1 #8 to 1 #8  
Min. CMA: 8220, Max. CMA: 36620



# Vinyl Insulated Butted Seam 3-Way Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 322-P          | 29376         | 22-18            | 1.23 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 316-P          | 29377         | 16-14            | 1.23 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 312-P          | 29378         | 12-10            | 1.39 | 0.040     | 0.25          | 0.135       | 0.250                       |



# Nylon Insulated with Insulation Grip 3-Way Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 322-NB         | 29373         | 22-18            | 1.21 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 316-NB         | 29374         | 16-14            | 1.25 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 312-NB         | 29375         | 12-10            | 1.39 | 0.040     | 0.25          | 0.135       | 0.250                       |



## Vinyl Insulated Butted Seam 4-Way Connectors



| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 422-P          | 29388         | 22-18            | 1.48 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 416-P          | 29389         | 16-14            | 1.48 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 412-P          | 29390         | 12-10            | 1.68 | 0.040     | 0.25          | 0.135       | 0.250                       |



**422-P**  
Wire Range  
22-18



**416-P**  
Wire Range  
16-14

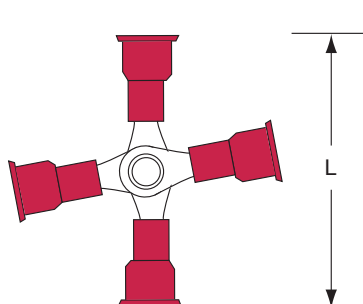


**412-P**  
Wire Range  
12-10

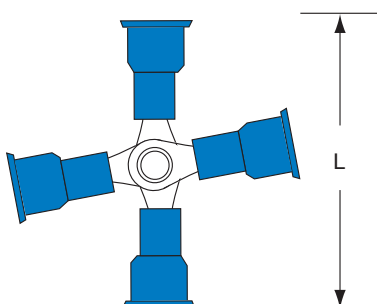
## Nylon Insulated with Insulation Grip 4-Way Connectors



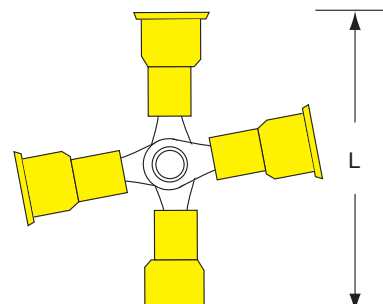
| Product Number | UPC (054007-) | Wire Range (AWG) | L    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|-----------|---------------|-------------|-----------------------------|
| 422-NB         | 29385         | 12-10            | 1.46 | 0.030     | 0.25          | 0.070       | 0.145                       |
| 416-NB         | 29386         | 16-14            | 1.50 | 0.030     | 0.25          | 0.090       | 0.170                       |
| 412-NB         | 29387         | 22-18            | 1.68 | 0.040     | 0.25          | 0.135       | 0.250                       |



**422-NB**  
Wire Range  
12-10



**416-NB**  
Wire Range  
16-14



**412-NB**  
Wire Range  
22-18

## Heat Shrink Nylon Fully-Insulated Female Disconnects

| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L   | W    | D    | Barrel Length | Barrel I.D. |
|-----------------------------|---------------|------------------|--------------------------------------------|-----|------|------|---------------|-------------|
| MNHU18-250DFIX*             | 06354         | 22-18            | 0.250 x 0.032                              | 1.2 | 0.37 | 0.23 | 0.25          | 0.080       |
| MNHU18-250DFIK*             | 06355         | 22-18            | 0.250 x 0.032                              | 1.2 | 0.37 | 0.23 | 0.25          | 0.080       |
| MNHU14-250DFIX*             | 06338         | 16-14            | 0.250 x 0.032                              | 1.2 | 0.37 | 0.23 | 0.25          | 0.080       |
| MNHU14-250DFIK*             | 06339         | 16-14            | 0.250 x 0.032                              | 1.2 | 0.37 | 0.23 | 0.25          | 0.080       |
| MNHU10-250DFIX              | 06314         | 12-10            | 0.250 x 0.032                              | 1.2 | 0.39 | 0.32 | 0.25          | 0.165       |
| MNHU10-250DFIK              | 06315         | 12-10            | 0.250 x 0.032                              | 1.2 | 0.39 | 0.32 | 0.25          | 0.165       |

\*Windowless receptacle



MNHU18-250DFI  
Wire Range 22-18



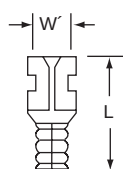
MNHU14-250DFI  
Wire Range 16-14



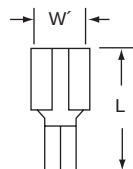
MNHU10-250DFI  
Wire Range 12-10

## High-Temperature Butted Seam Female Disconnects 900°F (482°C)

| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|
| HT-72F-187-20  | 29369         | 16-14            | 0.187 x 0.020                              | 0.58 | 0.25          | 0.085       |
| HT-72F-250-32  | 29370         | 16-14            | 0.250 x 0.032                              | 0.64 | 0.23          | 0.095       |



HT-72F-187-20  
Wire Range 16-14



HT-72F-250-32  
Wire Range 16-14

## High-Temperature Butted Seam Female Flag Disconnect 900°F (482°C)

| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|
| HT-752-250-32  | 29478         | 16-14            | 0.250 x 0.032                              | 0.51 | 0.26          | 0.095       |



HT-752-250-32  
Wire Range 16-14

<sup>†</sup>Product Number ending in X = box; Product Number ending with K = bulk

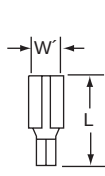
# Non-Insulated Butted Seam Female Disconnects



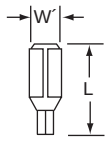
| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|
| 70F-110-20*    | 29172         | 26-20            | 0.110 x 0.020                              | 0.48 | 0.13          | 0.055       |
| 70F-110-32*    | 29173         | 26-20            | 0.110 x 0.032                              | 0.48 | 0.13          | 0.055       |
| 71F-187-20     | 30129         | 22-18            | 0.187 x 0.020                              | 0.58 | 0.25          | 0.085       |
| 71F-250-32     | 29174         | 22-18            | 0.250 x 0.032                              | 0.66 | 0.25          | 0.080       |
| 72F-110-20     | 29175         | 16-14            | 0.110 x 0.020                              | 0.54 | 0.19          | 0.115       |
| 72F-187-20     | 29177         | 16-14            | 0.187 x 0.020                              | 0.58 | 0.25          | 0.085       |
| 72F-250-32     | 29178         | 16-14            | 0.250 x 0.032                              | 0.66 | 0.25          | 0.080       |
| 73F-250-32†    | 29179         | 12-10            | 0.250 x 0.032                              | 0.66 | 0.25          | 0.165       |
| 73F-375-50*†   | 29180         | 12-10            | 0.375 x 0.050                              | 0.93 | 0.25          | 0.175       |

\* Not UL Listed or CSA Certified

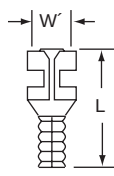
† Product not shown



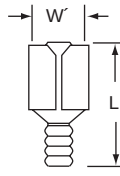
**70F-110-20**  
26-20



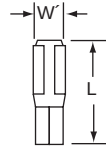
**70F-110-32**  
26-20



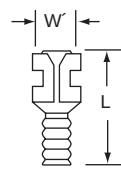
**71F-187-20**  
22-18



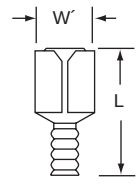
**71F-250-32**  
22-18



**72F-110-20**  
16-14



**72F-187-20**  
16-14



**72F-250-32**  
16-14

Wire Range

## Non-Insulated Butted Seam Female Disconnect Flag Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|
| 751-187*       | 29484         | 22-18            | 0.187 x 0.020                              | 0.46 | 0.20          | 0.075       |
| 751-250*       | 29412         | 22-18            | 0.250 x 0.032                              | 0.50 | 0.25          | 0.075       |
| 752-187        | 29486         | 16-14            | 0.187 x 0.020                              | 0.47 | 0.20          | 0.095       |
| 752-250        | 29413         | 16-14            | 0.250 x 0.032                              | 0.51 | 0.26          | 0.095       |

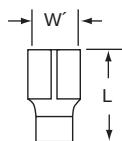
\* Not UL Listed or CSA Certified



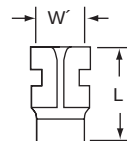
**751-187**  
22-18



**751-250**  
22-18



**752-187**  
16-14



**752-250**  
16-14

Wire Range

## Vinyl Insulated Butted Seam Female Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|-----------------------------|
| 71F-187-20-P   | 30132         | 22-18            | 0.187 x 0.020                              | 0.78 | 0.25          | 0.085       | 0.145                       |
| 71F-250-32-P   | 29618         | 22-18            | 0.250 x 0.032                              | 0.87 | 0.25          | 0.080       | 0.145                       |
| 72F-110-20-P*  | 29166         | 16-14            | 0.110 x 0.020                              | 0.81 | 0.19          | 0.115       | 0.145                       |
| 72F-187-20-P   | 29168         | 16-14            | 0.187 x 0.020                              | 0.78 | 0.25          | 0.085       | 0.145                       |
| 72F-250-32-P   | 29169         | 16-14            | 0.250 x 0.032                              | 0.87 | 0.25          | 0.080       | 0.145                       |
| 73F-250-32-P†  | 29170         | 12-10            | 0.250 x 0.032                              | 0.95 | 0.25          | 0.165       | 0.250                       |
| 73F-375-50-P*  | 29171         | 12-10            | 0.375 x 0.050                              | 1.23 | 0.25          | 0.175       | 0.250                       |

\* Not UL Listed or CSA Certified

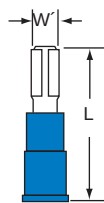
† Product not shown



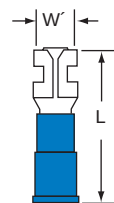
**71F-187-20-P**  
22-18



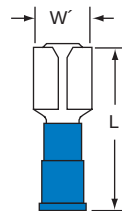
**71F-250-32-P**  
22-18



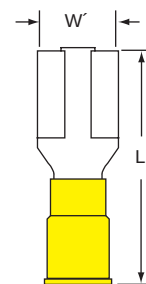
**72F-110-20-P**  
16-14



**72F-187-20-P**  
16-14



**72F-250-32-P**  
16-14



**73F-375-50-P**  
12-10

Wire Range

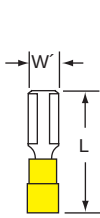
# Nylon Insulated with Insulation Grip Female Disconnects



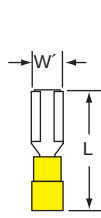
| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|--------------------------------------------|------|---------------|-------------|-----------------------------|
| 70F-110-20-NB* | 29158         | 26-20            | 0.110 x 0.020                              | 0.63 | 0.13          | 0.055       | 0.093                       |
| 70F-110-32-NB* | 29159         | 26-20            | 0.110 x 0.032                              | 0.63 | 0.13          | 0.055       | 0.093                       |
| 71F-187-20-NB  | 30131         | 22-18            | 0.187 x 0.020                              | 0.77 | 0.25          | 0.085       | 0.145                       |
| 71F-250-32-NB  | 30116         | 22-18            | 0.250 x 0.032                              | 0.86 | 0.25          | 0.080       | 0.145                       |
| 72F-110-20-NB* | 29160         | 16-14            | 0.110 x 0.020                              | 0.80 | 0.19          | 0.115       | 0.145                       |
| 72F-187-20-NB  | 29162         | 16-14            | 0.187 x 0.020                              | 0.77 | 0.25          | 0.085       | 0.145                       |
| 72F-250-32-NB  | 29163         | 16-14            | 0.250 x 0.032                              | 0.86 | 0.25          | 0.080       | 0.145                       |
| 73F-250-32-NB† | 29164         | 12-10            | 0.250 x 0.032                              | 0.96 | 0.25          | 0.165       | 0.250                       |
| 73F-375-50-NB* | 29165         | 12-10            | 0.375 x 0.050                              | 1.23 | 0.25          | 0.175       | 0.250                       |

\* Not UL Listed or CSA Certified

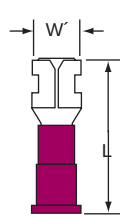
† Product not shown



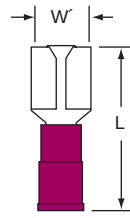
70F-110-20-NB  
Wire Range 26-20



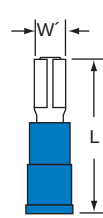
70F-110-32-NB  
Wire Range 26-20



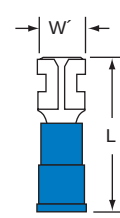
71F-187-20-NB  
Wire Range 22-18



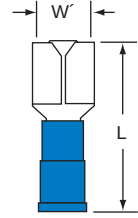
71F-250-32-NB  
Wire Range 22-18



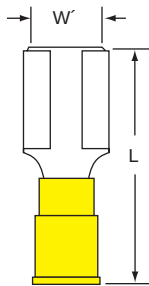
72F-110-20-NB  
Wire Range 16-14



72F-187-20-NB  
Wire Range 16-14



72F-250-32-NB  
Wire Range 16-14

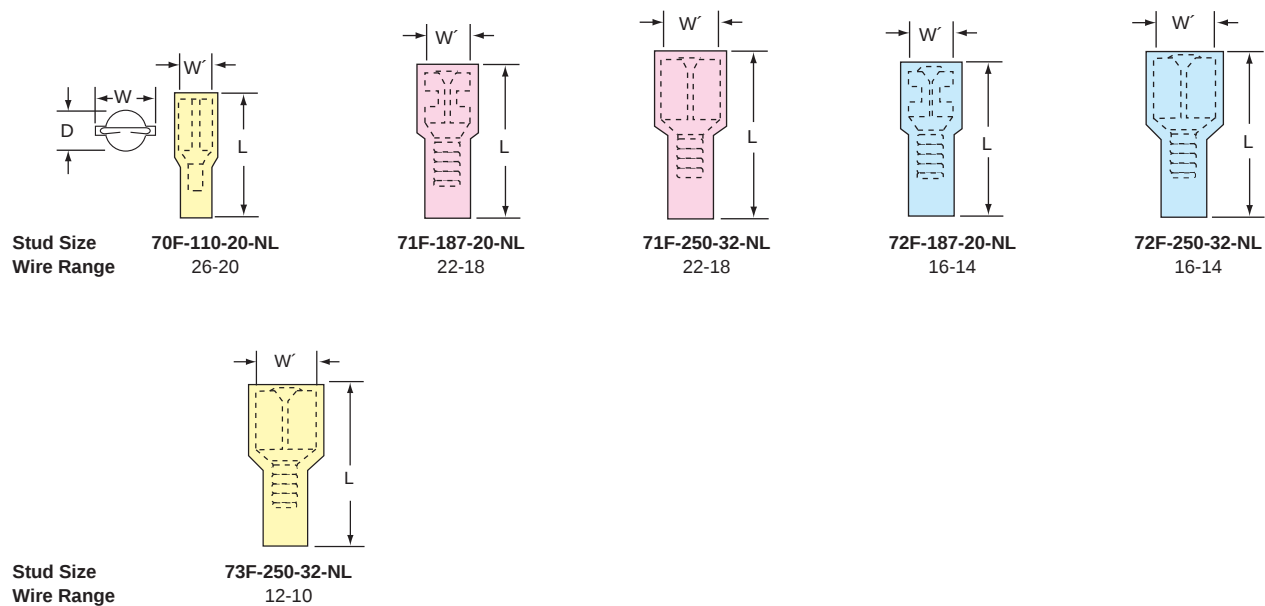


73F-375-50-NB  
Wire Range 12-10

# Fully Nylon Insulated Butted Seam Female Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | W    | D    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|--------------------------------------------|------|------|------|---------------|-------------|-----------------------------|
| 71F-187-20-NL  | 30125         | 22-18            | 0.187 x 0.020                              | 0.81 | 0.30 | 0.23 | 0.25          | 0.085       | 0.145                       |
| 71F-250-32-NL  | 30108         | 22-18            | 0.250 x 0.032                              | 0.87 | 0.37 | 0.23 | 0.25          | 0.080       | 0.120                       |
| 72F-187-20-NL  | 30134         | 16-14            | 0.187 x 0.020                              | 0.81 | 0.30 | 0.23 | 0.25          | 0.085       | 0.145                       |
| 72F-250-32-NL  | 30091         | 16-14            | 0.250 x 0.032                              | 0.87 | 0.37 | 0.23 | 0.25          | 0.080       | 0.120                       |
| 73F-250-32-NL  | 30104         | 12-10            | 0.250 x 0.032                              | 0.99 | 0.39 | 0.32 | 0.25          | 0.148       | 0.250                       |

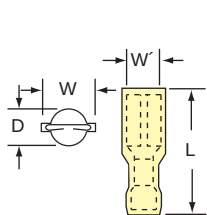


## Fully Nylon Insulated with Insulation Grip Female Disconnects

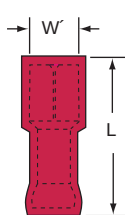


| Product Number  | UPC (054007-) | Wire Range (AWG) | Mates with Male Tab Width (W') x Thickness | L    | W    | D    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|-----------------|---------------|------------------|--------------------------------------------|------|------|------|---------------|-------------|-----------------------------|
| 70F-110-20-NBL* | 29444         | 26-20            | 0.110-0.125 x 0.020                        | 0.66 | 0.22 | 0.15 | 0.13          | 0.055       | 0.093                       |
| 71F-187-20-NBL  | 30126         | 22-18            | 0.187 x 0.020                              | 0.81 | 0.30 | 0.23 | 0.25          | 0.085       | 0.145                       |
| 71F-250-32-NBL  | 30110         | 22-18            | 0.250 x 0.032                              | 0.87 | 0.37 | 0.23 | 0.25          | 0.080       | 0.145                       |
| 72F-187-20-NBL  | 29446         | 16-14            | 0.187 x 0.020                              | 0.81 | 0.30 | 0.23 | 0.25          | 0.085       | 0.145                       |
| 72F-250-32-NBL  | 29447         | 16-14            | 0.250 x 0.032                              | 0.87 | 0.37 | 0.23 | 0.25          | 0.080       | 0.145                       |
| 73F-250-32-NBL  | 30106         | 12-10            | 0.250 x 0.032                              | 0.99 | 0.39 | 0.32 | 0.25          | 0.165       | 0.250                       |

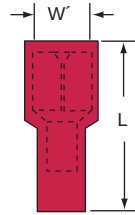
\* Not UL Listed or CSA Certified



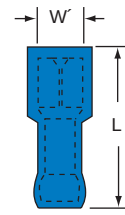
**Stud Size** 70F-110-20-NBL  
**Wire Range** 26-20



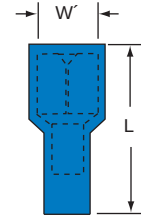
**71F-187-20-NBL**  
22-18



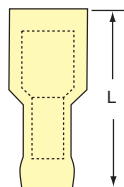
**71F-250-32-NBL**  
22-18



**72F-187-20-NBL**  
16-14



**72F-250-32-NBL**  
16-14

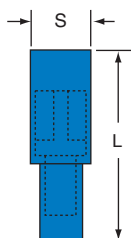


**Stud Size** 73F-250-32-NBL  
**Wire Range** 12-10

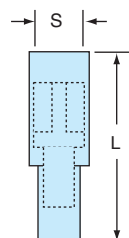
## Nylon Insulated Butted Seam Bullet Style Female Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|-----------------------------|
| 82F-156-NL     | 30088         | 22-18            | 0.156                  | 1.02 | 0.25          | 0.115       | 0.170                       |
| 82F-180-NL     | 30090         | 22-18            | 0.180                  | 1.02 | 0.25          | 0.115       | 0.170                       |



**82F-156-NL**  
22-18



**82F-180-NL**  
22-18

**Wire Range**

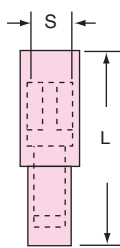
## Nylon Insulated with Insulation Grip Bullet Style Female Disconnects



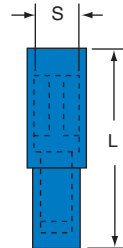
| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|-----------------------------|
| 81F-156-NBL    | 29423         | 22-18            | 0.156                  | 1.02 | 0.25          | 0.095       | 0.145                       |
| 81F-180-NBL    | 30061         | 22-18            | 0.180                  | 1.02 | 0.25          | 0.095       | 0.145                       |
| 82F-156-NBL    | 29424         | 16-14            | 0.156                  | 1.02 | 0.25          | 0.115       | 0.170                       |
| 82F-180-NBL    | 30042         | 16-14            | 0.180                  | 1.02 | 0.25          | 0.115       | 0.170                       |



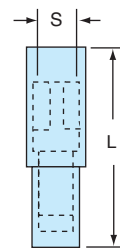
81F-156-NBL  
22-18



81F-180-NBL  
22-18



82F-156-NBL

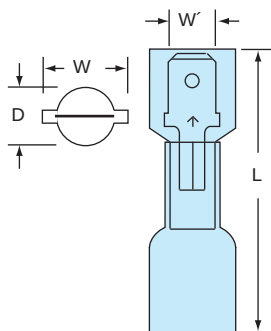


82F-180-NBL  
16-14 16-14

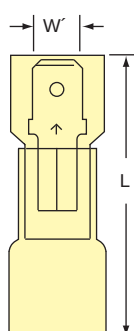
Wire Range

## Heat Shrink Nylon Fully-Insulated Butted Seam Male Disconnects

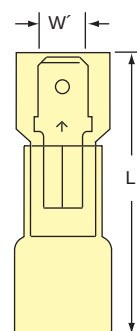
| Product Number <sup>1</sup> | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | W    | D    | Barrel Length | Barrel I.D. |
|-----------------------------|---------------|------------------|---------------------------------|------|------|------|---------------|-------------|
| MNHU18-250DMIX              | 06356         | 22-18            | 0.250 x 0.032                   | 1.20 | 0.44 | 0.30 | 0.25          | 0.065       |
| MNHU18-250DMIK              | 06357         | 22-18            | 0.250 x 0.032                   | 1.20 | 0.44 | 0.30 | 0.25          | 0.065       |
| MNHU14-250DMIX              | 06340         | 16-14            | 0.250 x 0.032                   | 1.20 | 0.44 | 0.30 | 0.25          | 0.085       |
| MNHU14-250DMIK              | 06341         | 16-14            | 0.250 x 0.032                   | 1.20 | 0.44 | 0.30 | 0.25          | 0.085       |
| MNHU10-250DMIX              | 06316         | 12-10            | 0.250 x 0.032                   | 1.20 | 0.47 | 0.39 | 0.25          | 0.150       |
| MNHU10-250DMIK              | 06317         | 12-10            | 0.250 x 0.032                   | 1.20 | 0.47 | 0.39 | 0.25          | 0.150       |



MNHU18-250DMI  
22-18



MNHU14-250DMI  
16-14

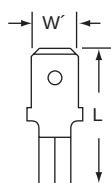


MNHU10-250DMI  
12-10

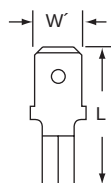
Wire Range

## High-Temperature Butted Seam Male Disconnects 900°F (482°C)

| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|---------------------------------|------|---------------|-------------|
| HT-72M-187-20  | 29371         | 16-14            | 0.187 x 0.020                   | 0.64 | 0.24          | 0.080       |
| HT-72M-250-32  | 29372         | 16-14            | 0.250 x 0.032                   | 0.73 | 0.25          | 0.090       |



HT-72M-187-20  
16-14



HT-72M-250-32  
16-14

Wire Range

<sup>1</sup>Product Number ending in X = box; Product Number ending with K = bulk

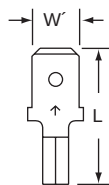
# Non-Insulated Butted Seam Male Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|---------------------------------|------|---------------|-------------|
| 71M-187-20     | 30127         | 22-18            | 0.187 x 0.020                   | 0.64 | 0.24          | 0.080       |
| 71M-250-32     | 30112         | 22-18            | 0.250 x 0.032                   | 0.73 | 0.25          | 0.065       |
| 72M-187-20     | 29236         | 16-14            | 0.187 x 0.020                   | 0.64 | 0.24          | 0.080       |
| 72M-250-32     | 29237         | 16-14            | 0.250 x 0.032                   | 0.73 | 0.25          | 0.085       |
| 73M-250-32     | 29238         | 12-10            | 0.250 x 0.032                   | 0.75 | 0.25          | 0.150       |



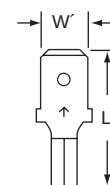
71M-187-20  
Wire Range 22-18



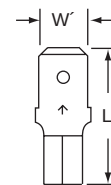
71M-250-32  
Wire Range 22-18



72M-187-20  
Wire Range 16-14



72M-250-32  
Wire Range 16-14



73M-250-32  
Wire Range 12-10

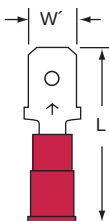
# Vinyl Insulated Butted Seam Male Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------|------|---------------|-------------|-----------------------------|
| 71M-187-20-P   | 30122         | 22-18            | 0.187 x 0.020                   | 0.85 | 0.24          | 0.080       | 0.145                       |
| 71M-250-32-P   | 30115         | 22-18            | 0.250 x 0.032                   | 0.93 | 0.25          | 0.065       | 0.145                       |
| 72M-187-20-P   | 29233         | 16-14            | 0.187 x 0.020                   | 0.85 | 0.24          | 0.080       | 0.145                       |
| 72M-250-32-P   | 29234         | 16-14            | 0.250 x 0.032                   | 0.93 | 0.25          | 0.085       | 0.170                       |
| 73M-250-32-P   | 29235         | 12-10            | 0.250 x 0.032                   | 1.05 | 0.25          | 0.150       | 0.250                       |



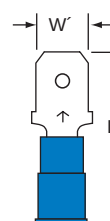
71M-187-20-P  
Wire Range 22-18



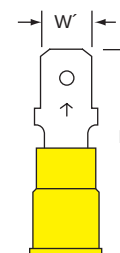
71M-250-32-P  
Wire Range 22-18



72M-187-20-P  
Wire Range 16-14



72M-250-32-P  
Wire Range 16-14

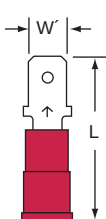


73M-250-32-P  
Wire Range 12-10

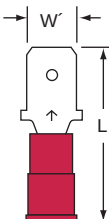
# Nylon Insulated with Insulation Grip Male Disconnects



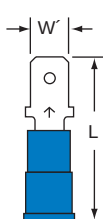
| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------|------|---------------|-------------|-----------------------------|
| 71M-187-20-NB  | 30121         | 22-18            | 0.187 x 0.020                   | 0.84 | 0.24          | 0.080       | 0.145                       |
| 71M-250-32-NB  | 30114         | 22-18            | 0.250 x 0.032                   | 0.92 | 0.25          | 0.065       | 0.145                       |
| 72M-187-20-NB  | 29230         | 16-14            | 0.187 x 0.020                   | 0.84 | 0.24          | 0.080       | 0.145                       |
| 72M-250-32-NB  | 29231         | 16-14            | 0.250 x 0.032                   | 0.94 | 0.25          | 0.085       | 0.170                       |
| 72M-250-32-NB  | 29232         | 12-10            | 0.250 x 0.032                   | 1.05 | 0.25          | 0.150       | 0.250                       |



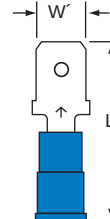
71M-187-20-NB  
Wire Range 22-18



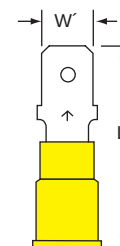
71M-250-32-NB  
Wire Range 22-18



72M-187-20-NB  
Wire Range 16-14



72M-250-32-NB  
Wire Range 16-14



73M-250-32-NB  
Wire Range 12-10

## Fully Nylon Insulated Butted Seam Male Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | W    | D    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------|------|------|------|---------------|-------------|-----------------------------|
| 71M-187-20-NL  | 30123         | 22-18            | 0.187 x 0.020                   | 0.87 | 0.37 | 0.30 | 0.24          | 0.080       | 0.145                       |
| 71M-250-32-NL  | 30109         | 22-18            | 0.250 x 0.032                   | 0.95 | 0.44 | 0.30 | 0.25          | 0.065       | 0.170                       |
| 72M-187-20-NL  | 30139         | 16-14            | 0.187 x 0.020                   | 0.87 | 0.37 | 0.30 | 0.24          | 0.080       | 0.145                       |
| 72M-250-32-NL  | 30092         | 16-14            | 0.250 x 0.032                   | 0.95 | 0.44 | 0.30 | 0.25          | 0.085       | 0.170                       |
| 73M-250-32-NL  | 30105         | 12-10            | 0.250 x 0.032                   | 1.05 | 0.47 | 0.39 | 0.25          | 0.150       | 0.250                       |

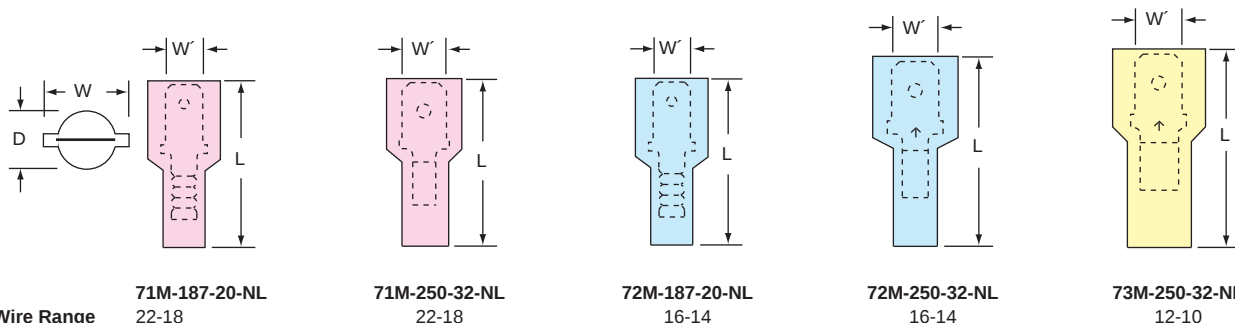
71M-187-20-NL mates with 71F-187-20-NL

71M-250-32-NL mates with 71F-250-32-NL

72M-187-20-NL mates with 72F-187-20-NL

72M-250-32-NL mates with 72F-250-32-NL

73M-250-32-NL mates with 73F-250-32-NL



## Fully Nylon Insulated with Insulation Grip Male Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Male Tab Width (W') x Thickness | L    | W    | D    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------|------|------|------|---------------|-------------|-----------------------------|
| 71M-187-20-NBL | 30124         | 22-18            | 0.187 x 0.020                   | 0.87 | 0.37 | 0.30 | 0.24          | 0.080       | 0.145                       |
| 71M-250-32-NBL | 30111         | 22-18            | 0.250 x 0.032                   | 0.95 | 0.44 | 0.30 | 0.25          | 0.065       | 0.145                       |
| 72M-187-20-NBL | 30140         | 16-14            | 0.187 x 0.020                   | 0.87 | 0.37 | 0.30 | 0.24          | 0.080       | 0.145                       |
| 72M-250-32-NBL | 30093         | 16-14            | 0.250 x 0.032                   | 0.95 | 0.44 | 0.30 | 0.25          | 0.085       | 0.170                       |
| 73M-250-32-NBL | 30107         | 12-10            | 0.250 x 0.032                   | 1.05 | 0.47 | 0.39 | 0.25          | 0.150       | 0.250                       |

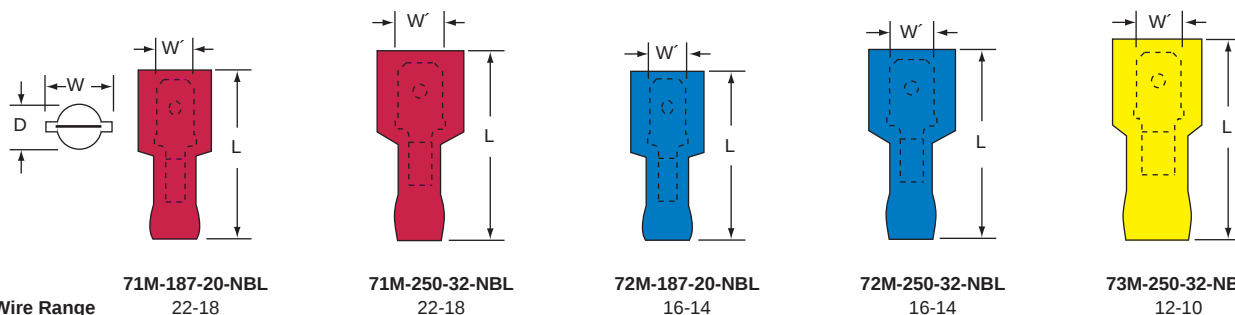
71M-187-20-NBL mates with 71F-187-20-NBL

71M-250-32-NBL mates with 71F-250-32-NBL

72M-187-20-NBL mates with 72F-187-20-NBL

72M-250-32-NBL mates with 72F-250-32-NBL

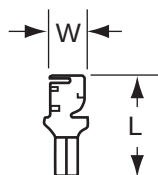
73M-250-32-NBL mates with 73F-250-32-NBL



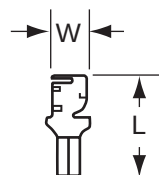
Note: Mating female disconnects listed on pages 16 and 17.

# Self-Mating Cross-Lock Disconnect Non-Insulated Butted Seam

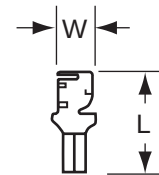
| Product Number | UPC (054007-) | Wire Range (AWG) | L     | W    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-------|------|---------------|-------------|
| 761            | 29223         | 22-18            | 0.735 | 0.25 | 0.25          | 0.200       |
| 762            | 29224         | 16-14            | 0.735 | 0.25 | 0.25          | 0.092       |
| 763            | 28869         | 12-10            | 0.735 | 0.25 | 0.25          | 0.135       |



761  
22-18



762  
16-14



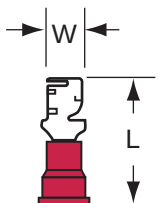
763  
12-10

Wire Range

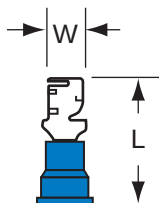
# Self-Mating Cross-Lock Disconnect Vinyl Insulated Butted Seam



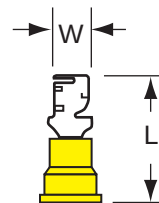
| Product Number | UPC (054007-) | Wire Range (AWG) | L    | W    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|------|---------------|-------------|-----------------------------|
| 761-P          | 29221         | 22-18            | 1.06 | 0.25 | 0.25          | 0.070       | 0.145                       |
| 762-P          | 29222         | 16-14            | 1.06 | 0.25 | 0.25          | 0.092       | 0.170                       |
| 763-P          | 29482         | 12-10            | 1.06 | 0.25 | 0.25          | 0.135       | 0.250                       |



761-P  
22-18



762-P  
16-14



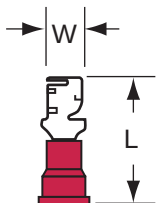
763-P  
12-10

Wire Range

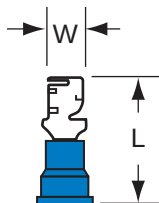
# Self-Mating Cross-Lock Disconnect Nylon Insulated with Insulation Grip



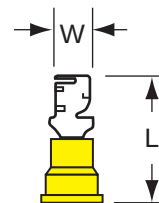
| Product Number | UPC (054007-) | Wire Range (AWG) | L    | W    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------|------|---------------|-------------|-----------------------------|
| 761-NB         | 29219         | 22-18            | 1.06 | 0.25 | 0.25          | 0.070       | 0.145                       |
| 762-NB         | 29220         | 16-14            | 1.06 | 0.25 | 0.25          | 0.092       | 0.170                       |
| 763-NB         | 29483         | 12-10            | 1.06 | 0.25 | 0.25          | 0.135       | 0.250                       |



761-NB  
22-18



762-NB  
16-14



763-NB  
12-10

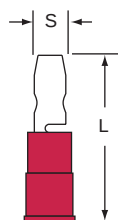
Wire Range

## Vinyl Insulated Butted Seam Bullet Style Male Disconnects



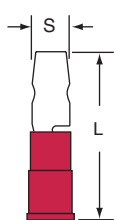
| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|-----------------------------|
| 81M-156-P      | 30036         | 22-18            | 0.156                  | 0.85 | 0.19          | 0.070       | 0.145                       |
| 81M-180-P      | 30069         | 22-18            | 0.180                  | 0.85 | 0.19          | 0.070       | 0.145                       |
| 82M-156-P      | 29248         | 16-14            | 0.156                  | 0.85 | 0.19          | 0.090       | 0.170                       |
| 82M-180-P      | 29249         | 16-14            | 0.180                  | 0.85 | 0.19          | 0.090       | 0.170                       |
| 83M-156-P      | 29250         | 12-10            | 0.156                  | 0.94 | 0.22          | 0.155       | 0.250                       |

81M-156-P mates with 81F-156-NL  
 81M-180-P mates with 81F-180-NL  
 82M-156-P mates with 82F-156-NL  
 82M-180-P mates with 82F-180-NL  
 83M-156-P – no 12-10 Female

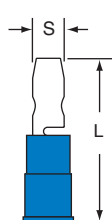


**81M-156-P**  
22-18

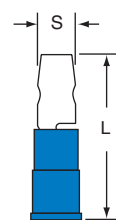
Wire Range



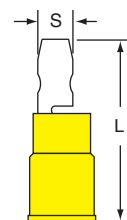
**81M-180-P**  
22-18



**82M-156-P**  
16-14



**82M-180-P**  
16-14



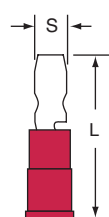
**83M-156-P**  
12-10

## Nylon Insulated with Insulation Grip Bullet Style Male Disconnects



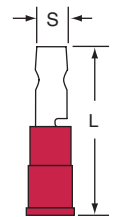
| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|-----------------------------|
| 81M-156-NB     | 30038         | 22-18            | 0.156                  | 0.85 | 0.19          | 0.070       | 0.145                       |
| 81M-180-NB     | 30068         | 22-18            | 0.180                  | 0.85 | 0.19          | 0.070       | 0.145                       |
| 82M-156-NB     | 29245         | 16-14            | 0.156                  | 0.87 | 0.19          | 0.090       | 0.170                       |
| 82M-180-NB     | 29246         | 16-14            | 0.180                  | 0.87 | 0.19          | 0.090       | 0.170                       |
| 83M-156-NB     | 29247         | 12-10            | 0.156                  | 0.94 | 0.22          | 0.155       | 0.250                       |

81M-156-NB mates with 81F-156-NBL  
 81M-180-NB mates with 81F-180-NBL  
 82M-156-NB mates with 82F-156-NBL  
 82M-180-NB mates with 82F-180-NBL  
 83M-156-NB – no 12-10 Female

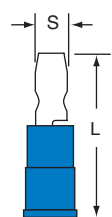


**81M-156-NB**  
22-18

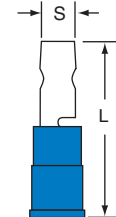
Wire Range



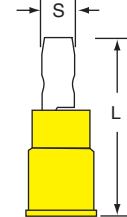
**81M-180-NB**  
22-18



**82M-156-NB**  
16-14



**82M-180-NB**  
16-14



**83M-156-NB**  
12-10

Note: Mating female disconnects listed on pages 17 and 18.

# Butted Seam Bullet Style Male Disconnects



| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|
| 81M-156        | 30040         | 22-18            | 0.156                  | 0.65 | 0.19          | 0.076       |
| 81M-180†       | 30065         | 22-18            | 0.130                  | 0.68 | 0.25          | 0.080       |
| 82M-156        | 29251         | 16-14            | 0.156                  | 0.65 | 0.19          | 0.096       |
| 82M-180†       | 29252         | 16-14            | 0.180                  | 0.68 | 0.25          | 0.100       |
| 83M-156†       | 29253         | 12-10            | 0.156                  | 0.61 | 0.22          | 0.160       |

† Product not shown



**81M-156**  
22-18



**82M-156**  
16-14

Wire Range

## Nylon Insulated with Insulation Grip Multi-Stack Disconnects

| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Female and Male Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------------------------|------|---------------|-------------|-----------------------------|
| 771-250-NB     | 29439         | 22-18            | 0.250 x 0.032                                     | 0.86 | 0.23          | 0.070       | 0.145                       |
| 772-250-NB     | 29440         | 16-14            | 0.250 x 0.032                                     | 0.88 | 0.23          | 0.090       | 0.170                       |



**771-250-NB**  
22-18



**772-250-NB**  
16-14

Wire Range

## Vinyl Insulated Butted Seam Multi-Stack Disconnects

| Product Number | UPC (054007-) | Wire Range (AWG) | Mates with Female and Male Width (W') x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|---------------------------------------------------|------|---------------|-------------|-----------------------------|
| 771-250-P      | 29437         | 22-18            | 0.250 x 0.032                                     | 0.87 | 0.23          | 0.070       | 0.145                       |
| 772-250-P      | 29438         | 16-14            | 0.250 x 0.032                                     | 0.87 | 0.23          | 0.090       | 0.170                       |



**771-250-P**  
22-18

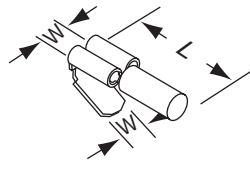


**772-250-P**  
16-14

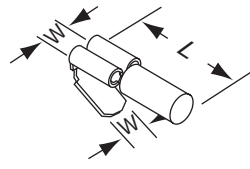
Wire Range

# Non-Insulated Butted Seam Multi-Stack Disconnects

| Product Number | UPC (054007-) | Wire Range (AWG) | Mating Snap Diameter S | L    | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|------------------------|------|---------------|-------------|
| 771-250        | 29435         | 22-18            | 0.250 x 0.032          | 0.66 | 0.23          | 0.070       |
| 772-250        | 29436         | 16-14            | 0.250 x 0.032          | 0.66 | 0.23          | 0.090       |



771-250-P  
22-18



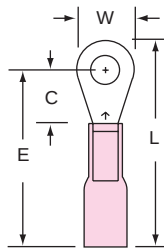
772-250-P  
16-14

Wire Range

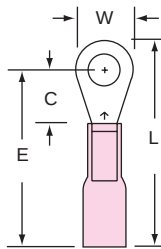
## Heat Shrink Brazed Seam Ring Tongue Terminals 22-18 AWG



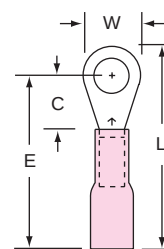
| Product Number <sup>1</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L   | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------------------|---------------|------------------|-----------|------|------|-----|------|-----------|---------------|-------------|
| MH18-6R/LX                  | 06344         | 22-18            | 6         | 0.31 | 0.15 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |
| MH18-6R/LK                  | 06345         | 22-18            | 6         | 0.31 | 0.15 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |
| MH18-8R/LX                  | 06348         | 22-18            | 8         | 0.31 | 0.18 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |
| MH18-8R/LK                  | 06349         | 22-18            | 8         | 0.31 | 0.18 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |
| MH18-10R/LK                 | 06350         | 22-18            | 10        | 0.31 | 0.20 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |
| MH18-10R/LX                 | 06351         | 22-18            | 10        | 0.31 | 0.20 | 1.0 | 0.84 | 0.030     | 0.25          | 0.070       |



MH18-6R/L  
6  
22-18



MH18-8R/L  
8  
22-18



MH18-10R/L  
10  
22-18

Stud Size  
Wire Range

<sup>1</sup>Product Number ending in X = box; Product Number ending with K = bulk

# Heat Shrink Brazed Seam Ring Tongue Terminals 16-14 AWG



| Product Number† | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| MH14-6R/LX      | 06320         | 16-14            | 6         | 0.31 | 0.15 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-6R/LK      | 06321         | 16-14            | 6         | 0.31 | 0.15 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-8R/LX      | 06324         | 16-14            | 8         | 0.31 | 0.18 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-8R/LK      | 06325         | 16-14            | 8         | 0.31 | 0.18 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-10R/LX     | 06326         | 16-14            | 10        | 0.31 | 0.20 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-10R/LK     | 06327         | 16-14            | 10        | 0.31 | 0.20 | 1.00 | 0.84 | 0.030     | 0.25          | 0.090       |
| MH14-14R/SX     | 06330         | 16-14            | 1/4       | 0.47 | 0.26 | 1.10 | 0.86 | 0.030     | 0.25          | 0.090       |
| MH14-14R/SK     | 06331         | 16-14            | 1/4       | 0.47 | 0.26 | 1.10 | 0.86 | 0.030     | 0.25          | 0.090       |
| MH14-516R/SX    | 06336         | 16-14            | 5/16      | 0.47 | 0.33 | 1.10 | 0.86 | 0.030     | 0.25          | 0.090       |
| MH14-516R/SK    | 06337         | 16-14            | 5/16      | 0.47 | 0.33 | 1.10 | 0.86 | 0.030     | 0.25          | 0.090       |
| MH14-38RX       | 06334         | 16-14            | 3/8       | 0.56 | 0.28 | 1.10 | 0.82 | 0.030     | 0.25          | 0.090       |
| MH14-38RK       | 06335         | 16-14            | 3/8       | 0.56 | 0.28 | 1.10 | 0.82 | 0.030     | 0.25          | 0.090       |

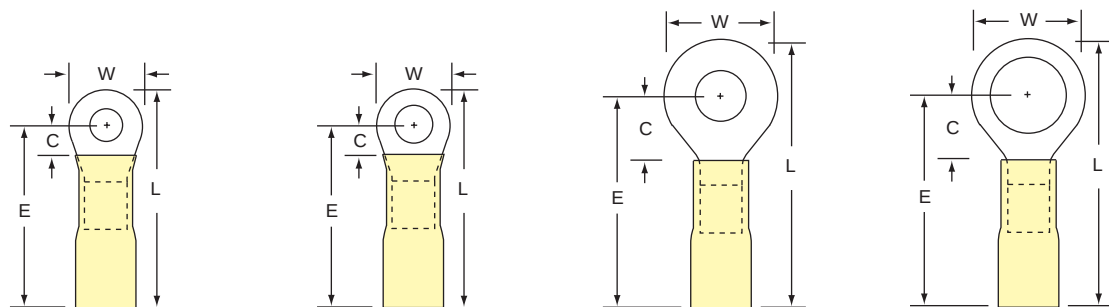


|                   |                  |                  |                   |                   |                    |                 |
|-------------------|------------------|------------------|-------------------|-------------------|--------------------|-----------------|
| <b>Stud Size</b>  | <b>MH14-6R/L</b> | <b>MH14-8R/L</b> | <b>MH14-10R/L</b> | <b>MH14-14R/S</b> | <b>MH14-516R/S</b> | <b>MH14-38R</b> |
| <b>Wire Range</b> | 6<br>16-14       | 8<br>16-14       | 10<br>16-14       | 1/4<br>16-14      | 5/16<br>16-14      | 3/8<br>16-14    |

# Heat Shrink Brazed Seam Ring Tongue Terminals 12-10



| Product Number† | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| MH10-8RX        | 06302         | 12-10            | 8         | 0.38 | 0.19 | 1.10 | 0.91 | 0.040     | 0.25          | 0.135       |
| MH10-8RK        | 06303         | 12-10            | 8         | 0.38 | 0.19 | 1.10 | 0.91 | 0.040     | 0.25          | 0.135       |
| MH10-10RX       | 06305         | 12-10            | 10        | 0.38 | 0.21 | 1.10 | 0.91 | 0.040     | 0.25          | 0.135       |
| MH10-10RK       | 06306         | 12-10            | 10        | 0.38 | 0.21 | 1.10 | 0.91 | 0.040     | 0.25          | 0.135       |
| MH10-14RX       | 06309         | 12-10            | 1/4       | 0.59 | 0.29 | 1.20 | 0.90 | 0.040     | 0.25          | 0.135       |
| MH10-14RK       | 06359         | 12-10            | 1/4       | 0.59 | 0.29 | 1.20 | 0.90 | 0.040     | 0.25          | 0.135       |
| MH10-38RX       | 06312         | 12-10            | 3/8       | 0.59 | 0.29 | 1.20 | 0.90 | 0.040     | 0.25          | 0.135       |
| MH10-38RK       | 06313         | 12-10            | 3/8       | 0.59 | 0.29 | 1.20 | 0.90 | 0.040     | 0.25          | 0.135       |



|                   |                |                 |                 |                 |
|-------------------|----------------|-----------------|-----------------|-----------------|
| <b>Stud Size</b>  | <b>MH10-8R</b> | <b>MH10-10R</b> | <b>MH10-14R</b> | <b>MH10-38R</b> |
| <b>Wire Range</b> | 8<br>12-10     | 10<br>12-10     | 1/4<br>12-10    | 3/8<br>12-10    |

†Product Number ending in X = box; Product Number ending with K = bulk

# High-Temperature Butted Seam Ring Tongue Terminals 900°F (482°C)

| Product Number        | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| HT-11-6S              | 29353         | 22-18            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| HT-11-10              | 29354         | 22-18            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| HT-11-14 <sup>†</sup> | 29355         | 22-18            | 1/4       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.070       |
| HT-12-6S              | 29356         | 16-14            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| HT-12-10              | 29357         | 16-14            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| HT-12-14              | 29358         | 16-14            | 1/4       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |
| HT-13-6 <sup>†</sup>  | 29359         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| HT-13-10              | 29360         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| HT-13-14              | 29361         | 12-10            | 1/4       | 0.61 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| HT-13-38 <sup>†</sup> | 29362         | 12-10            | 3/8       | 0.61 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| HT-14-14S             | 29363         | 8                | 1/4       | 0.47 | 0.4  | 0.95 | 0.72 | 0.050     | 0.31          | 0.175       |
| HT-15-38              | 29364         | 6                | 3/8       | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       |
| HT-16-38              | 29365         | 4                | 3/8       | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |

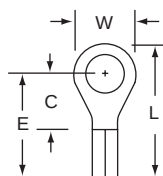
<sup>†</sup>Product not shown



HT-11-6S

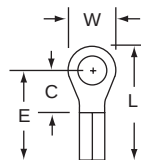
Stud Size  
Wire Range

6  
22-18



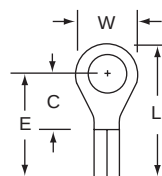
HT-11-10

10  
22-18



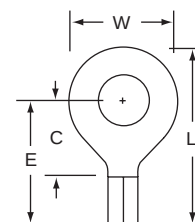
HT-12-6S

6  
16-14



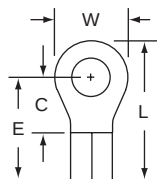
HT-12-10

10  
16-14



HT-12-14

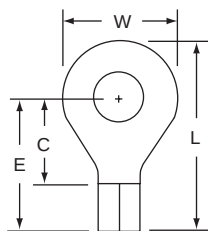
1/4  
16-14



HT-13-10

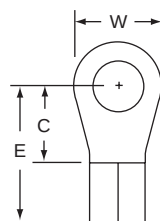
Stud Size  
Wire Range

10  
12-10



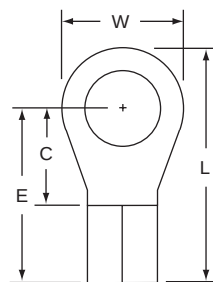
HT-13-14

1/4  
12-10



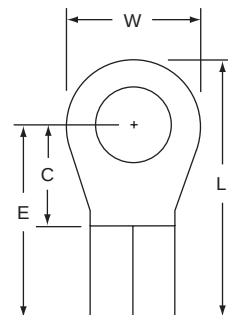
HT-14-14S

1/4  
8



HT-15-38

3/8  
6



HT-16-38

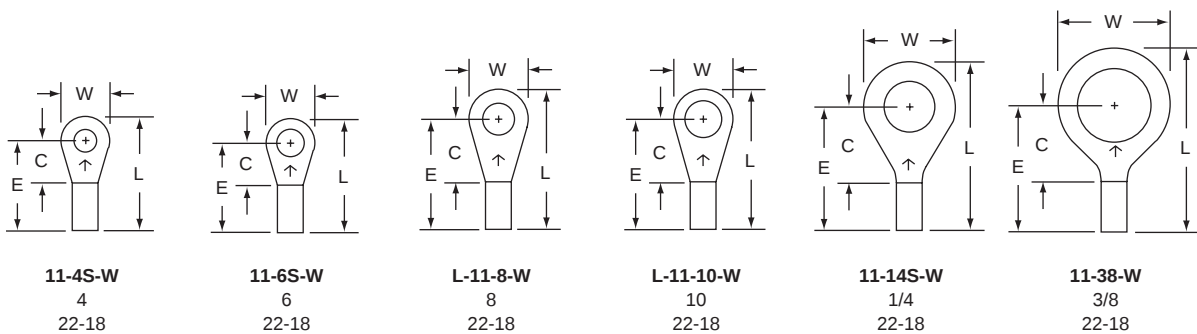
3/8  
4

# Non-Insulated Brazed Seam Ring Tongue Terminals 22-18 AWG



| Product Number        | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 11-2S-W <sup>†</sup>  | 27927         | 22-18            | 2         | 0.25 | 0.23 | 0.60 | 0.48 | 0.030     | 0.25          | 0.070       |
| 11-4S-W               | 27928         | 22-18            | 4         | 0.25 | 0.23 | 0.60 | 0.48 | 0.030     | 0.25          | 0.070       |
| 11-6S-W               | 27930         | 22-18            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| L-11-6-W <sup>†</sup> | 27933         | 22-18            | 6         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-8S-W <sup>†</sup>  | 27934         | 22-18            | 8         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| 11-8-W <sup>†</sup>   | 27935         | 22-18            | 8         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| L-11-8-W              | 27936         | 22-18            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-10-W <sup>†</sup>  | 27937         | 22-18            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| L-11-10-W             | 27938         | 22-18            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-14S-W              | 27939         | 22-18            | 1/4       | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.070       |
| 11-56S-W <sup>†</sup> | 27941         | 22-18            | 5/16      | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.070       |
| 11-38-W               | 27943         | 22-18            | 3/8       | 0.56 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.070       |

<sup>†</sup>Product not shown



## Non-Insulated Brazed Seam Ring Tongue Terminals 16-14 AWG



| Product Number       | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 12-2S-W              | 28329         | 16-14            | 2         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-4S-W              | 28330         | 16-14            | 4         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-6S-W              | 28332         | 16-14            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-6-W <sup>†</sup>  | 28333         | 16-14            | 6         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-6-W             | 28334         | 16-14            | 6         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-8S-W <sup>†</sup> | 28335         | 16-14            | 8         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-8-W <sup>†</sup>  | 28336         | 16-14            | 8         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-8-W             | 28337         | 16-14            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-10-W              | 28338         | 16-14            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-10-W            | 28339         | 16-14            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-14S-W             | 28340         | 16-14            | 1/4       | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-14-W <sup>†</sup> | 28341         | 16-14            | 1/4       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-56S-W             | 28342         | 16-14            | 5/16      | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-56-W <sup>†</sup> | 28343         | 16-14            | 5/16      | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-38-W              | 28344         | 16-14            | 3/8       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |

<sup>†</sup>Product not shown



12-2S-W

Stud Size  
2Wire Range  
16-14

12-4S-W

Stud Size  
4Wire Range  
16-14

12-6S-W

Stud Size  
6Wire Range  
16-14

L-12-6-W

Stud Size  
6Wire Range  
16-14

L-12-8-W

Stud Size  
8Wire Range  
16-14

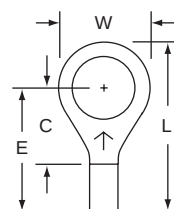
12-10-W

Stud Size  
10Wire Range  
16-14

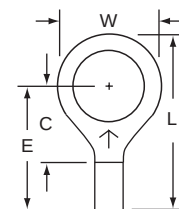
L-12-10-W

Stud Size  
10Wire Range  
16-14

12-14S-W

Stud Size  
1/4Wire Range  
16-14

12-56S-W

Stud Size  
5/16Wire Range  
16-14

12-38-W

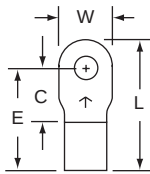
Stud Size  
3/8Wire Range  
16-14

# Non-Insulated Brazed Seam Ring Tongue Terminals 12-10 AWG

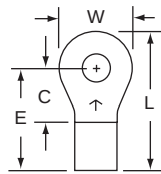


| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 13-4S-W        | 28733         | 12-10            | 4         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-6S-W†       | 28734         | 12-10            | 6         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-6-W         | 28735         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-8S-W†       | 28736         | 12-10            | 8         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-8-W         | 28737         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-10-W        | 28738         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-14S-W       | 28739         | 12-10            | 1/4       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-14-W†       | 28740         | 12-10            | 1/4       | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-56S-W       | 28741         | 12-10            | 5/16      | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-56-W†       | 28742         | 12-10            | 5/16      | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-38S-W       | 28743         | 12-10            | 3/8       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-38-W†       | 28744         | 12-10            | 3/8       | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-716-W†      | 28745         | 12-10            | 7/16      | 0.75 | 0.57 | 1.19 | 0.82 | 0.040     | 0.25          | 0.135       |
| 13-500-W       | 28746         | 12-10            | 1/2       | 0.75 | 0.57 | 1.19 | 0.82 | 0.040     | 0.25          | 0.135       |

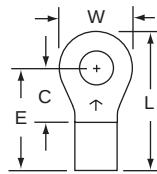
† Product not shown



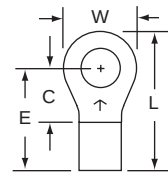
**13-4S-W**  
Stud Size  
4  
Wire Range  
12-10



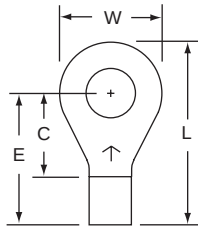
**13-6-W**  
Stud Size  
6  
Wire Range  
12-10



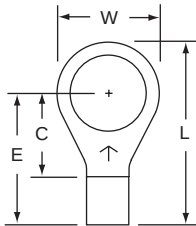
**13-8-W**  
Stud Size  
8  
Wire Range  
12-10



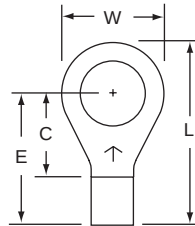
**13-10-W**  
Stud Size  
10  
Wire Range  
12-10



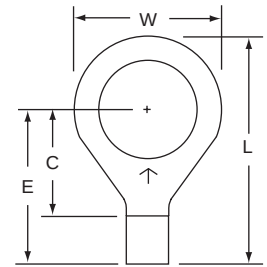
**13-14S-W**  
Stud Size  
1/4  
Wire Range  
12-10



**13-56S-W**  
Stud Size  
5/16  
Wire Range  
12-10



**13-38S-W**  
Stud Size  
3/8  
Wire Range  
12-10



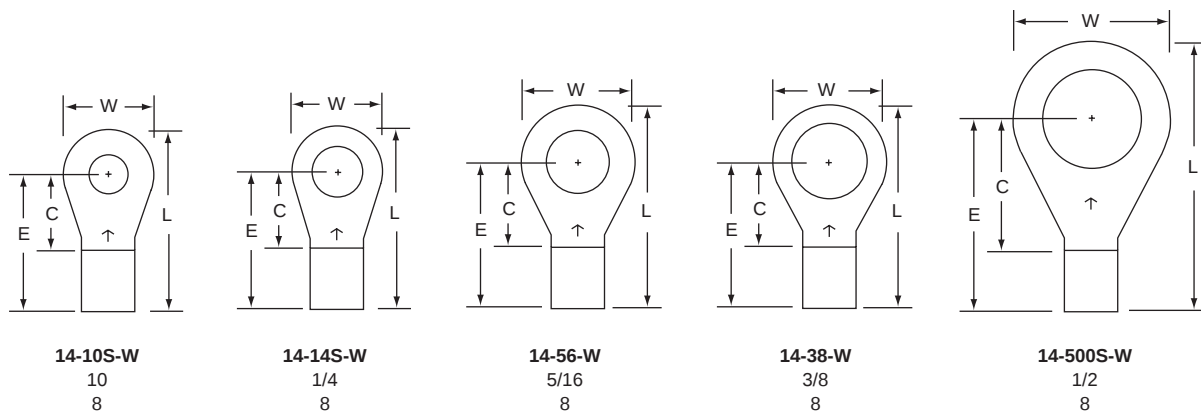
**13-500-W**  
Stud Size  
1/2  
Wire Range  
12-10

## Non-Insulated Brazed Seam Ring Tongue Terminals 8 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 14-10S-W       | 29074         | 8                | 10        | 0.47 | 0.40 | 0.95 | 0.72 | 0.050     | 0.31          | 0.175       |
| 14-14S-W       | 29076         | 8                | 1/4       | 0.47 | 0.40 | 0.95 | 0.72 | 0.050     | 0.31          | 0.175       |
| 14-56-W        | 29078         | 8                | 5/16      | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31          | 0.175       |
| 14-38-W        | 29079         | 8                | 3/8       | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31          | 0.175       |
| 14-716S-W†     | 29080         | 8                | 7/16      | 0.81 | 0.69 | 1.41 | 1.00 | 0.050     | 0.31          | 0.175       |
| 14-500S-W      | 29082         | 8                | 1/2       | 0.81 | 0.69 | 1.41 | 1.00 | 0.050     | 0.31          | 0.175       |
| 14-58-W†       | 29084         | 8                | 5/8       | 1.13 | 1.02 | 1.90 | 1.33 | 0.050     | 0.31          | 0.175       |

† Product not shown

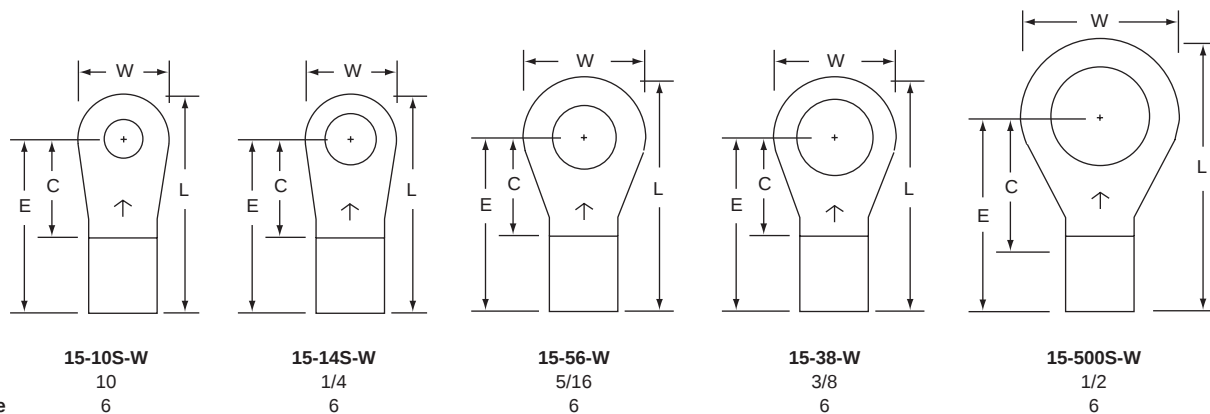


## Non-Insulated Brazed Seam Ring Tongue Terminals 6 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 15-10S-W       | 29102         | 6                | 10        | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       |
| 15-14S-W       | 29104         | 6                | 1/4       | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       |
| 15-56-W        | 29106         | 6                | 5/16      | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       |
| 15-38-W        | 29107         | 6                | 3/8       | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       |
| 15-716S-W†     | 29108         | 6                | 7/16      | 0.81 | 0.63 | 1.42 | 1.02 | 0.050     | 0.39          | 0.250       |
| 15-500S-W      | 29110         | 6                | 1/2       | 0.81 | 0.63 | 1.42 | 1.02 | 0.050     | 0.39          | 0.250       |
| 15-58-W†       | 29112         | 6                | 5/8       | 1.13 | 1.02 | 1.97 | 1.41 | 0.050     | 0.39          | 0.250       |

† Product not shown

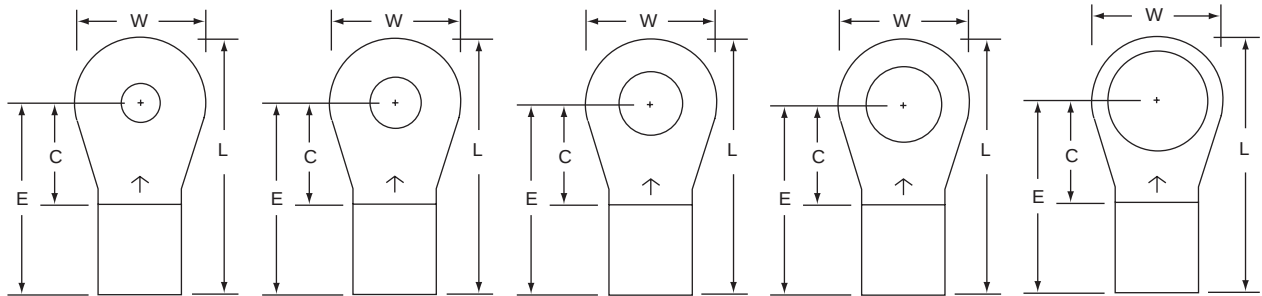


# Non-Insulated Brazed Seam Ring Tongue Terminals 4 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 16-10-W        | 29130         | 4                | 10        | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |
| 16-14-W        | 29131         | 4                | 1/4       | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |
| 16-56-W        | 29132         | 4                | 5/16      | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |
| 16-38-W        | 29133         | 4                | 3/8       | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |
| 16-716S-W†     | 29134         | 4                | 7/16      | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |
| 16-500S-W      | 29136         | 4                | 1/2       | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47          | 0.280       |

† Product not shown



**16-10-W**  
Stud Size 10  
Wire Range 4

**16-14-W**  
Stud Size 1/4  
Wire Range 4

**16-56-W**  
Stud Size 5/16  
Wire Range 4

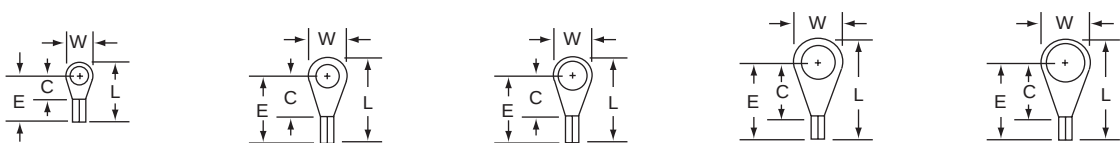
**16-38-W**  
Stud Size 3/8  
Wire Range 4

**16-500S-W**  
Stud Size 1/2  
Wire Range 4

# Non-Insulated Butted Seam Ring Tongue Terminals 26-24 AWG

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 10-0†          | 27842         | 26-24            | 0         | 0.14 | 0.12 | 0.31 | 0.24 | 0.020     | 0.13          | 0.030       |
| 10-2           | 27843         | 26-24            | 2         | 0.14 | 0.12 | 0.31 | 0.24 | 0.020     | 0.13          | 0.030       |
| 10-4           | 27844         | 26-24            | 4         | 0.20 | 0.21 | 0.45 | 0.35 | 0.020     | 0.14          | 0.030       |
| 10-6           | 27845         | 26-24            | 6         | 0.20 | 0.21 | 0.45 | 0.35 | 0.020     | 0.14          | 0.030       |
| 10-8           | 27846         | 26-24            | 8         | 0.25 | 0.28 | 0.53 | 0.40 | 0.020     | 0.13          | 0.030       |
| 10-10          | 27847         | 26-24            | 10        | 0.25 | 0.28 | 0.53 | 0.40 | 0.020     | 0.13          | 0.030       |

† Product not shown



**10-2**  
Stud Size 2  
Wire Range 26-24

**10-4**  
Stud Size 4  
Wire Range 26-24

**10-6**  
Stud Size 6  
Wire Range 26-24

**10-8**  
Stud Size 8  
Wire Range 26-24

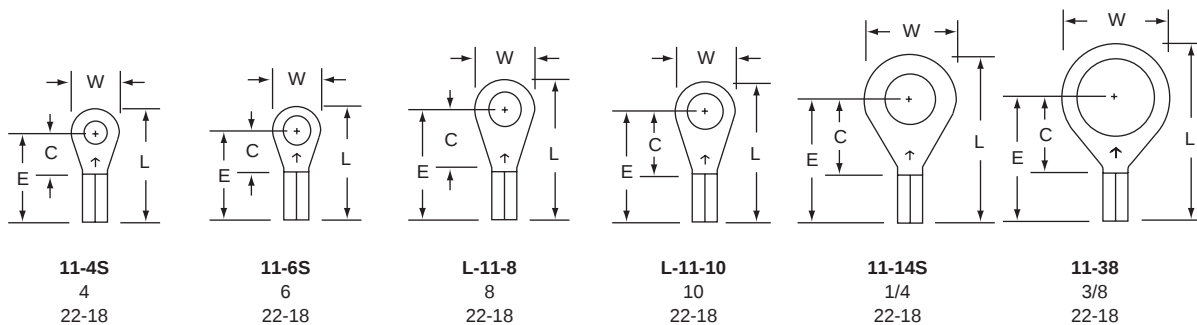
**10-10**  
Stud Size 10  
Wire Range 26-24

# Non-Insulated Butted Seam Ring Tongue Terminals 22-18 AWG



| Product Number      | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|---------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 11-2S <sup>†</sup>  | 27910         | 22-18            | 2         | 0.25 | 0.23 | 0.60 | 0.48 | 0.030     | 0.25          | 0.070       |
| 11-4S               | 27911         | 22-18            | 4         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| 11-6S               | 27913         | 22-18            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| L-11-6              | 27916         | 22-18            | 6         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-8S <sup>†</sup>  | 27917         | 22-18            | 8         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       |
| 11-8 <sup>†</sup>   | 27918         | 22-18            | 8         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| L-11-8 <sup>†</sup> | 27919         | 22-18            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-10 <sup>†</sup>  | 27920         | 22-18            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| L-11-10             | 27921         | 22-18            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       |
| 11-14S              | 27922         | 22-18            | 1/4       | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.070       |
| 11-56S <sup>†</sup> | 27924         | 22-18            | 5/16      | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.070       |
| 11-38               | 27926         | 22-18            | 3/8       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.070       |

<sup>†</sup> Product not shown



# Non-Insulated Butted Seam Ring Tongue Terminals 16-14 AWG



| Product Number      | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|---------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 12-2S <sup>†</sup>  | 28313         | 16-14            | 2         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-4S               | 28314         | 16-14            | 4         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-6S               | 28316         | 16-14            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-6 <sup>†</sup>   | 28317         | 16-14            | 6         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-6 <sup>†</sup> | 28318         | 16-14            | 6         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-8S               | 28319         | 16-14            | 8         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       |
| 12-8 <sup>†</sup>   | 28320         | 16-14            | 8         | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-8 <sup>†</sup> | 28321         | 16-14            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-10 <sup>†</sup>  | 28322         | 16-14            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| L-12-10             | 28323         | 16-14            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       |
| 12-14S              | 28324         | 16-14            | 1/4       | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-14 <sup>†</sup>  | 28325         | 16-14            | 1/4       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-56S <sup>†</sup> | 28326         | 16-14            | 5/16      | 0.47 | 0.40 | 0.88 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-56 <sup>†</sup>  | 28327         | 16-14            | 5/16      | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |
| 12-38 <sup>†</sup>  | 28328         | 16-14            | 3/8       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.090       |

<sup>†</sup> Product not shown

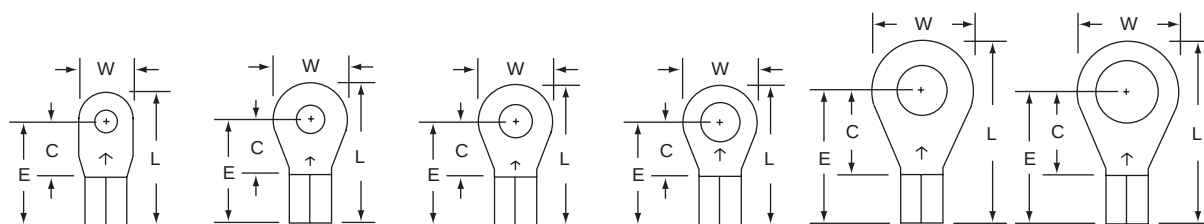


## Non-Insulated Butted Seam Ring Tongue Terminals 12-10 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 13-4S          | 28719         | 12-10            | 4         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-6S†         | 28720         | 12-10            | 6         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-6           | 28721         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-8S†         | 28722         | 12-10            | 8         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-8           | 28723         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-10          | 28724         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 13-14S         | 28725         | 12-10            | 1/4       | 0.53 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-14†         | 28726         | 12-10            | 1/4       | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-56S         | 28727         | 12-10            | 5/16      | 0.53 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-56†         | 28728         | 12-10            | 5/16      | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-38S†        | 28729         | 12-10            | 3/8       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-38†         | 28730         | 12-10            | 3/8       | 0.59 | 0.44 | 0.99 | 0.69 | 0.040     | 0.25          | 0.135       |
| 13-716†        | 28731         | 12-10            | 7/16      | 0.75 | 0.57 | 1.19 | 0.82 | 0.040     | 0.25          | 0.135       |
| 13-500†        | 28732         | 12-10            | 1/2       | 0.75 | 0.57 | 1.20 | 0.82 | 0.040     | 0.25          | 0.135       |

†Product not shown



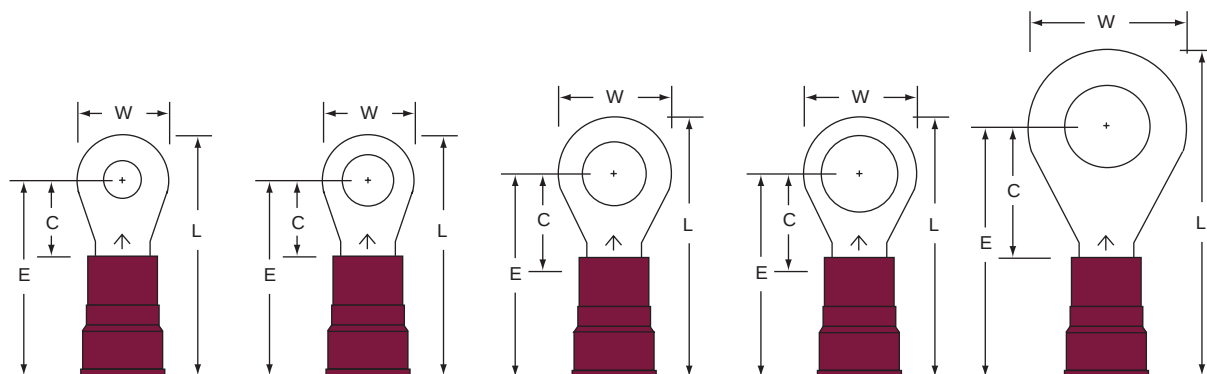
|                   |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|
| <b>Stud Size</b>  | 4     | 6     | 8     | 10    | 1/4   | 5/16  |
| <b>Wire Range</b> | 12-10 | 12-10 | 12-10 | 12-10 | 12-10 | 12-10 |

## Nylon Insulated Brazed Seam Ring Tongue Terminals 8 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 14-10S-WN      | 08231         | 8 (Red)          | 10        | 0.47 | 0.4  | 1.26 | 1.03 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-14S-WN      | 08233         | 8 (Red)          | 1/4       | 0.47 | 0.4  | 1.26 | 1.03 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-56-WN       | 08235         | 8 (Red)          | 5/16      | 0.59 | 0.45 | 1.38 | 1.08 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-38-WN       | 08236         | 8 (Red)          | 3/8       | 0.59 | 0.45 | 1.38 | 1.08 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-716S-WN†    | 08237         | 8 (Red)          | 7/16      | 0.81 | 0.69 | 1.72 | 1.32 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-500S-WN     | 08239         | 8 (Red)          | 1/2       | 0.81 | 0.69 | 1.72 | 1.32 | 0.050     | 0.310         | 0.175       | 0.340                      |
| 14-58-WN†      | 08241         | 8 (Red)          | 5/8       | 1.13 | 1.02 | 2.20 | 1.65 | 0.050     | 0.310         | 0.175       | 0.340                      |

†Product not shown



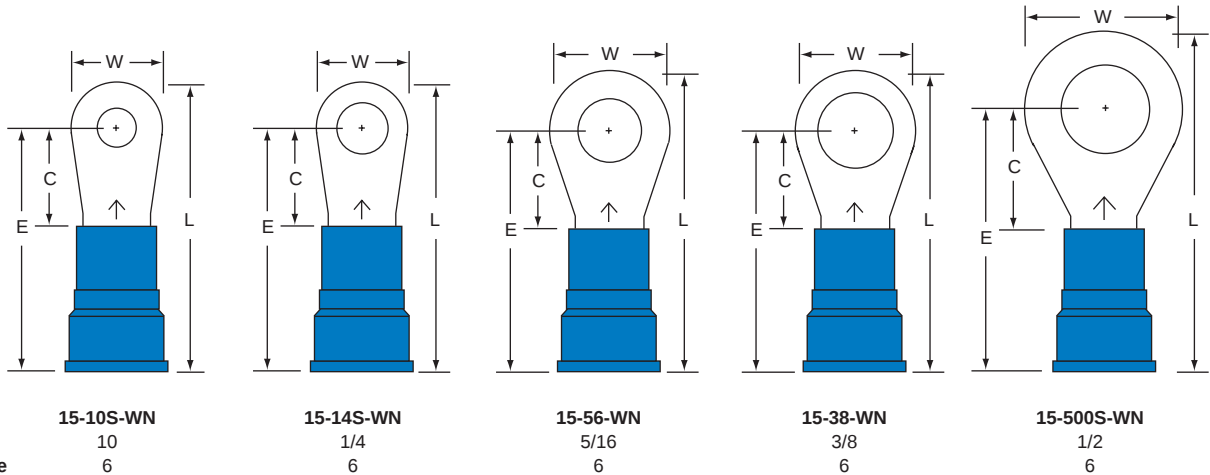
|                   |    |     |      |     |     |
|-------------------|----|-----|------|-----|-----|
| <b>Stud Size</b>  | 10 | 1/4 | 5/16 | 3/8 | 1/2 |
| <b>Wire Range</b> | 8  | 8   | 8    | 8   | 8   |

# Nylon Insulated Brazed Seam Ring Tongue Terminals 6 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 15-10S-WN      | 08243         | 6                | 10        | 0.47 | 0.52 | 1.5  | 1.27 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-14S-WN      | 08245         | 6                | 1/4       | 0.47 | 0.52 | 1.5  | 1.27 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-56-WN       | 08247         | 6                | 5/16      | 0.63 | 0.52 | 1.58 | 1.27 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-38-WN       | 08248         | 6                | 3/8       | 0.63 | 0.52 | 1.58 | 1.27 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-716S-WN†    | 08249         | 6                | 7/16      | 0.81 | 0.63 | 1.78 | 1.38 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-500S-WN     | 08251         | 6                | 1/2       | 0.81 | 0.63 | 1.78 | 1.38 | 0.050     | 0.39          | 0.250       | 0.440                      |
| 15-58-WN†      | 08253         | 6                | 5/8       | 1.13 | 1.02 | 2.33 | 1.77 | 0.050     | 0.39          | 0.250       | 0.440                      |

† Product not shown

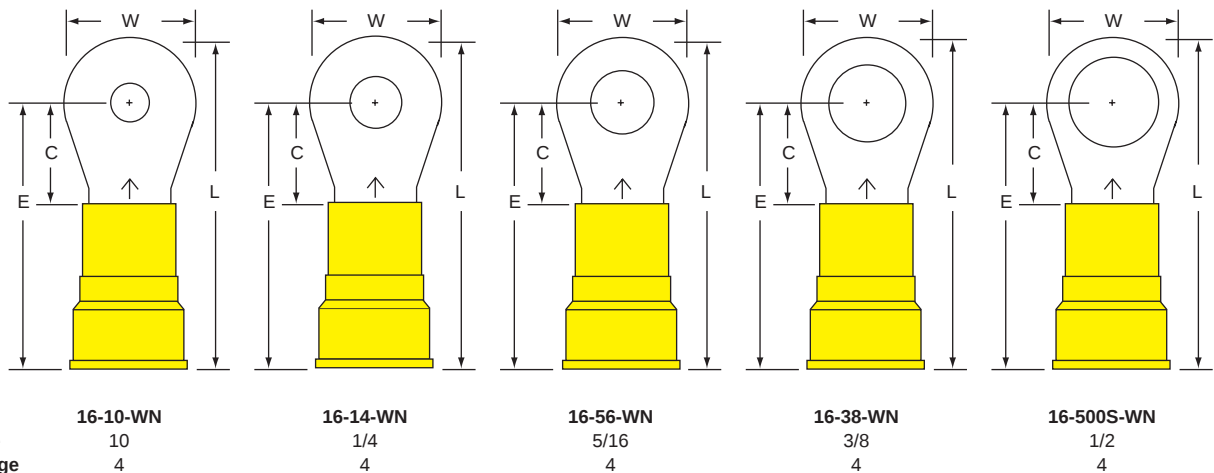


# Nylon Insulated Brazed Seam Ring Tongue Terminals 4 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 16-10-WN       | 08255         | 4                | 10        | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |
| 16-14-WN       | 08256         | 4                | 1/4       | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |
| 16-56-WN       | 08257         | 4                | 5/16      | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |
| 16-38-WN       | 08258         | 4                | 3/8       | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |
| 16-716S-WN†    | 08259         | 4                | 7/16      | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |
| 16-500S-WN     | 08261         | 4                | 1/2       | 0.68 | 0.53 | 1.74 | 1.41 | 0.075     | 0.47          | 0.280       | 0.515                      |

† Product not shown



## Nylon Insulated with Insulation Grip Ring Tongue Terminals 26-24 AWG

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 10-0-NB        | 27830         | 26-24            | 0         | 0.14 | 0.12 | 0.47 | 0.40 | 0.020     | 0.13          | 0.030       | 0.093                      |
| 10-2-NB        | 27831         | 26-24            | 2         | 0.14 | 0.12 | 0.47 | 0.40 | 0.020     | 0.13          | 0.030       | 0.093                      |
| 10-4-NB        | 27832         | 26-24            | 4         | 0.20 | 0.21 | 0.60 | 0.49 | 0.020     | 0.14          | 0.030       | 0.093                      |
| 10-6-NB        | 27833         | 26-24            | 6         | 0.20 | 0.21 | 0.60 | 0.49 | 0.020     | 0.14          | 0.030       | 0.093                      |
| 10-8-NB        | 27834         | 26-24            | 8         | 0.25 | 0.28 | 0.69 | 0.56 | 0.020     | 0.13          | 0.030       | 0.093                      |
| 10-10-NB       | 27835         | 26-24            | 10        | 0.25 | 0.28 | 0.69 | 0.56 | 0.020     | 0.13          | 0.030       | 0.093                      |



10-0-NB

Stud Size  
Wire Range

0  
26-24



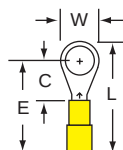
10-2-NB

2  
26-24



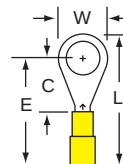
10-4-NB

4  
26-24



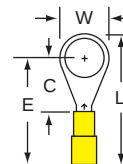
10-6-NB

6  
26-24



10-8-NB

8  
26-24



10-10-NB

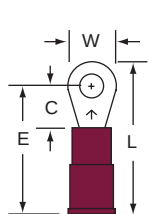
10  
26-24

## Nylon Insulated with Insulation Grip Ring Tongue Terminals 22-18 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 11-2S-NB†      | 27877         | 22-18            | 2         | 0.25 | 0.23 | 0.79 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-4S-NB       | 27878         | 22-18            | 4         | 0.25 | 0.22 | 0.79 | 0.66 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-6S-NB       | 27880         | 22-18            | 6         | 0.25 | 0.22 | 0.79 | 0.66 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-6-NB†     | 27882         | 22-18            | 6         | 0.31 | 0.33 | 0.92 | 0.77 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-8S-NB†      | 27883         | 22-18            | 8         | 0.25 | 0.22 | 0.79 | 0.66 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-8-NB†       | 27884         | 22-18            | 8         | 0.33 | 0.29 | 0.89 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-8-NB      | 27885         | 22-18            | 8         | 0.31 | 0.33 | 0.92 | 0.77 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-10-NB†      | 27886         | 22-18            | 10        | 0.33 | 0.29 | 0.89 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-10-NB     | 27887         | 22-18            | 10        | 0.31 | 0.33 | 0.92 | 0.77 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-14S-NB      | 27888         | 22-18            | 1/4       | 0.47 | 0.40 | 1.07 | 0.84 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-56S-NB      | 27890         | 22-18            | 5/16      | 0.47 | 0.40 | 1.07 | 0.84 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-38-NB       | 27892         | 22-18            | 3/8       | 0.56 | 0.40 | 1.12 | 0.84 | 0.030     | 0.25          | 0.070       | 0.145                      |

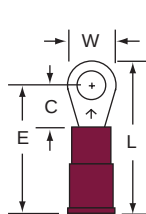
† Product not shown



11-4S-NB

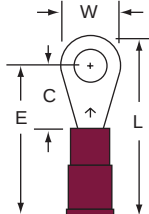
Stud Size  
Wire Range

4  
22-18



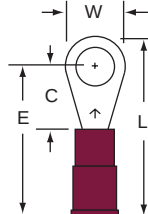
11-6S-NB

6  
22-18



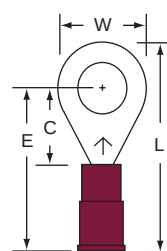
L-11-8-NB

8  
22-18



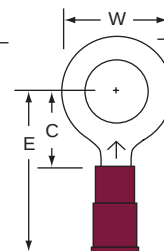
L-11-10-NB

10  
22-18



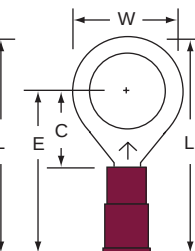
11-14S-NB

1/4  
22-18



11-56S-NB

5/16  
22-18



11-38-NB

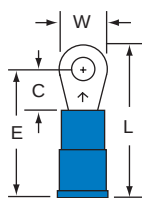
3/8  
22-18

# Nylon Insulated with Insulation Grip Ring Tongue Terminals 16-14 AWG



| Product Number         | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 12-2S-NB <sup>†</sup>  | 28281         | 16-14            | 2         | 0.25 | 0.22 | 0.81 | 0.68 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-4S-NB               | 28282         | 16-14            | 4         | 0.25 | 0.22 | 0.81 | 0.68 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-6S-NB               | 28284         | 16-14            | 6         | 0.25 | 0.22 | 0.81 | 0.68 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-6-NB <sup>†</sup>   | 28285         | 16-14            | 6         | 0.33 | 0.29 | 0.91 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-6-NB <sup>†</sup> | 28286         | 16-14            | 6         | 0.31 | 0.33 | 0.94 | 0.79 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-8S-NB               | 28287         | 16-14            | 8         | 0.25 | 0.22 | 0.81 | 0.68 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-8-NB                | 28288         | 16-14            | 8         | 0.33 | 0.29 | 0.91 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-8-NB              | 28289         | 16-14            | 8         | 0.31 | 0.33 | 0.94 | 0.79 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-10-NB               | 28290         | 16-14            | 10        | 0.33 | 0.29 | 0.89 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-10-NB             | 28291         | 16-14            | 10        | 0.31 | 0.33 | 0.92 | 0.79 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-14S-NB              | 28292         | 16-14            | 1/4       | 0.47 | 0.40 | 1.09 | 0.86 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-14-NB <sup>†</sup>  | 28293         | 16-14            | 1/4       | 0.56 | 0.40 | 1.14 | 0.86 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-56S-NB              | 28294         | 16-14            | 5/16      | 0.47 | 0.40 | 1.09 | 0.86 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-56-NB <sup>†</sup>  | 28295         | 16-14            | 5/16      | 0.56 | 0.40 | 1.14 | 0.86 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-38-NB               | 28296         | 16-14            | 3/8       | 0.56 | 0.40 | 1.14 | 0.86 | 0.030     | 0.25          | 0.090       | 0.170                      |

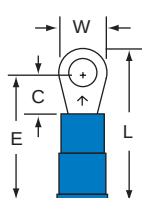
<sup>†</sup> Product not shown



**12-4S-NB**

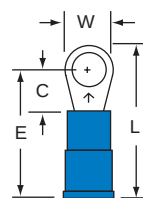
**Stud Size**  
**Wire Range**

4  
16-14



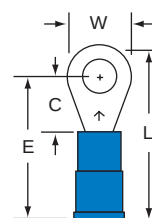
**12-6S-NB**

6  
16-14



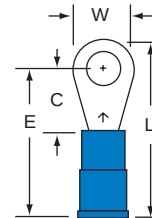
**12-8S-NB**

8  
16-14



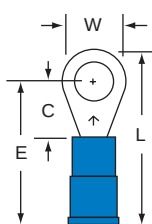
**12-8-NB**

8  
16-14



**L-12-8-NB**

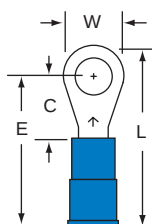
8  
16-14



**12-10-NB**

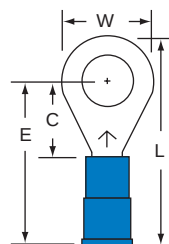
**Stud Size**  
**Wire Range**

10  
16-14



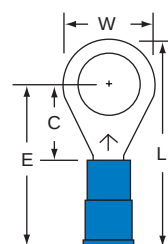
**L-12-10-NB**

10  
16-14



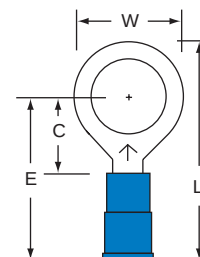
**12-14S-NB**

1/4  
16-14



**12-56S-NB**

5/16  
16-14



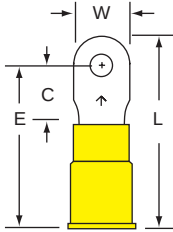
**12-38-NB**

3/8  
16-14

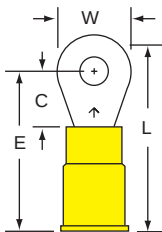
Nylon Insulated with Insulation Grip Ring Tongue Terminals 12-10 AWG  

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 13-4S-NB       | 28691         | 12-10            | 4         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-6S-NB†      | 28692         | 12-10            | 6         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-6-NB        | 28693         | 12-10            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-8S-NB†      | 28694         | 12-10            | 8         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-8-NB        | 28695         | 12-10            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-10-NB       | 28696         | 12-10            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-14S-NB      | 28697         | 12-10            | 1/4       | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-14-NB†      | 28698         | 12-10            | 1/4       | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-56S-NB      | 28699         | 12-10            | 5/16      | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-56-NB†      | 28700         | 12-10            | 5/16      | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-38S-NB      | 28701         | 12-10            | 3/8       | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-38-NB†      | 28702         | 12-10            | 3/8       | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-716-NB†     | 28703         | 12-10            | 7/16      | 0.75 | 0.57 | 1.49 | 1.12 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-500-NB†     | 28704         | 12-10            | 1/2       | 0.75 | 0.57 | 1.50 | 1.12 | 0.040     | 0.25          | 0.135       | 0.250                      |

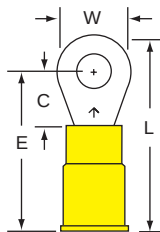
†Product not shown



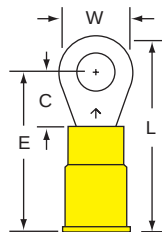
**13-4S-NB**  
Stud Size  
4  
Wire Range  
12-10



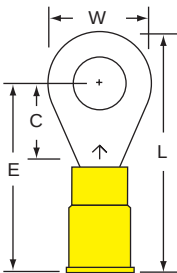
**13-6-NB**  
Stud Size  
6  
Wire Range  
12-10



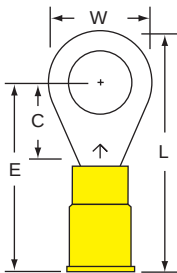
**13-8-NB**  
Stud Size  
8  
Wire Range  
12-10



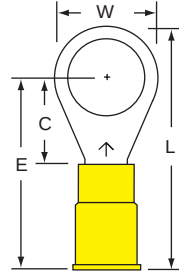
**13-10-NB**  
Stud Size  
10  
Wire Range  
12-10



**13-14S-NB**  
Stud Size  
1/4  
Wire Range  
12-10



**13-56S-NB**  
Stud Size  
5/16  
Wire Range  
12-10



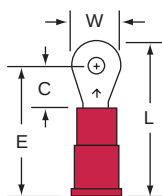
**13-38S-NB**  
Stud Size  
3/8  
Wire Range  
12-10

# Vinyl Insulated Butted Seam Ring Tongue Terminals 22-18 AWG

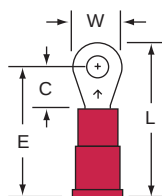


| Product Number        | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|-----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 11-2S-P               | 27893         | 22-18            | 2         | 0.25 | 0.23 | 0.80 | 0.68 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-4S-P               | 27894         | 22-18            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-6S-P               | 27896         | 22-18            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-6-P <sup>†</sup> | 27899         | 22-18            | 6         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-8S-P <sup>†</sup>  | 27900         | 22-18            | 8         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-8-P <sup>†</sup>   | 27901         | 22-18            | 8         | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-8-P              | 27902         | 22-18            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-10-P <sup>†</sup>  | 27903         | 22-18            | 10        | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.070       | 0.145                      |
| L-11-10-P             | 27904         | 22-18            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-14S-P              | 27905         | 22-18            | 1/4       | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-56S-P              | 27907         | 22-18            | 5/16      | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-38-P               | 27909         | 22-18            | 3/8       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                      |

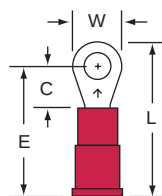
<sup>†</sup> Product not shown



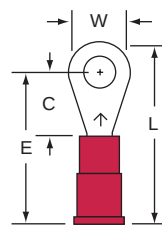
**11-2S-P**  
Stud Size  
2  
Wire Range  
22-18



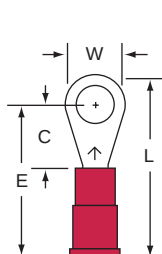
**11-4S-P**  
Stud Size  
4  
Wire Range  
22-18



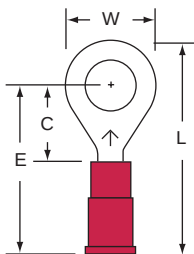
**11-6S-P**  
Stud Size  
6  
Wire Range  
22-18



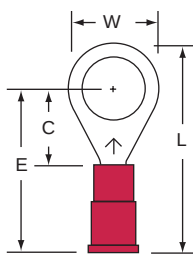
**L-11-8-P**  
Stud Size  
8  
Wire Range  
22-18



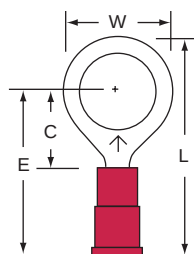
**L-11-10-P**  
Stud Size  
10  
Wire Range  
22-18



**11-14S-P**  
Stud Size  
1/4  
Wire Range  
22-18



**11-56S-P**  
Stud Size  
5/16  
Wire Range  
22-18



**11-38-P**  
Stud Size  
3/8  
Wire Range  
22-18

## Vinyl Insulated Butted Seam Ring Tongue Terminals 16-14 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 12-2S-P†       | 28297         | 16-14            | 2         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-4S-P        | 28298         | 16-14            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-6S-P        | 28300         | 16-14            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-6-P†        | 28301         | 16-14            | 6         | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-6-P†      | 28302         | 16-14            | 6         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-8S-P        | 28303         | 16-14            | 8         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-8-P         | 28304         | 16-14            | 8         | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-8-P       | 28305         | 16-14            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-10-P        | 28306         | 16-14            | 10        | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| L-12-10-P      | 28307         | 16-14            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-14S-P†      | 28308         | 16-14            | 1/4       | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-14-P        | 28309         | 16-14            | 1/4       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-56S-P       | 28310         | 16-14            | 5/16      | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-56-P†       | 28311         | 16-14            | 5/16      | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-38-P        | 28312         | 16-14            | 3/8       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |

†Product not shown



**12-4S-P**  
Stud Size 4  
Wire Range 16-14



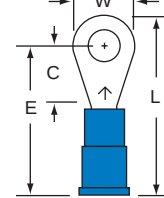
**12-6S-P**  
Stud Size 6  
Wire Range 16-14



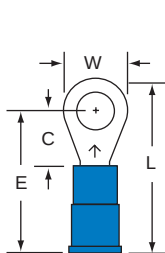
**12-8S-P**  
Stud Size 8  
Wire Range 16-14



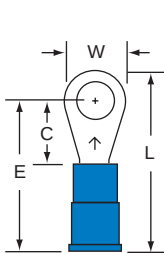
**12-8-P**  
Stud Size 8  
Wire Range 16-14



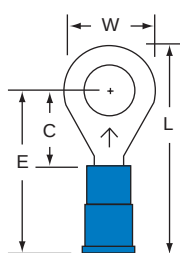
**L-12-8-P**  
Stud Size 8  
Wire Range 16-14



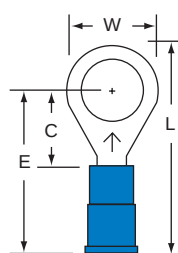
**12-10-P**  
Stud Size 10  
Wire Range 16-14



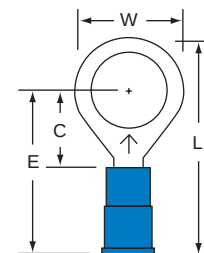
**L-12-10-P**  
Stud Size 10  
Wire Range 16-14



**12-14-P**  
Stud Size 1/4  
Wire Range 16-14



**12-56S-P**  
Stud Size 5/16  
Wire Range 16-14



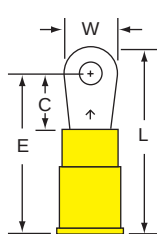
**12-38-P**  
Stud Size 3/8  
Wire Range 16-14

# Vinyl Insulated Butted Seam Ring Tongue Terminals 12-10 AWG



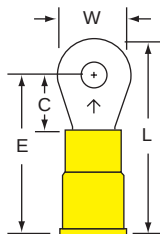
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 13-4S-P        | 28705         | 12-10            | 4         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-6S-P†       | 28706         | 12-10            | 6         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-6-P         | 28707         | 12-10            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-8S-P†       | 28708         | 12-10            | 8         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-8-P         | 28709         | 12-10            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-10-P        | 28710         | 12-10            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-14S-P       | 28711         | 12-10            | 1/4       | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-14-P†       | 28712         | 12-10            | 1/4       | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-56S-P       | 28713         | 12-10            | 5/16      | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-56-P†       | 28714         | 12-10            | 5/16      | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-38S-P       | 28715         | 12-10            | 3/8       | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-38-P†       | 28716         | 12-10            | 3/8       | 0.59 | 0.44 | 1.29 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-716-P†      | 28717         | 12-10            | 7/16      | 0.75 | 0.57 | 1.49 | 1.12 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 13-500-P†      | 28718         | 12-10            | 1/2       | 0.75 | 0.57 | 1.50 | 1.12 | 0.040     | 0.25          | 0.135       | 0.250                      |

† Product not shown

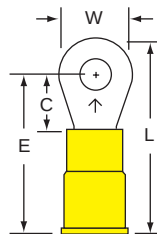


**13-4S-P**  
4  
12-10

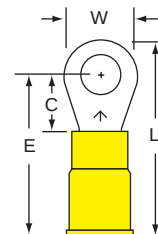
Stud Size  
Wire Range



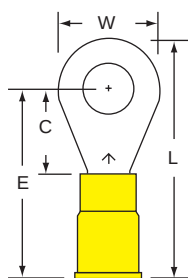
**13-6-P**  
6  
12-10



**13-8-P**  
8  
12-10

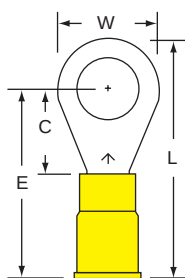


**13-10-P**  
10  
12-10

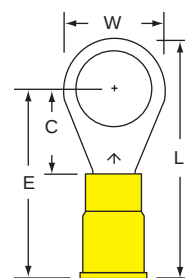


**13-14S-P,**  
1/4  
12-10

Stud Size  
Wire Range



**13-56S-P**  
5/16  
12-10



**13-38S-P**  
3/8  
12-10

## Non-Insulated Butted Seam Multi-Stud Ring Tongue Terminals



| Product Number     | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|--------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 11-26 <sup>†</sup> | 29895         | 22-18            | 2, 4, 6   | 0.28 | 0.28 | 0.74 | 0.53 | 0.030     | 0.25          | 0.070       |
| 11-610             | 29638         | 22-18            | 6, 8, 10  | 0.34 | 0.31 | 0.81 | 0.56 | 0.030     | 0.25          | 0.070       |
| 12-26 <sup>†</sup> | 29896         | 16-14            | 2, 4, 6   | 0.28 | 0.28 | 0.74 | 0.53 | 0.030     | 0.25          | 0.090       |
| 12-610             | 29642         | 16-14            | 6, 8, 10  | 0.34 | 0.31 | 0.81 | 0.56 | 0.030     | 0.25          | 0.090       |
| 13-610             | 29646         | 12-10            | 6, 8, 10  | 0.39 | 0.35 | 0.89 | 0.60 | 0.040     | 0.25          | 0.135       |

<sup>†</sup>Product not shown



**11-610**  
Stud Size  
Wire Range  
6, 8, 10  
22-18



**12-610**  
Stud Size  
Wire Range  
6, 8, 10  
16-14



**13-610**  
Stud Size  
Wire Range  
6, 8, 10  
12-10

## Non-Insulated Brazed Seam Multi-Stud Ring Tongue Terminals



| Product Number       | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 11-26-W <sup>†</sup> | 29893         | 22-18            | 2, 4, 6   | 0.28 | 0.28 | 0.74 | 0.53 | 0.030     | 0.25          | 0.070       |
| 11-610-W             | 29639         | 22-18            | 6, 8, 10  | 0.34 | 0.31 | 0.81 | 0.56 | 0.030     | 0.25          | 0.070       |
| 12-26-W <sup>†</sup> | 29894         | 16-14            | 2, 4, 6   | 0.28 | 0.28 | 0.74 | 0.53 | 0.030     | 0.25          | 0.090       |
| 12-610-W             | 29670         | 16-14            | 6, 8, 10  | 0.34 | 0.31 | 0.81 | 0.56 | 0.030     | 0.25          | 0.090       |
| 13-610-W             | 29647         | 12-10            | 6, 8, 10  | 0.39 | 0.35 | 0.89 | 0.60 | 0.040     | 0.25          | 0.135       |

<sup>†</sup>Product not shown



**11-610-W**  
Stud Size  
Wire Range  
6, 8, 10  
22-18



**12-610-W**  
Stud Size  
Wire Range  
6, 8, 10  
16-14



**13-610-W**  
Stud Size  
Wire Range  
6, 8, 10  
12-10

# Vinyl Insulated Butted Seam Multi-Stud Ring Tongue Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 11-26-P†       | 29897         | 22-18            | 2, 4, 6   | 0.28 | 0.28 | 0.94 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-610-P       | 29640         | 22-18            | 6, 8, 10  | 0.34 | 0.31 | 1.01 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 12-26-P†       | 29898         | 16-14            | 2, 4, 6   | 0.28 | 0.28 | 0.94 | 0.73 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-610-P       | 29643         | 16-14            | 6, 8, 10  | 0.34 | 0.31 | 1.01 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 13-610-P       | 29648         | 12-10            | 6, 8, 10  | 0.39 | 0.35 | 1.19 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |

† Product not shown



**11-610-P**  
Stud Size  
Wire Range



**12-610-P**  
Stud Size  
Wire Range



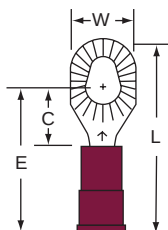
**13-610-P**  
Stud Size  
Wire Range

# Nylon Insulated with Insulation Grip Multi-Stud Ring Tongue Terminals

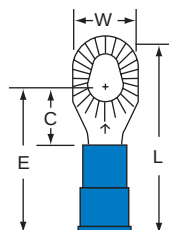


| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 11-26-NB†      | 29901         | 22-18            | 2, 4, 6   | 0.28 | 0.28 | 0.93 | 0.72 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 11-610-NB      | 29641         | 22-18            | 6, 8, 10  | 0.34 | 0.31 | 1.00 | 0.75 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 12-26-NB†      | 29902         | 16-14            | 2, 4, 6   | 0.28 | 0.28 | 0.95 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 12-610-NB      | 29644         | 16-14            | 6, 8, 10  | 0.34 | 0.31 | 1.02 | 0.77 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 13-610-NB      | 29649         | 12-10            | 6, 8, 10  | 0.39 | 0.35 | 1.19 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |

† Product not shown



**11-610-NB**  
Stud Size  
Wire Range



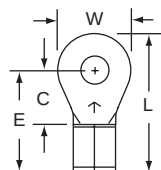
**12-610-NB**  
Stud Size  
Wire Range



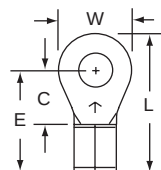
**13-610-NB**  
Stud Size  
Wire Range

# Heavy-Duty Non-Insulated Butted Seam Ring Tongue Terminals

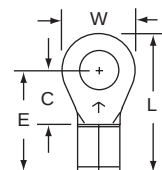
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 123-6          | 28930         | 16-12            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-8          | 28932         | 16-12            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-10         | 28933         | 16-12            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-14         | 28935         | 16-12            | 1/4       | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-56         | 28937         | 16-12            | 5/16      | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-38         | 28939         | 16-12            | 3/8       | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-716        | 28940         | 16-12            | 7/16      | 0.75 | 0.57 | 1.19 | 0.82 | 0.050     | 0.25          | 0.110       |
| 123-500        | 28941         | 16-12            | 1/2       | 0.75 | 0.57 | 1.20 | 0.82 | 0.050     | 0.25          | 0.110       |



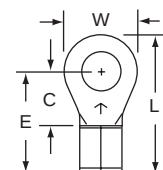
**123-6**  
6  
16-12



**123-8**  
8  
16-12

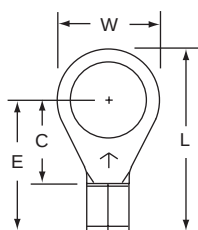


**123-10**  
10  
16-12

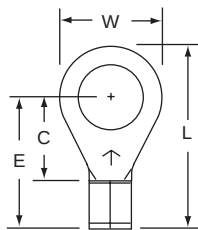


**123-14**  
1/4  
16-12

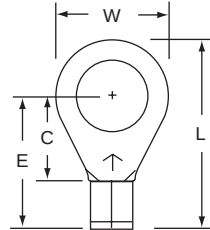
Stud Size  
Wire Range



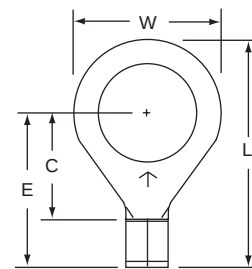
**123-56**  
5/16  
16-12



**123-38**  
3/8  
16-12



**123-716**  
7/16  
16-12



**123-500**  
1/2  
16-12

Stud Size  
Wire Range

# Heavy-Duty Non-Insulated Brazen Seam Ring Tongue Terminals



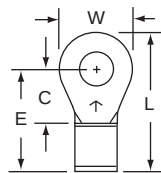
| Product Number        | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-----------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 123-6S-W <sup>†</sup> | 28943         | 16-12            | 6         | 0.28 | 0.29 | 0.68 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-6-W               | 28944         | 16-12            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-8-W               | 28946         | 16-12            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-10-W              | 28947         | 16-12            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.050     | 0.25          | 0.110       |
| 123-14-W              | 28949         | 16-12            | 1/4       | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-56-W              | 28951         | 16-12            | 5/16      | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-38-W              | 28953         | 16-12            | 3/8       | 0.61 | 0.44 | 0.99 | 0.69 | 0.050     | 0.25          | 0.110       |
| 123-716-W             | 28954         | 16-12            | 7/16      | 0.75 | 0.57 | 1.19 | 0.82 | 0.050     | 0.25          | 0.110       |
| 123-500-W             | 28955         | 16-12            | 1/2       | 0.75 | 0.57 | 1.19 | 0.82 | 0.050     | 0.25          | 0.110       |

<sup>†</sup>Product not shown

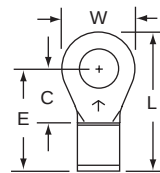


**123-6-W**  
6  
16-12

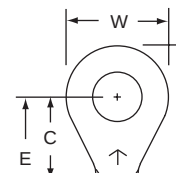
Stud Size  
Wire Range



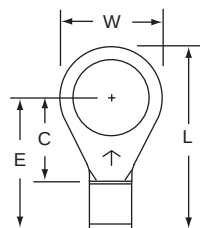
**123-8-W**  
8  
16-12



**123-10-W**  
10  
16-12

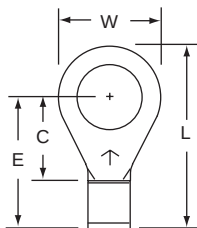


**123-14-W**  
1/4  
16-12

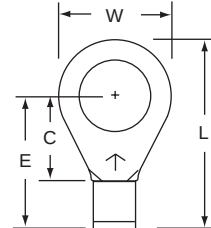


**123-56-W**  
5/16  
16-12

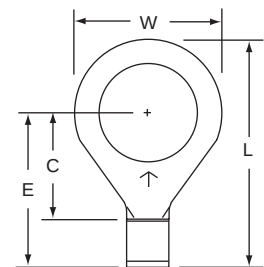
Stud Size  
Wire Range



**123-38-W**  
3/8  
16-12



**123-716-W**  
7/16  
16-12



**123-500-W**  
1/2  
16-12

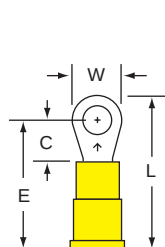
<sup>†</sup>Product Number ending in X = box; Product Number ending with K = bulk

# Heavy-Duty Vinyl Insulated Butted Seam Ring Tongue Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 123-6S-P†      | 28915         | 16-12            | 6         | 0.28 | 0.29 | 0.98 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-6-P        | 28916         | 16-12            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-8S-P†      | 28903         | 16-12            | 8         | 0.28 | 0.29 | 0.98 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-8-P        | 28918         | 16-12            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-10-P       | 28919         | 16-12            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-14-P       | 28921         | 16-12            | 1/4       | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-56-P       | 28923         | 16-12            | 5/16      | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-38-P       | 28925         | 16-12            | 3/8       | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-716-P      | 28926         | 16-12            | 7/16      | 0.75 | 0.57 | 1.49 | 1.12 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-500-P      | 28927         | 16-12            | 1/2       | 0.75 | 0.57 | 1.50 | 1.12 | 0.050     | 0.25          | 0.110       | 0.250                      |

†Product not shown

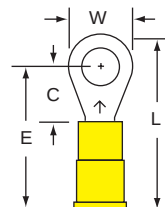


**123-6-P**  
6  
16-12

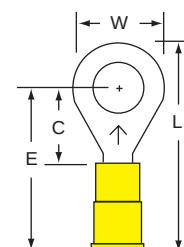
Stud Size  
Wire Range



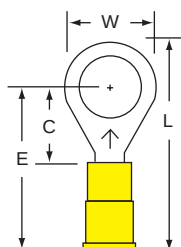
**123-8-P**  
8  
16-12



**123-10-P**  
10  
16-12

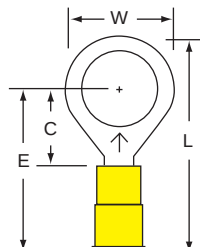


**123-14-P**  
1/4  
16-12

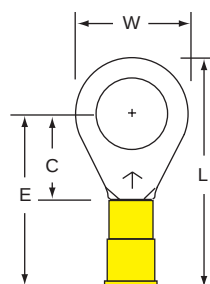


**123-56-P**  
5/16  
16-12

Stud Size  
Wire Range



**123-38-P**  
3/8  
16-12



**123-716-P**  
7/16  
16-12

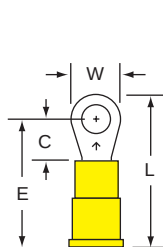


**123-500-P**  
1/2  
16-12

# Heavy-Duty Nylon Insulated with Insulation Grip Ring Tongue Terminals

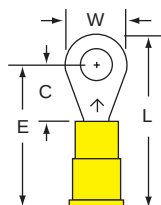
| Product Number         | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 123-6S-NB <sup>†</sup> | 28901         | 16-12            | 6         | 0.28 | 0.29 | 0.98 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-6-NB               | 28902         | 16-12            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-8S-NB <sup>†</sup> | 28903         | 16-12            | 8         | 0.28 | 0.29 | 0.98 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-8-NB               | 28904         | 16-12            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-10-NB              | 28905         | 16-12            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-14-NB              | 28907         | 16-12            | 1/4       | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-56-NB              | 28909         | 16-12            | 5/16      | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-38-NB              | 28911         | 16-12            | 3/8       | 0.61 | 0.44 | 1.29 | 0.99 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-716-NB             | 28912         | 16-12            | 7/16      | 0.75 | 0.57 | 1.49 | 1.12 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 123-500-NB             | 28913         | 16-12            | 1/2       | 0.75 | 0.57 | 1.50 | 1.12 | 0.050     | 0.25          | 0.110       | 0.250                      |

<sup>†</sup> Product not shown

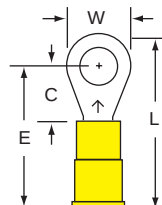


**123-6-NB**  
6  
16-12

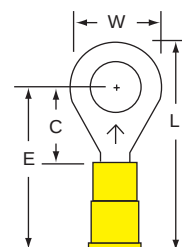
Stud Size  
Wire Range



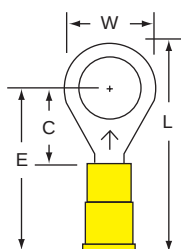
**123-8-NB**  
8  
16-12



**123-10-NB**  
10  
16-12

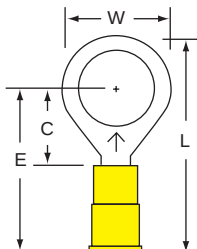


**123-14-NB**  
1/4  
16-12

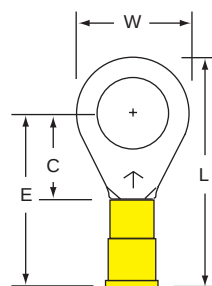


**123-56-NB**  
5/16  
16-12

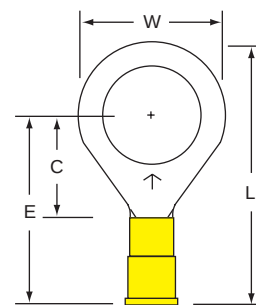
Stud Size  
Wire Range



**123-38-NB**  
3/8  
16-12



**123-716-NB**  
7/16  
16-12



**123-500-NB**  
1/2  
16-12

## High-Temperature Butted Seam Block Fork Terminals 900°F (482°C)

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| HT-BS-31-6     | 29601         | 22-18            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| HT-BS-32-6     | 29602         | 16-14            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |



**HT-BS-31-6**  
Stud Size  
6  
Wire Range  
22-18



**HT-BS-32-6**  
Stud Size  
6  
Wire Range  
16-14

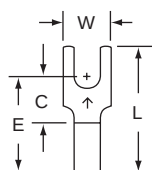
## Non-Insulated Brazed Seam Block Fork Terminals 22-18 AWG



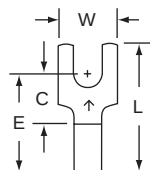
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-31-4S-W     | 29635         | 22-18            | 4         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-6S-W     | 28146         | 22-18            | 6         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-6-W      | 28147         | 22-18            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-8-W      | 28148         | 22-18            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-10-W     | 28149         | 22-18            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |



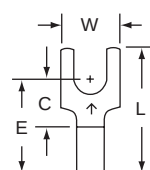
**BS-31-4S-W**  
Stud Size  
4  
Wire Range  
22-18



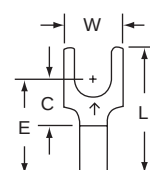
**BS-31-6S-W**  
Stud Size  
6  
Wire Range  
22-18



**BS-31-6-W**  
Stud Size  
6  
Wire Range  
22-18



**BS-31-8-W**  
Stud Size  
8  
Wire Range  
22-18

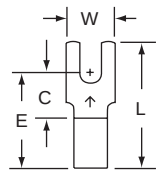


**BS-31-10-W**  
Stud Size  
10  
Wire Range  
22-18

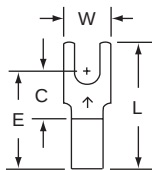
## Non-Insulated Brazed Seam Block Fork Terminals 16-14 AWG



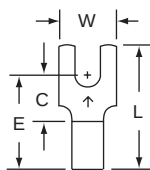
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-32-4S-W     | 30081         | 16-14            | 4         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-6S-W     | 28545         | 16-14            | 6         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-6-W      | 28546         | 16-14            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-8-W      | 28547         | 16-14            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-10-W     | 28548         | 16-14            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |



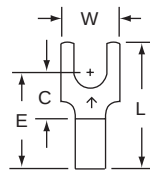
**BS-32-4S-W**  
Stud Size  
4  
Wire Range  
16-14



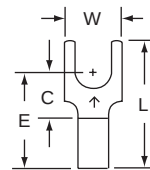
**BS-32-6S-W**  
Stud Size  
6  
Wire Range  
16-14



**BS-32-6-W**  
Stud Size  
6  
Wire Range  
16-14



**BS-32-8-W**  
Stud Size  
8  
Wire Range  
16-14



**BS-32-10-W**  
Stud Size  
10  
Wire Range  
16-14

# Non-Insulated Brazed Seam Block Fork Terminals 12-10 AWG



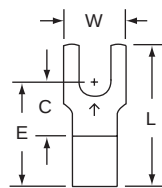
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-33-6-W      | 28818         | 12-10            | 6         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-33-8-W      | 28819         | 12-10            | 8         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-33-10-W     | 28820         | 12-10            | 10        | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |



BS-33-6-W

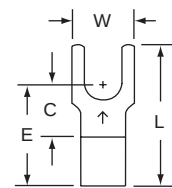
Stud Size  
Wire Range

6  
12-10



BS-33-8-W

8  
12-10



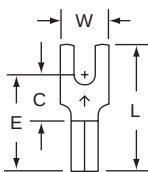
BS-33-10-W

10  
12-10

# Non-Insulated Butted Seam Block Fork Terminals 22-18 AWG



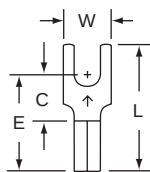
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-31-4S       | 29632         | 22-18            | 4         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-6S       | 28142         | 22-18            | 6         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-6        | 28143         | 22-18            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-8        | 28144         | 22-18            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-31-10       | 28145         | 22-18            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |



BS-31-4S

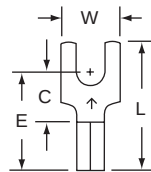
Stud Size  
Wire Range

4  
22-18



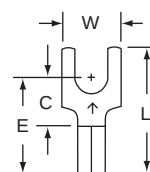
BS-31-6S

6  
22-18



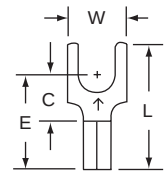
BS-31-6

6  
22-18



BS-31-8

8  
22-18



BS-31-10

10  
22-18

# Non-Insulated Butted Seam Block Fork Terminals 16-14 AWG



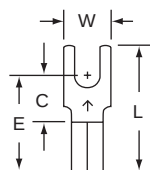
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-32-4S       | 30080         | 16-14            | 4         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-6S       | 28541         | 16-14            | 6         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-6        | 28542         | 16-14            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-8        | 28543         | 16-14            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-32-10       | 28544         | 16-14            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |



BS-32-4S

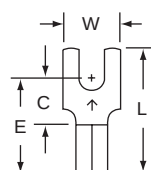
Stud Size  
Wire Range

4  
16-14



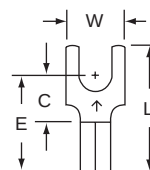
BS-32-6S

6  
16-14



BS-32-6

6  
16-14



BS-32-8

8  
16-14



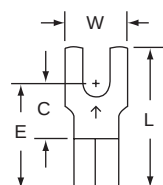
BS-32-10

10  
16-14

# Non-Insulated Butted Seam Block Fork Terminals 12-10 AWG



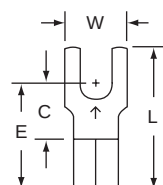
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-33-6        | 28815         | 12-10            | 6         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-33-8        | 28816         | 12-10            | 8         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-33-10       | 28817         | 12-10            | 10        | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |



BS-33-6

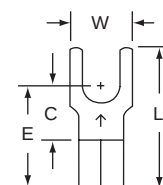
Stud Size  
Wire Range

6  
12-10



BS-33-8

8  
12-10



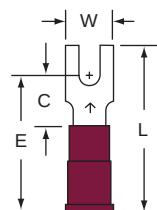
BS-33-10

10  
12-10

# Nylon Insulated with Insulation Grip Block Fork Terminals 22-18 AWG



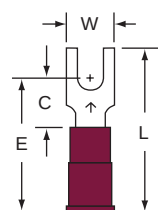
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-31-4S-NB    | 29634         | 22-18            | 4         | 0.25 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-6S-NB    | 28134         | 22-18            | 6         | 0.25 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-6-NB     | 28135         | 22-18            | 6         | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-8-NB     | 28136         | 22-18            | 8         | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-10-NB    | 28137         | 22-18            | 10        | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |



BS-31-4S-NB

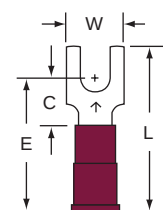
Stud Size  
Wire Range

4  
22-18



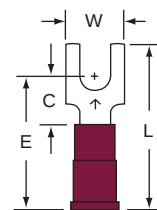
BS-31-6S-NB

6  
22-18



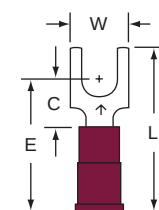
BS-31-6-NB

6  
22-18



BS-31-8-NB

8  
22-18



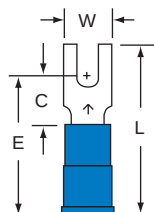
BS-31-10-NB

10  
22-18

# Nylon Insulated with Insulation Grip Block Fork Terminals 16-14 AWG



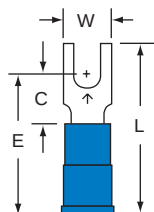
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-32-4S-NB    | 30083         | 16-14            | 4         | 0.25 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-6S-NB    | 28533         | 16-14            | 6         | 0.25 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-6-NB     | 28534         | 16-14            | 6         | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-8-NB     | 28535         | 16-14            | 8         | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-10-NB    | 28536         | 16-14            | 10        | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |



BS-32-4S-NB

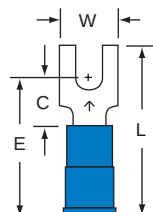
Stud Size  
Wire Range

4  
16-14



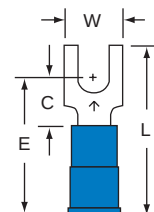
BS-32-6S-NB

6  
16-14



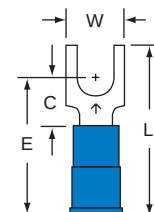
BS-32-6-NB

6  
16-14



BS-32-8-NB

8  
16-14



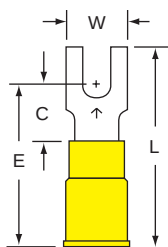
BS-32-10-NB

10  
16-14

# Nylon Insulated with Insulation Grip Block Fork Terminals 12-10 AWG



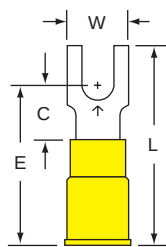
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-33-6-NB     | 28809         | 12-10            | 6         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-33-8-NB     | 28810         | 12-10            | 8         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-33-10-NB    | 28811         | 12-10            | 10        | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |



BS-33-6-NB

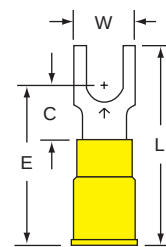
Stud Size  
Wire Range

6  
12-10



BS-33-8-NB

8  
12-10



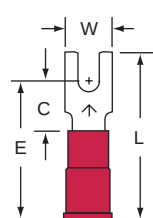
BS-33-10-NB

10  
12-10

## Vinyl Insulated Butted Seam Block Fork Terminals 22-18 AWG



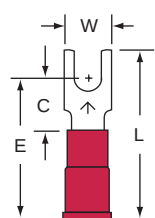
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-31-4S-P     | 29633         | 22-18            | 4         | 0.25 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-6S-P     | 28138         | 22-18            | 6         | 0.25 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-6-P      | 28139         | 22-18            | 6         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-8-P      | 28140         | 22-18            | 8         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-31-10-P     | 28141         | 22-18            | 10        | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |



BS-31-4S-P

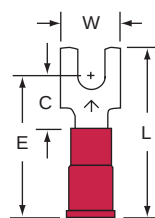
Stud Size  
Wire Range

4  
22-18



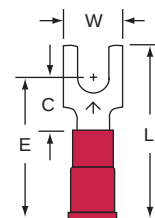
BS-31-6S-P

6  
22-18



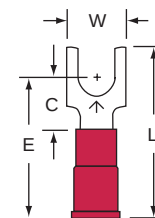
BS-31-6-P

6  
22-18



BS-31-8-P

8  
22-18



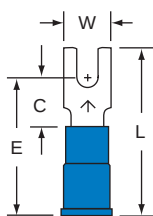
BS-31-10-P

10  
22-18

## Vinyl Insulated Butted Seam Block Fork Terminals 16-14 AWG



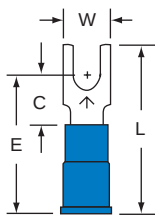
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-32-4S-P     | 30084         | 16-14            | 4         | 0.25 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-6S-P     | 28537         | 16-14            | 6         | 0.25 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-6-P      | 28538         | 16-14            | 6         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-8-P      | 28539         | 16-14            | 8         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-32-10-P     | 28540         | 16-14            | 10        | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |



BS-32-4S-P

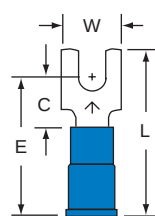
Stud Size  
Wire Range

4  
16-14



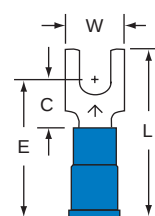
BS-32-6S-P

6  
16-14



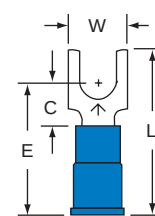
BS-32-6-P

6  
16-14



BS-32-8-P

8  
16-14



BS-32-10-P

10  
16-14

## Vinyl Insulated Butted Seam Block Fork Terminals 12-10 AWG



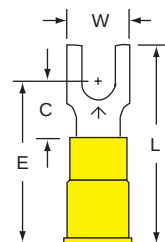
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-33-6-P      | 28812         | 12-10            | 6         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-33-8-P      | 28813         | 12-10            | 8         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-33-10-P     | 28814         | 12-10            | 10        | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |



BS-33-6-P

Stud Size  
Wire Range

6  
12-10



BS-33-8-P

8  
12-10



BS-33-10-P

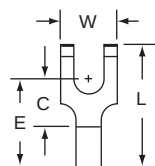
10  
12-10

# Non-Insulated Brazed Seam Flanged Block Fork Terminals

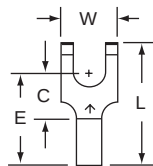


| Product Number          | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-21-6S-W <sup>†</sup> | 28194         | 22-18            | 6         | 0.25 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-6-W               | 28195         | 22-18            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-8-W               | 28196         | 22-18            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-10-W              | 28197         | 22-18            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-22-6S-W <sup>†</sup> | 28593         | 16-14            | 6         | 0.25 | 0.25 | 0.64 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-6-W               | 28594         | 16-14            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-8-W               | 28595         | 16-14            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-10-W              | 28596         | 16-14            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-23-6-W               | 28839         | 12-10            | 6         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-23-8-W               | 28840         | 12-10            | 8         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-23-10-W              | 28841         | 12-10            | 10        | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |

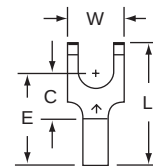
<sup>†</sup> Product not shown



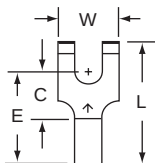
**BS-21-6-W**  
Stud Size  
6  
Wire Range  
22-18



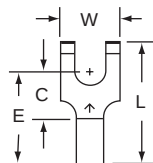
**BS-21-8-W**  
Stud Size  
8  
Wire Range  
22-18



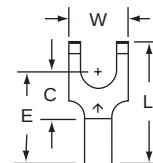
**BS-21-10-W**  
Stud Size  
10  
Wire Range  
22-18



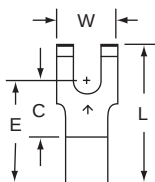
**BS-22-6-W**  
Stud Size  
6  
Wire Range  
16-14



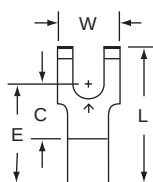
**BS-22-8-W**  
Stud Size  
8  
Wire Range  
16-14



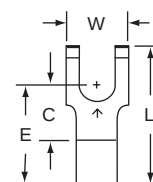
**BS-22-10-W**  
Stud Size  
10  
Wire Range  
16-14



**BS-23-6-W**  
Stud Size  
6  
Wire Range  
12-10



**BS-23-8-W**  
Stud Size  
8  
Wire Range  
12-10



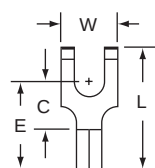
**BS-23-10-W**  
Stud Size  
10  
Wire Range  
12-10

# Non-Insulated Butted Seam Flanged Block Fork Terminals

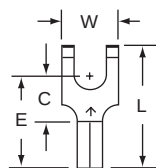


| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| BS-21-6S†      | 28190         | 22-18            | 6         | 0.25 | 0.25 | 0.63 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-6        | 28191         | 22-18            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-8        | 28192         | 22-18            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-21-10       | 28193         | 22-18            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.070       |
| BS-22-6S†      | 28589         | 16-14            | 6         | 0.25 | 0.25 | 0.64 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-6        | 28590         | 16-14            | 6         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-8        | 28591         | 16-14            | 8         | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-22-10       | 28592         | 16-14            | 10        | 0.30 | 0.25 | 0.65 | 0.50 | 0.030     | 0.25          | 0.090       |
| BS-23-6        | 28836         | 12-10            | 6         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-23-8        | 28837         | 12-10            | 8         | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| BS-23-10       | 28838         | 12-10            | 10        | 0.32 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |

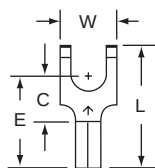
† Product not shown



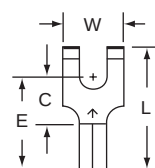
**BS-21-6**  
Stud Size 6  
Wire Range 22-18



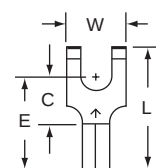
**BS-21-8**  
Stud Size 8  
Wire Range 22-18



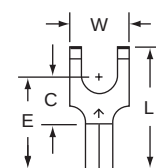
**BS-21-10**  
Stud Size 10  
Wire Range 22-18



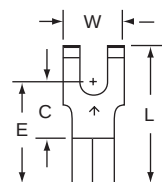
**BS-22-6**  
Stud Size 6  
Wire Range 16-14



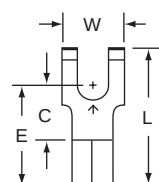
**BS-22-8**  
Stud Size 8  
Wire Range 16-14



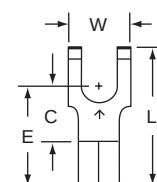
**BS-22-10**  
Stud Size 10  
Wire Range 16-14



**BS-23-6**  
Stud Size 6  
Wire Range 12-10



**BS-23-8**  
Stud Size 8  
Wire Range 12-10



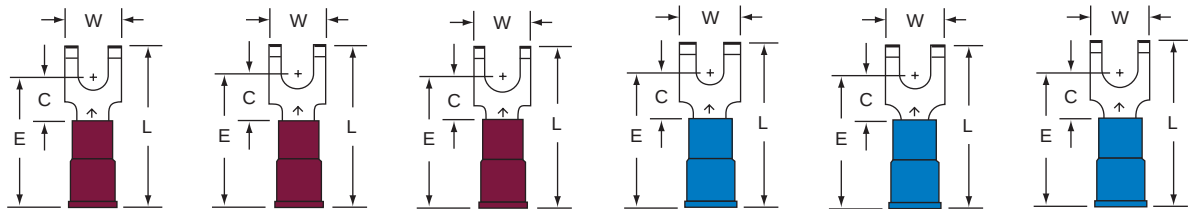
**BS-23-10**  
Stud Size 10  
Wire Range 12-10

# Nylon Insulated with Insulation Grip Flanged Block Fork Terminals

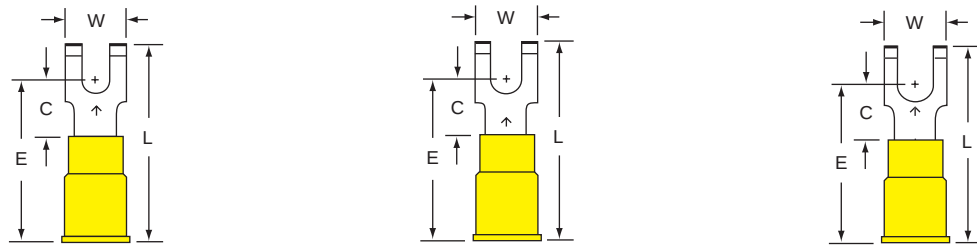


| Product Number           | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|--------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-21-6S-NB <sup>†</sup> | 28182         | 22-18            | 6         | 0.25 | 0.25 | 0.82 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-6-NB               | 28183         | 22-18            | 6         | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-8-NB               | 28184         | 22-18            | 8         | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-10-NB              | 28185         | 22-18            | 10        | 0.30 | 0.25 | 0.84 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-22-6S-NB <sup>†</sup> | 28581         | 16-14            | 6         | 0.25 | 0.25 | 0.85 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-6-NB               | 28582         | 16-14            | 6         | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-8-NB               | 28583         | 16-14            | 8         | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-10-NB              | 28584         | 16-14            | 10        | 0.30 | 0.25 | 0.86 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-23-6-NB               | 28830         | 12-10            | 6         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-23-8-NB               | 28831         | 12-10            | 8         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-23-10-NB              | 28832         | 12-10            | 10        | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |

<sup>†</sup> Product not shown



|                   |                   |                   |                    |                   |                   |                    |
|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|--------------------|
|                   | <b>BS-21-6-NB</b> | <b>BS-21-8-NB</b> | <b>BS-21-10-NB</b> | <b>BS-22-6-NB</b> | <b>BS-22-8-NB</b> | <b>BS-22-10-NB</b> |
| <b>Stud Size</b>  | 6                 | 8                 | 10                 | 6                 | 8                 | 10                 |
| <b>Wire Range</b> | 22-18             | 22-18             | 22-18              | 16-14             | 16-14             | 16-14              |



|                   |                   |                   |                    |
|-------------------|-------------------|-------------------|--------------------|
|                   | <b>BS-23-6-NB</b> | <b>BS-23-8-NB</b> | <b>BS-23-10-NB</b> |
| <b>Stud Size</b>  | 6                 | 8                 | 10                 |
| <b>Wire Range</b> | 12-10             | 12-10             | 12-10              |

## Vinyl Insulated Butted Seam Flanged Block Fork Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| BS-21-6S-P†    | 28186         | 22-18            | 6         | 0.25 | 0.25 | 0.83 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-6-P      | 28187         | 22-18            | 6         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-8-P      | 28188         | 22-18            | 8         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-21-10-P     | 28189         | 22-18            | 10        | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                      |
| BS-22-6S-P†    | 28585         | 16-14            | 6         | 0.25 | 0.25 | 0.84 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-6-P      | 28586         | 16-14            | 6         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-8-P      | 28587         | 16-14            | 8         | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-22-10-P     | 28588         | 16-14            | 10        | 0.30 | 0.25 | 0.85 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                      |
| BS-23-6-P      | 28833         | 12-10            | 6         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-23-8-P      | 28834         | 12-10            | 8         | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| BS-23-10-P     | 28835         | 12-10            | 10        | 0.32 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |

† Product not shown



|                   |                  |                  |                   |                  |                  |                   |
|-------------------|------------------|------------------|-------------------|------------------|------------------|-------------------|
| <b>Stud Size</b>  | <b>BS-21-6-P</b> | <b>BS-21-8-P</b> | <b>BS-21-10-P</b> | <b>BS-22-6-P</b> | <b>BS-22-8-P</b> | <b>BS-22-10-P</b> |
|                   | 6                | 8                | 10                | 6                | 8                | 10                |
| <b>Wire Range</b> | 22-18            | 22-18            | 22-18             | 16-14            | 16-14            | 16-14             |



|                   |                  |                  |                   |
|-------------------|------------------|------------------|-------------------|
| <b>Stud Size</b>  | <b>BS-23-6-P</b> | <b>BS-23-8-P</b> | <b>BS-23-10-P</b> |
|                   | 6                | 8                | 10                |
| <b>Wire Range</b> | 12-10            | 12-10            | 12-10             |

# Heat Shrink Brazed Seam Locking Fork Terminals 22-18 AWG



| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| MH18-6FLX                   | 06346         | 22-18            | 6         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| MH18-6FLK                   | 06347         | 22-18            | 6         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| MH18-8FLX                   | 06363         | 22-18            | 8         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| MH18-8FLK                   | 06362         | 22-18            | 8         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| MH18-10FLX                  | 06352         | 22-18            | 10        | 0.32 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |
| MH18-10FLK                  | 06353         | 22-18            | 10        | 0.32 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.070       | 0.145                      |



**MH18-6FL**  
Stud Size  
6  
Wire Range  
22-18



**MH18-8FL**  
Stud Size  
8  
Wire Range  
22-18

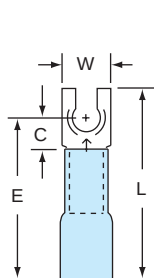


**MH18-10FL**  
Stud Size  
10  
Wire Range  
22-18

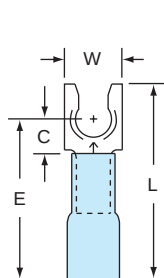
# Heat Shrink Brazed Seam Locking Fork Terminals 16-14 AWG



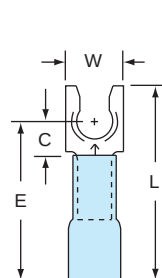
| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| MH14-6FLX                   | 06322         | 16-14            | 6         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-6FLK                   | 06323         | 16-14            | 6         | 0.25 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-8FLX                   | 06361         | 16-14            | 8         | 0.30 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-8FLK                   | 06360         | 16-14            | 8         | 0.30 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-10FLX                  | 06328         | 16-14            | 10        | 0.32 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-10FLK                  | 06329         | 16-14            | 10        | 0.32 | 0.25 | 0.90 | 0.76 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-14FLX                  | 06332         | 16-14            | 1/4       | 0.43 | 0.27 | 1.10 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |
| MH14-14FLK                  | 06333         | 16-14            | 1/4       | 0.43 | 0.27 | 1.10 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                      |



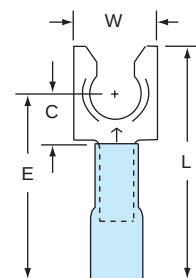
**MH14-6FL**  
Stud Size  
6  
Wire Range  
16-14



**MH14-8FL**  
Stud Size  
8  
Wire Range  
16-14



**MH14-10FL**  
Stud Size  
10  
Wire Range  
16-14



**MH14-14FL**  
Stud Size  
1/4  
Wire Range  
16-14

<sup>†</sup>Product Number ending in X = box; Product Number ending with K = bulk

## Heat Shrink Brazed Seam Locking Fork Terminals 12-10 AWG



| Product Number† | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|-----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| MH10-8FLX       | 06304         | 12-10            | 8         | 0.32 | 0.28 | 1.00 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |
| MH10-8FLK       | 06358         | 12-10            | 8         | 0.32 | 0.28 | 1.00 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |
| MH10-10FLX      | 06307         | 12-10            | 10        | 0.32 | 0.28 | 1.00 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |
| MH10-10FLK      | 06308         | 12-10            | 10        | 0.32 | 0.28 | 1.00 | 0.80 | 0.040     | 0.25          | 0.135       | 0.250                      |
| MH10-14FLX      | 06310         | 12-10            | 1/4       | 0.43 | 0.44 | 1.20 | 0.95 | 0.040     | 0.25          | 0.135       | 0.250                      |
| MH10-14FLK      | 06311         | 12-10            | 1/4       | 0.43 | 0.44 | 1.20 | 0.95 | 0.040     | 0.25          | 0.135       | 0.250                      |



MH10-8FL

Stud Size  
Wire Range

8  
12-10



MH10-10FL

10  
12-10



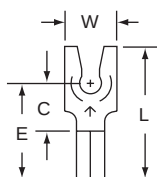
MH10-14FL

1/4  
12-10

## Non-Insulated Butted Seam Locking Fork Terminals 22-18 AWG



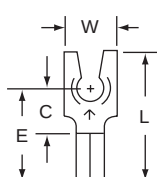
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max. Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|-----------------|------|------|------|------|-----------|---------------|-------------|
| SS-31-4        | 29966         | 22-18            | 4         | 0.27            | 0.25 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.070       |
| SS-31-6        | 29967         | 22-18            | 6         | 0.27            | 0.25 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.070       |
| SS-31-8        | 29968         | 22-18            | 8         | 0.27            | 0.25 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.070       |
| SS-31-10       | 29969         | 22-18            | 10        | 0.34            | 0.30 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.070       |



SS-31-4

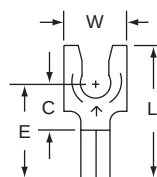
Stud Size  
Wire Range

4  
22-18



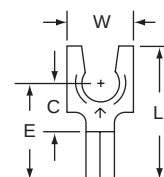
SS-31-6

6  
22-18



SS-31-8

8  
22-18



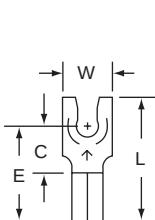
SS-31-10

10  
22-18

# Non-Insulated Butted Seam Locking Fork Terminals 16-14 AWG



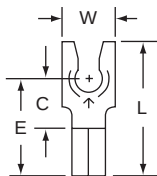
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max. Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|-----------------|------|------|------|------|-----------|---------------|-------------|
| SS-32-4        | 29970         | 16-14            | 4         | 0.27            | 0.25 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.090       |
| SS-32-6        | 29971         | 16-14            | 6         | 0.27            | 0.25 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.090       |
| SS-32-8        | 29972         | 16-14            | 8         | 0.34            | 0.30 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.090       |
| SS-32-10       | 29973         | 16-14            | 10        | 0.35            | 0.32 | 0.25 | 0.68 | 0.50 | 0.030     | 0.25          | 0.090       |
| SS-32-14       | 29974         | 16-14            | 1/4       | 0.48            | 0.43 | 0.40 | 0.90 | 0.65 | 0.030     | 0.25          | 0.090       |



SS-32-4

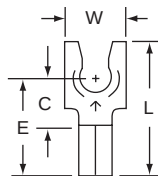
Stud Size  
Wire Range

4  
16-14



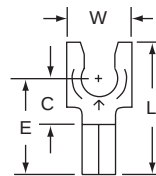
SS-32-6

6  
16-14



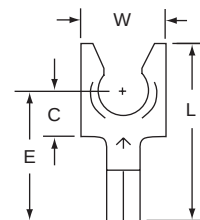
SS-32-8

8  
16-14



SS-32-10

10  
16-14



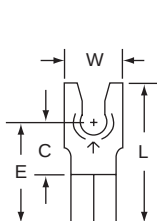
SS-32-14

1/4  
16-14

# Non-Insulated Butted Seam Locking Fork Terminals 12-10 AWG



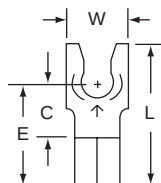
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max. Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|-----------------|------|------|------|------|-----------|---------------|-------------|
| SS-33-6        | 29975         | 12-10            | 6         | 0.30            | 0.28 | 0.28 | 0.73 | 0.53 | 0.040     | 0.25          | 0.135       |
| SS-33-8        | 29976         | 12-10            | 8         | 0.35            | 0.32 | 0.28 | 0.73 | 0.53 | 0.040     | 0.25          | 0.135       |
| SS-33-10       | 29977         | 12-10            | 10        | 0.36            | 0.32 | 0.28 | 0.73 | 0.53 | 0.040     | 0.25          | 0.135       |
| SS-33-14       | 29978         | 12-10            | 1/4       | 0.48            | 0.43 | 0.44 | 0.94 | 0.69 | 0.040     | 0.25          | 0.135       |



SS-33-6

Stud Size  
Wire Range

6  
12-10



SS-33-8

8  
12-10



SS-33-10

10  
12-10

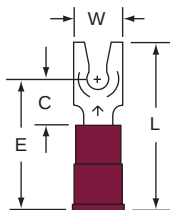


SS-33-14

1/4  
12-10

# Nylon Insulated with Insulation Grip Locking Fork Terminals 22-18 AWG

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-31-4-NB     | 29992         | 22-18            | 4         | 0.27           | 0.25 | 0.25 | 0.87 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-6-NB     | 29993         | 22-18            | 6         | 0.27           | 0.25 | 0.25 | 0.87 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-8-NB     | 29994         | 22-18            | 8         | 0.34           | 0.30 | 0.25 | 0.87 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-10-NB    | 29995         | 22-18            | 10        | 0.35           | 0.32 | 0.25 | 0.87 | 0.69 | 0.030     | 0.25          | 0.070       | 0.145                       |

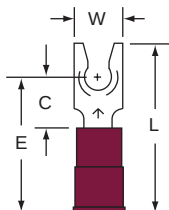


SS-31-4-NB

4

Stud Size  
Wire Range

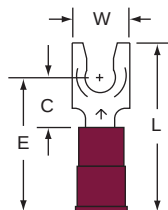
22-18



SS-31-6-NB

6

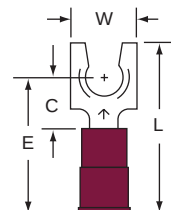
22-18



SS-31-8-NB

8

22-18



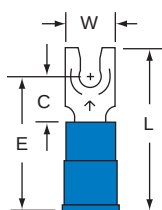
SS-31-10-NB

10

22-18

# Nylon Insulated with Insulation Grip Locking Fork Terminals 16-14 AWG

| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-32-4-NB     | 29996         | 16-14            | 4         | 0.27           | 0.25 | 0.25 | 0.89 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-6-NB     | 29997         | 16-14            | 6         | 0.27           | 0.24 | 0.25 | 0.89 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-8-NB     | 29998         | 16-14            | 8         | 0.34           | 0.30 | 0.25 | 0.89 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-10-NB    | 29999         | 16-14            | 10        | 0.35           | 0.32 | 0.25 | 0.89 | 0.71 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-14-NB    | 30000         | 16-14            | 1/4       | 0.48           | 0.43 | 0.40 | 1.11 | 0.84 | 0.030     | 0.25          | 0.090       | 0.170                       |

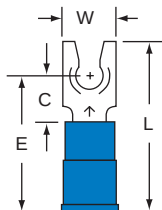


SS-32-4-NB

4

Stud Size  
Wire Range

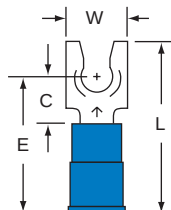
16-14



SS-32-6-NB

6

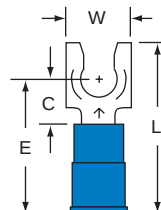
16-14



SS-32-8-NB

8

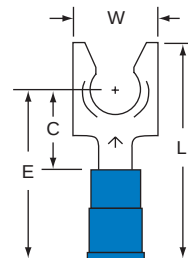
16-14



SS-32-10-NB

10

16-14



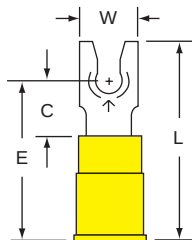
SS-32-14-NB

1/4

16-14

Nylon Insulated with Insulation Grip Locking Fork Terminals 12-10 AWG  

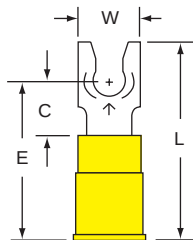
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-33-6-NB     | 30001         | 12-10            | 6         | 0.30           | 0.28 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-8-NB     | 30002         | 12-10            | 8         | 0.35           | 0.32 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-10-NB    | 30003         | 12-10            | 10        | 0.36           | 0.32 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-14-NB    | 30004         | 12-10            | 1/4       | 0.48           | 0.43 | 0.44 | 1.24 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                       |



SS-33-6-NB

6

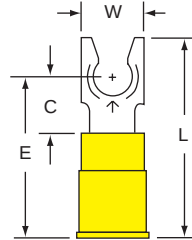
12-10

Stud Size  
Wire Range

SS-33-8-NB

8

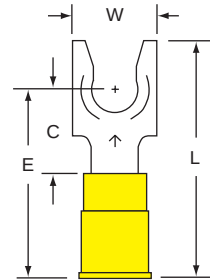
12-10



SS-33-10-NB

10

12-10



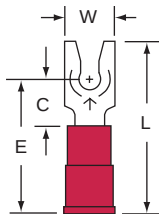
SS-33-14-NB

1/4

12-10

Vinyl Insulated Butted Seam Locking Fork Terminals 22-18 AWG  

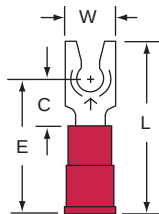
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-31-4-P      | 29979         | 22-18            | 4         | 0.27           | 0.25 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-6-P      | 29980         | 22-18            | 6         | 0.27           | 0.25 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-8-P      | 29981         | 22-18            | 8         | 0.34           | 0.30 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                       |
| SS-31-10-P     | 29982         | 22-18            | 10        | 0.35           | 0.32 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.070       | 0.145                       |



SS-31-4-P

4

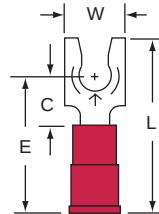
22-18

Stud Size  
Wire Range

SS-31-6-P

6

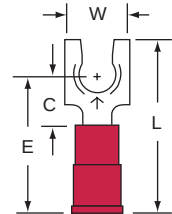
22-18



SS-31-8-P

8

22-18



SS-31-10-P

10

22-18

## Vinyl Insulated Butted Seam Locking Fork Terminals 16-14 AWG



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-32-4-P      | 29983         | 16-14            | 4         | 0.27           | 0.25 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-6-P      | 29984         | 16-14            | 6         | 0.27           | 0.25 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-8-P      | 29985         | 16-14            | 8         | 0.34           | 0.30 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-10-P     | 29986         | 16-14            | 10        | 0.35           | 0.32 | 0.25 | 0.88 | 0.70 | 0.030     | 0.25          | 0.090       | 0.170                       |
| SS-32-14-P     | 29987         | 16-14            | 1/4       | 0.48           | 0.43 | 0.40 | 1.10 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       |



SS-32-4-P

Stud Size  
Wire Range

4  
16-14



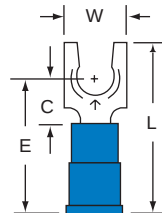
SS-32-6-P

6  
16-14



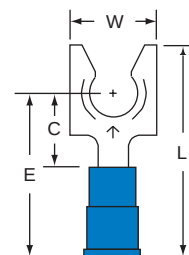
SS-32-8-P

8  
16-14



SS-32-10-P

10  
16-14



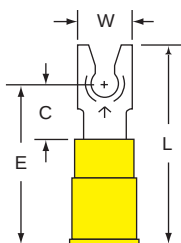
SS-32-14-P

1/4  
16-14

## Vinyl Insulated Butted Seam Locking Fork Terminals 12-10 AWG



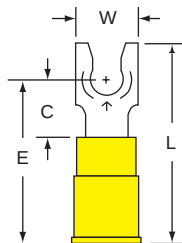
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | Max Lock Width | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|---------------|------------------|-----------|----------------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| SS-33-6-P      | 29988         | 12-10            | 6         | 0.30           | 0.28 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-8-P      | 29989         | 12-10            | 8         | 0.35           | 0.32 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-10-P     | 29990         | 12-10            | 10        | 0.36           | 0.32 | 0.28 | 1.03 | 0.83 | 0.040     | 0.25          | 0.135       | 0.250                       |
| SS-33-14-P     | 29991         | 12-10            | 1/4       | 0.48           | 0.43 | 0.44 | 1.24 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                       |



SS-33-6-P

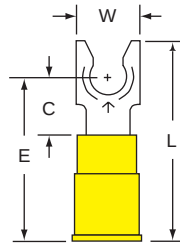
Stud Size  
Wire Range

6  
12-10



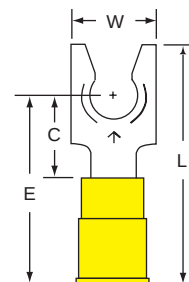
SS-33-8-P

8  
12-10



SS-33-10-P

10  
12-10



SS-33-14-P

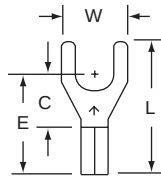
1/4  
12-10

## High-Temperature Butted Seam Standard Fork Terminals 900°F (482°C)

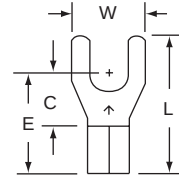
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| HT-31-10       | 29612         | 22-18            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| HT-32-10       | 29613         | 16-14            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| HT-33-10       | 29600         | 12-10            | 10        | 0.38 | 0.28 | 0.73 | 0.53 | 0.040     | 0.25          | 0.135       |



**HT-31-10**  
Stud Size  
10  
Wire Range  
22-18



**HT-32-10**  
Stud Size  
10  
Wire Range  
16-14

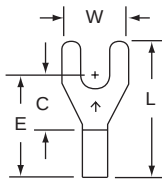


**HT-33-10**  
Stud Size  
10  
Wire Range  
12-10

## Non-Insulated Brazed Seam Standard Fork Terminals



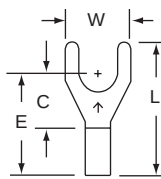
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 31-6-W         | 28056         | 22-18            | 6         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 31-8-W         | 28058         | 22-18            | 8         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 31-10-W        | 28060         | 22-18            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 32-6-W         | 28453         | 16-14            | 6         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 32-8-W         | 28455         | 16-14            | 8         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 32-10-W        | 28457         | 16-14            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 33-6-W         | 28776         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 33-8-W         | 28777         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 33-10-W        | 28778         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |



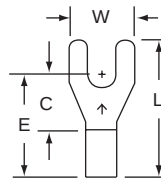
**31-6-W**  
Stud Size  
6  
Wire Range  
22-18



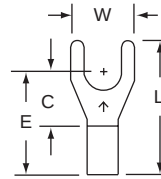
**31-8-W**  
Stud Size  
8  
Wire Range  
22-18



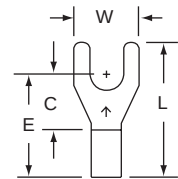
**31-10-W**  
Stud Size  
10  
Wire Range  
22-18



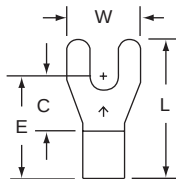
**32-6-W**  
Stud Size  
6  
Wire Range  
16-14



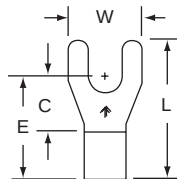
**32-8-W**  
Stud Size  
8  
Wire Range  
16-14



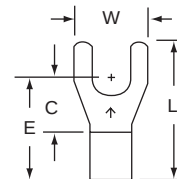
**32-10-W**  
Stud Size  
10  
Wire Range  
16-14



**33-6-W**  
Stud Size  
6  
Wire Range  
12-10



**33-8-W**  
Stud Size  
8  
Wire Range  
12-10



**33-10-W**  
Stud Size  
10  
Wire Range  
12-10

# Non-Insulated Butted Seam Standard Fork Terminals



| Product Number    | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|-------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 30-0 <sup>†</sup> | 27854         | 26-24*           | 0         | 0.13 | 0.12 | 0.30 | 0.24 | 0.020     | 0.13          | 0.030       |
| 30-4 <sup>†</sup> | 27855         | 26-24*           | 4         | 0.20 | 0.21 | 0.46 | 0.35 | 0.020     | 0.14          | 0.030       |
| 30-6 <sup>†</sup> | 27856         | 26-24*           | 6         | 0.25 | 0.28 | 0.53 | 0.40 | 0.020     | 0.13          | 0.030       |
| 31-6              | 28050         | 22-18            | 6         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 31-8              | 28052         | 22-18            | 8         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 31-10             | 28054         | 22-18            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.070       |
| 32-6              | 28447         | 16-14            | 6         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 32-8              | 28449         | 16-14            | 8         | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 32-10             | 28451         | 16-14            | 10        | 0.34 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       |
| 33-6              | 28773         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 33-8              | 28774         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |
| 33-10             | 28775         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       |

<sup>†</sup> Product not shown

\* Not UL Listed or CSA Certified



|                   |             |             |              |             |             |              |
|-------------------|-------------|-------------|--------------|-------------|-------------|--------------|
| <b>Stud Size</b>  | <b>31-6</b> | <b>31-8</b> | <b>31-10</b> | <b>32-6</b> | <b>32-8</b> | <b>32-10</b> |
| <b>Wire Range</b> | 6<br>22-18  | 8<br>22-18  | 10<br>22-18  | 6<br>16-14  | 8<br>16-14  | 10<br>16-14  |



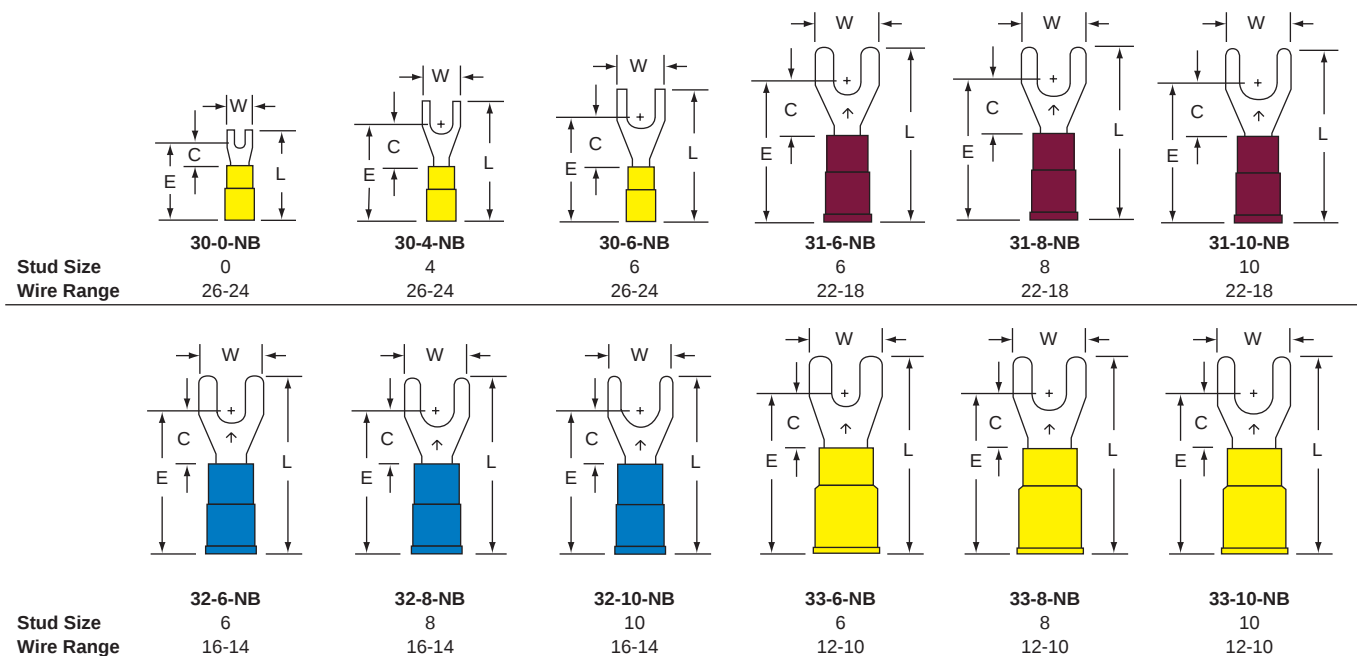
|                   |             |             |              |
|-------------------|-------------|-------------|--------------|
| <b>Stud Size</b>  | <b>33-6</b> | <b>33-8</b> | <b>33-10</b> |
| <b>Wire Range</b> | 6<br>12-10  | 8<br>12-10  | 10<br>12-10  |

# Nylon Insulated with Insulation Grip Standard Fork Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 30-0-NB        | 27848         | 26-24*           | 0         | 0.13 | 0.12 | 0.46 | 0.40 | 0.020     | 0.13          | 0.030       | 0.093                      |
| 30-4-NB        | 27849         | 26-24*           | 4         | 0.20 | 0.21 | 0.61 | 0.49 | 0.020     | 0.14          | 0.030       | 0.093                      |
| 30-6-NB        | 27850         | 26-24*           | 6         | 0.25 | 0.28 | 0.69 | 0.56 | 0.020     | 0.13          | 0.030       | 0.093                      |
| 31-6-NB        | 28038         | 22-18            | 6         | 0.34 | 0.29 | 0.89 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 31-8-NB        | 28040         | 22-18            | 8         | 0.34 | 0.29 | 0.89 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 31-10-NB       | 28042         | 22-18            | 10        | 0.34 | 0.29 | 0.89 | 0.73 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 32-6-NB        | 28435         | 16-14            | 6         | 0.34 | 0.29 | 0.91 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 32-8-NB        | 28437         | 16-14            | 8         | 0.34 | 0.29 | 0.91 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 32-10-NB       | 28439         | 16-14            | 10        | 0.34 | 0.29 | 0.91 | 0.75 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 33-6-NB        | 28767         | 12-10            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 33-8-NB        | 28768         | 12-10            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 33-10-NB       | 28769         | 12-10            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |

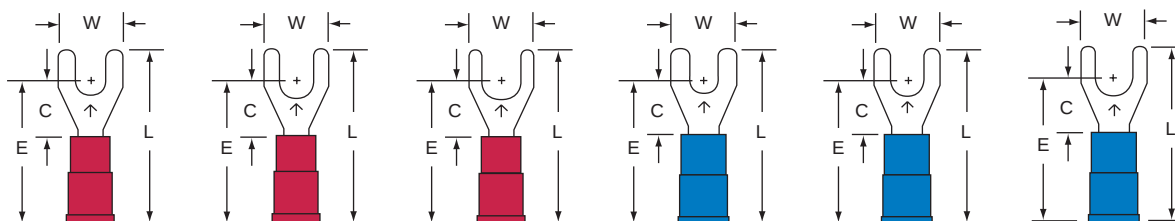
\* Not UL Listed or CSA Certified



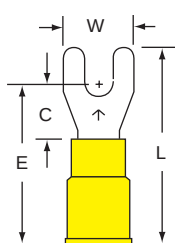
# Vinyl Insulated Butted Seam Standard Fork Terminals



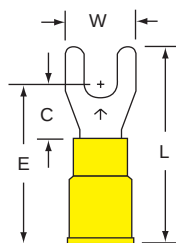
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 31-6-P         | 28044         | 22-18            | 6         | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 31-8-P         | 28046         | 22-18            | 8         | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 31-10-P        | 28048         | 22-18            | 10        | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.070       | 0.145                      |
| 32-6-P         | 28441         | 16-14            | 6         | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 32-8-P         | 28443         | 16-14            | 8         | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 32-10-P        | 28445         | 16-14            | 10        | 0.34 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                      |
| 33-6-P         | 28770         | 12-10            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 33-8-P         | 28771         | 12-10            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |
| 33-10-P        | 28772         | 12-10            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                      |



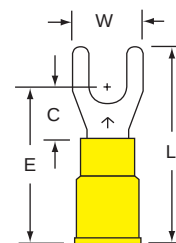
|                   |             |             |               |             |             |               |
|-------------------|-------------|-------------|---------------|-------------|-------------|---------------|
| <b>Stud Size</b>  | 31-6-P<br>6 | 31-8-P<br>8 | 31-10-P<br>10 | 32-6-P<br>6 | 32-8-P<br>8 | 32-10-P<br>10 |
| <b>Wire Range</b> | 22-18       | 22-18       | 22-18         | 16-14       | 16-14       | 16-14         |



**33-6-P**  
6  
12-10



**33-8-P**  
8  
12-10



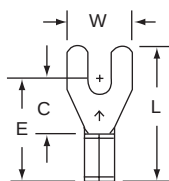
**33-10-P**  
10  
12-10

**Stud Size**  
**Wire Range**

## Heavy-Duty Non-Insulated Butted Seam Fork Terminals



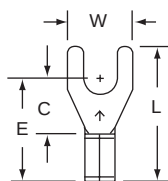
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 323-6          | 29002         | 16-12            | 6         | 0.38 | 0.28 | 0.73 | 0.53 | 0.050     | 0.25          | 0.110       |
| 323-10         | 29004         | 16-12            | 10        | 0.38 | 0.28 | 0.73 | 0.53 | 0.050     | 0.25          | 0.110       |



**323-6**

Stud Size  
Wire Range

6  
16-12



**323-10**

10  
16-12

## Heavy-Duty Non-Insulated Brazed Seam Fork Terminals



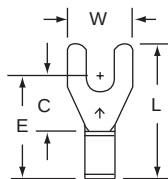
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|
| 323-6-W        | 29005         | 16-12            | 6         | 0.38 | 0.28 | 0.73 | 0.53 | 0.050     | 0.25          | 0.110       |
| 323-8-W        | 94952         | 16-12            | 8         | 0.38 | 0.28 | 0.73 | 0.53 | 0.050     | 0.25          | 0.110       |
| 323-10-W       | 29007         | 16-12            | 10        | 0.38 | 0.28 | 0.73 | 0.53 | 0.050     | 0.25          | 0.110       |



**323-6-W**

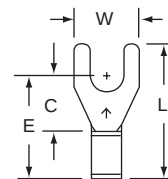
Stud Size  
Wire Range

6  
16-12



**323-8-W**

8  
16-12



**323-10-W**

10  
16-12

## Heavy-Duty Vinyl Insulated Butted Seam Fork Terminals



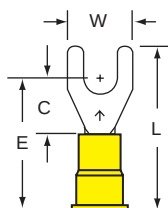
| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 323-6-P        | 28999         | 16-12            | 6         | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 323-10-P       | 29001         | 16-12            | 10        | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.110       | 0.250                      |



**323-6-P**

Stud Size  
Wire Range

6  
16-12



**323-10-P**

10  
16-12

## Heavy-Duty Vinyl Insulated Butted Seam Flanged Fork Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 223-6-P        | 29020         | 16-12            | 6         | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.110       | 0.250                      |
| 223-10-P       | 29022         | 16-12            | 10        | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.110       | 0.250                      |

**223-6-P**

Stud Size  
Wire Range

6  
16-12

**223-10-P**

10  
16-12

## Heavy-Duty Nylon Insulated with Insulation Grip Flanged Fork Terminals



| Product Number | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulator Diameter |
|----------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------------|
| 223-6-NB       | 29017         | 16-12            | 6         | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.11        | 0.250                      |
| 223-8-NB       | 29018         | 16-12            | 8         | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.11        | 0.250                      |
| 223-10-NB      | 29019         | 16-12            | 10        | 0.38 | 0.28 | 1.03 | 0.83 | 0.050     | 0.25          | 0.11        | 0.250                      |

**223-6-NB**

Stud Size  
Wire Range

6  
16-12

**223-8-NB**

8  
16-12

**223-10-NB**

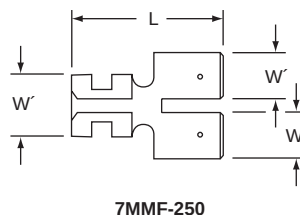
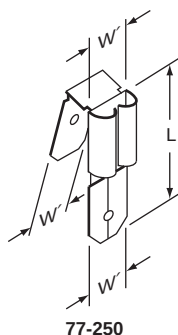
10  
16-12

# Non-Insulated Double Male-Female Disconnect Adapters



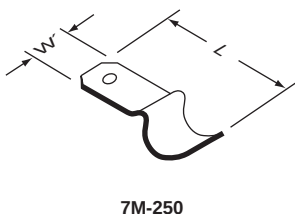
| Product Number | UPC (054007-) | Mates with Female and Male Width (W') x Thickness | L    |
|----------------|---------------|---------------------------------------------------|------|
| 77-250*        | 29443         | 0.250 x 0.032                                     | 0.78 |
| 7MMF-250       | 29955         | 0.250 x 0.032                                     | 0.76 |

\*Not UL Listed or CSA Certified



## Non-Insulated Fuse-Clip Male Disconnect Adapter

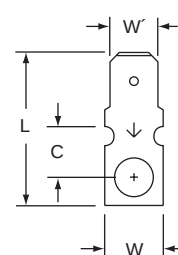
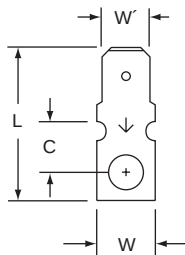
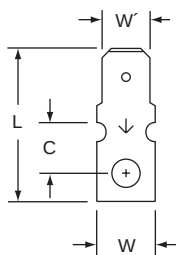
| Product Number | UPC (054007-) | Male Width (W') x Thickness | L    |
|----------------|---------------|-----------------------------|------|
| 7M-250         | 30095         | 0.250 x 0.030               | 0.77 |



## Non-Insulated Male Tabs (Rectangular Tongue)

| Product Number | UPC (054007-) | Stud Size | Male Tab Width (W') x Thickness | W    | C    | L    |
|----------------|---------------|-----------|---------------------------------|------|------|------|
| 07-6-250       | 29418         | 6         | .250 x .030                     | 0.30 | 0.26 | 0.80 |
| 07-8-250       | 29419         | 8         | .250 x .030                     | 0.30 | 0.26 | 0.80 |
| 07-10-250      | 29420         | 10        | .250 x .030                     | 0.30 | 0.26 | 0.80 |
| 07-6S-250†     | 29421         | 6         | .250 x .030                     | 0.25 | 0.26 | 0.78 |
| 07-8S-250†     | 29422         | 8         | .250 x .030                     | 0.25 | 0.26 | 0.78 |

† Product not shown



Stud Size

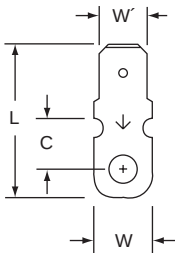
6

8

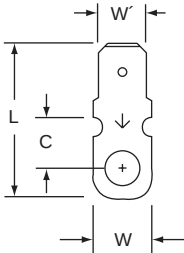
10

Non-Insulated Male Tabs (Ring Tongue)

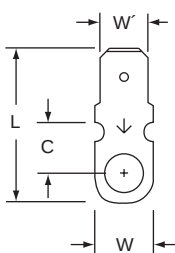
| Product Number | UPC (054007-) | Stud Size | Male Tab Width (W') x Thickness | W    | C    | L    |
|----------------|---------------|-----------|---------------------------------|------|------|------|
| 17-6-250       | 29415         | 6         | 0.250 x 0.030                   | 0.34 | 0.26 | 0.83 |
| 17-8-250       | 29416         | 8         | 0.250 x 0.030                   | 0.34 | 0.26 | 0.83 |
| 17-10-250      | 29417         | 10        | 0.250 x 0.030                   | 0.34 | 0.26 | 0.83 |



17-6-250  
6



17-8-250  
8

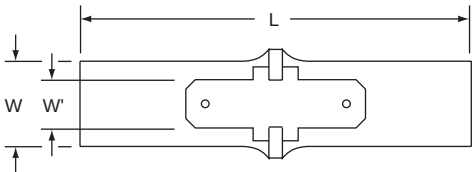


17-10-250  
10

Stud Size

Vinyl Insulated Double Male Disconnect Adapter

| Product Number | UPC (054007-) | Male Tab Width (W') x Thickness | L    | Insulation Barrel W |
|----------------|---------------|---------------------------------|------|---------------------|
| 7MM-250-PL     | 29401         | 0.250 x 0.032                   | 2.12 | 0.44                |



7MM-250-PL

## Non-Insulated Pin Terminals



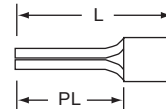
| Product Number | UPC (054007-) | Wire Range (AWG) | Pin Diameter | L    | Barrel Length | Barrel I.D. | PL   |
|----------------|---------------|------------------|--------------|------|---------------|-------------|------|
| 81P-47         | 49671         | 22-18            | 0.08         | 0.73 | 0.25          | 0.070       | 0.47 |
| 82P-47         | 49672         | 16-14            | 0.08         | 0.73 | 0.25          | 0.090       | 0.47 |
| 83P-55         | 49673         | 12-10            | 0.11         | 0.81 | 0.25          | 0.135       | 0.55 |



**81P-47**  
22-18



**82P-47**  
16-14



**83P-55**  
12-10

Wire Range

## Nylon Insulated with Insulation Grip Pin Terminals



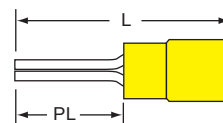
| Product Number | UPC (054007-) | Wire Range (AWG) | Pin Diameter | L     | Barrel Length | Barrel I.D. | PL   | Maximum Insulation Diameter |
|----------------|---------------|------------------|--------------|-------|---------------|-------------|------|-----------------------------|
| 81P-47-NB      | 49403         | 22-18            | 0.08         | 0.92  | 0.25          | 0.070       | 0.47 | 0.145                       |
| 82P-47-NB      | 49408         | 16-14            | 0.08         | 0.92  | 0.25          | 0.090       | 0.47 | 0.170                       |
| 83P-55-NB      | 49413         | 12-10            | 0.11         | 1.105 | 0.25          | 0.135       | 0.55 | 0.250                       |



**81P-47-NB**  
22-18



**82P-47-NB**  
16-14



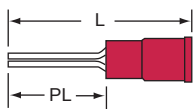
**83P-55-NB**  
12-10

Wire Range

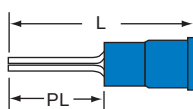
## Vinyl Insulated Butted Seam Pin Terminals



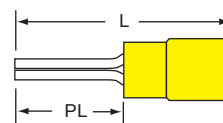
| Product Number | UPC (054007-) | Wire Range (AWG) | Pin Diameter | L     | Barrel Length | Barrel I.D. | PL   | Maximum Insulation Diameter |
|----------------|---------------|------------------|--------------|-------|---------------|-------------|------|-----------------------------|
| 81P-47-P       | 49404         | 22-18            | 0.08         | 0.92  | 0.25          | 0.070       | 0.47 | 0.145                       |
| 82P-47-P       | 49409         | 16-14            | 0.08         | 0.92  | 0.25          | 0.090       | 0.47 | 0.170                       |
| 83P-55-P       | 49414         | 12-10            | 0.11         | 1.105 | 0.25          | 0.135       | 0.55 | 0.250                       |



**81P-47-P**  
22-18



**82P-47-P**  
16-14



**83P-55-P**  
12-10

Wire Range

## Nylon Insulated Bullet Style Male Disconnect

| Product Number | UPC (054007-) | AWG (mm <sup>2</sup> ) Wire Range O.D. | Description                 |
|----------------|---------------|----------------------------------------|-----------------------------|
| T-90-3*        | 29352         | 16-14                                  | Nylon Plug (0.156 diameter) |

\* Part can be used with the 901 IDC Connector found on page 103 and 0.156 diameter female receptacles.



**T-90-3**

# Highland™ Bagged Terminals

Highland terminals, disconnects, and connectors are for use in the assembly and maintenance of electrical systems. Highland terminals offer effective and reliable performance in a variety of types of general applications.

Available in low quantity, reclosable bags Highland terminals are the optimal choice for smaller jobs.



## 3M™ Highland™ Rings – Non-Insulated



| Product Number <sup>†</sup> | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------------------|------------|------------------|---------------|---------------|-----------|
| R10-10L                     | 12-10      | 10               | 70320         | 50            | 5         |
| R10-14L                     | 12-10      | 1/4              | 70321         | 50            | 5         |
| R10-14Q                     | 12-10      | 1/4              | 70475         | 25            | 10        |
| R14-4C                      | 16-14      | 4                | 49896         | 100           | 5         |
| R14-6C                      | 16-14      | 6                | 70235         | 100           | 5         |
| R14-6L                      | 16-14      | 6                | 70322         | 50            | 10        |
| R14-8C                      | 16-14      | 8                | 70236         | 100           | 5         |
| R14-8L                      | 16-14      | 8                | 70323         | 50            | 10        |
| R14-10C                     | 16-14      | 10               | 70237         | 100           | 5         |
| R18-4C                      | 22-18      | 4                | 49902         | 100           | 5         |
| R18-6C                      | 22-18      | 6                | 70238         | 100           | 5         |
| R18-6L                      | 22-18      | 6                | 70325         | 50            | 10        |
| R18-8C                      | 22-18      | 8                | 70239         | 100           | 5         |
| R18-8L                      | 22-18      | 8                | 70326         | 50            | 10        |
| R18-10C                     | 22-18      | 10               | 70240         | 100           | 5         |

<sup>†</sup>Product Number ending in Q=25; L=50; C=100

# 3M™ Highland™ Rings – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| RV10-6L         | 12-10      | 6                | 49893         | 50            | 5         |
| RV10-8L         | 12-10      | 8                | 70328         | 50            | 5         |
| RV10-8Q         | 12-10      | 8                | 70476         | 25            | 10        |
| RV10-10L        | 12-10      | 10               | 70329         | 50            | 5         |
| RV10-10Q        | 12-10      | 10               | 70477         | 25            | 10        |
| RV10-14L        | 12-10      | 1/4              | 70330         | 50            | 5         |
| RV10-14Q        | 12-10      | 1/4              | 70478         | 25            | 10        |
| RV10-38L        | 12-10      | 3/8              | 70331         | 50            | 5         |
| RV10-38Q        | 12-10      | 3/8              | 70479         | 25            | 10        |
| RV10-516Q       | 12-10      | 5/16             | 49562         | 25            | 10        |
| RV14-6C         | 16-14      | 6                | 70241         | 100           | 5         |
| RV14-6L         | 16-14      | 6                | 70332         | 50            | 10        |
| RV14-8C         | 16-14      | 8                | 70242         | 100           | 5         |
| RV14-8L         | 16-14      | 8                | 70333         | 50            | 10        |
| RV14-10C        | 16-14      | 10               | 70243         | 100           | 5         |
| RV14-10L        | 16-14      | 10               | 70334         | 50            | 10        |
| RV14-14C        | 16-14      | 1/4              | 70244         | 100           | 5         |
| RV14-14L        | 16-14      | 1/4              | 70335         | 50            | 10        |
| RV14-516L       | 16-14      | 5/16             | 49560         | 50            | 10        |
| RV18-6C         | 22-18      | 6                | 70245         | 100           | 5         |
| RV18-6L         | 22-18      | 6                | 70336         | 50            | 10        |
| RV18-8C         | 22-18      | 8                | 70246         | 100           | 5         |
| RV18-8L         | 22-18      | 8                | 70337         | 50            | 10        |
| RV18-10C        | 22-18      | 10               | 70247         | 100           | 5         |
| RV18-10L        | 22-18      | 10               | 70338         | 50            | 10        |
| RV18-14C        | 22-18      | 1/4              | 70248         | 100           | 5         |
| RV18-14L        | 22-18      | 1/4              | 70339         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

# 3M Highland Standard Forks – Non-Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| F14-6C          | 16-14      | 6                | 70211         | 100           | 5         |
| F14-10C         | 16-14      | 10               | 70213         | 100           | 5         |

†Product Number ending in Q=25; L=50; C=100

## 3M™ Highland™ Standard Forks – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| FV10-8L         | 12-10      | 8                | 70288         | 50            | 5         |
| FV10-8Q         | 12-10      | 8                | 70460         | 25            | 10        |
| FV10-10L        | 12-10      | 10               | 70289         | 50            | 5         |
| FV10-10Q        | 12-10      | 10               | 70461         | 25            | 10        |
| FV14-6L         | 16-14      | 6                | 70290         | 50            | 10        |
| FV14-8C         | 16-14      | 8                | 70225         | 100           | 5         |
| FV14-8L         | 16-14      | 8                | 70291         | 50            | 10        |
| FV14-10C        | 16-14      | 10               | 70226         | 100           | 5         |
| FV14-10L        | 16-14      | 10               | 70292         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Block Forks – Non-Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| BF10-8Q         | 12-10      | 8                | 70448         | 25            | 10        |
| BF10-10L        | 12-10      | 10               | 70250         | 50            | 5         |
| BF10-10Q        | 12-10      | 10               | 70449         | 25            | 10        |
| BF14-6L         | 16-14      | 6                | 70251         | 50            | 10        |
| BF14-8C         | 16-14      | 8                | 70198         | 100           | 5         |
| BF18-6C         | 22-18      | 6                | 70200         | 100           | 5         |
| BF18-6L         | 22-18      | 6                | 70254         | 50            | 10        |
| BF18-8C         | 22-18      | 8                | 70201         | 100           | 5         |
| BF18-8L         | 22-18      | 8                | 70255         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

# 3M™ Highland™ Block Forks - Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| BFV10-6L        | 12-10      | 6                | 49891         | 50            | 5         |
| BFV10-8L        | 12-10      | 8                | 70256         | 50            | 5         |
| BFV10-8Q        | 12-10      | 8                | 70450         | 25            | 10        |
| BFV10-10L       | 12-10      | 10               | 70257         | 50            | 5         |
| BFV10-10Q       | 12-10      | 10               | 70451         | 25            | 10        |
| BFV14-6C        | 16-14      | 6                | 70202         | 100           | 5         |
| BFV14-6L        | 16-14      | 6                | 70258         | 50            | 10        |
| BFV14-8C        | 16-14      | 8                | 70203         | 100           | 5         |
| BFV14-8L        | 16-14      | 8                | 70259         | 50            | 10        |
| BFV14-10C       | 16-14      | 10               | 70204         | 100           | 5         |
| BFV14-10L       | 16-14      | 10               | 70260         | 50            | 10        |
| BFV18-6C        | 22-18      | 6                | 70205         | 100           | 5         |
| BFV18-6L        | 22-18      | 6                | 70261         | 50            | 10        |
| BFV18-8C        | 22-18      | 8                | 70206         | 100           | 5         |
| BFV18-8L        | 22-18      | 8                | 70262         | 50            | 10        |
| BFV18-10C       | 22-18      | 10               | 49899         | 100           | 5         |
| BFV18-10L       | 22-18      | 10               | 41515         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

# 3M Highland Locking Forks – Non-Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| LF10-8Q         | 12-10      | 8                | 70463         | 25            | 10        |
| LF10-10Q        | 12-10      | 10               | 70464         | 25            | 10        |
| LF10-14Q        | 12-10      | 14               | 70465         | 25            | 10        |
| LF14-6L         | 16-14      | 6                | 70293         | 50            | 10        |
| LF14-8L         | 16-14      | 8                | 70294         | 50            | 10        |
| LF18-6L         | 22-18      | 6                | 70297         | 50            | 10        |
| LF18-8L         | 22-18      | 8                | 70298         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

# 3M Highland Locking Forks – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| LFV10-6Q        | 12-10      | 6                | 70466         | 25            | 10        |
| LFV10-8Q        | 12-10      | 8                | 70467         | 25            | 10        |
| LFV10-10Q       | 12-10      | 10               | 70468         | 25            | 10        |
| LFV10-14Q       | 12-10      | 14               | 70469         | 25            | 10        |
| LFV14-6L        | 16-14      | 6                | 70299         | 50            | 10        |
| LFV14-8L        | 16-14      | 8                | 70300         | 50            | 10        |
| LFV14-10L       | 16-14      | 10               | 70301         | 50            | 10        |
| LFV18-6L        | 22-18      | 6                | 70303         | 50            | 10        |
| LFV18-8L        | 22-18      | 8                | 70304         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M™ Highland™ Butt Splices



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| BS10L           | 12-10      | NA               | 70263         | 50            | 5         |
| BS10Q           | 12-10      | NA               | 70452         | 25            | 10        |
| BS14C           | 16-14      | NA               | 70207         | 100           | 5         |
| BS14L           | 16-14      | NA               | 70264         | 50            | 10        |
| BS18C           | 22-18      | NA               | 70208         | 100           | 5         |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Butt Splices – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| BSV10L          | 12-10      | NA               | 70266         | 50            | 5         |
| BSV10Q          | 12-10      | NA               | 70453         | 25            | 10        |
| BSV14C          | 16-14      | NA               | 70209         | 100           | 5         |
| BSV14L          | 16-14      | NA               | 70267         | 50            | 10        |
| BSV18C          | 22-18      | NA               | 70210         | 100           | 5         |
| BSV18L          | 22-18      | NA               | 70268         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Female Disconnects – Non-Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| FD14-187C       | 16-14      | .187             | 49894         | 100           | 5         |
| FD14-187L       | 16-14      | .187             | 49895         | 50            | 10        |
| FD14-250C       | 16-14      | .250             | 70214         | 100           | 5         |
| FD14-250L       | 16-14      | .250             | 70275         | 50            | 10        |
| FD18-187L       | 22-18      | .187             | 49901         | 50            | 10        |
| FD18-250C       | 22-18      | .250             | 70215         | 100           | 5         |
| FD18-250L       | 22-18      | .250             | 70276         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M™ Highland™ Female Disconnects – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| FDV10-250L      | 12-10      | .250             | 70282         | 50            | 5         |
| FDV10-250Q      | 12-10      | .250             | 70458         | 25            | 10        |
| FDV14-187C      | 16-14      | .187             | 70220         | 100           | 5         |
| FDV14-187L      | 16-14      | .187             | 70283         | 50            | 10        |
| FDV14-250C      | 16-14      | .250             | 70221         | 100           | 5         |
| FDV14-250L      | 16-14      | .250             | 70284         | 50            | 10        |
| FDV18-187C      | 22-18      | .187             | 70222         | 100           | 5         |
| FDV18-187L      | 22-18      | .187             | 70285         | 50            | 10        |
| FDV18-250C      | 22-18      | .250             | 70223         | 100           | 5         |
| FDV18-250L      | 22-18      | .250             | 70286         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Female Disconnects – Nylon Fully Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| FDI10-250L      | 12-10      | .250             | 70277         | 50            | 5         |
| FDI10-250Q      | 12-10      | .250             | 70457         | 25            | 10        |
| FDI14-187L      | 16-14      | .187             | 70278         | 50            | 10        |
| FDI14-250C      | 16-14      | .250             | 70217         | 100           | 5         |
| FDI14-250L      | 16-14      | .250             | 70279         | 50            | 10        |
| FDI18-187C      | 22-18      | .187             | 70218         | 100           | 5         |
| FDI18-187L      | 22-18      | .187             | 70280         | 50            | 10        |
| FDI18-250C      | 22-18      | .250             | 70219         | 100           | 5         |
| FDI18-250L      | 22-18      | .250             | 70281         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Male Tabs – Non-Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| MT14-250L       | 16-14      | .250             | 70306         | 50            | 10        |
| MT18-187L       | 22-18      | .187             | 70307         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M™ Highland™ Male Tabs – Nylon Fully Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| MTI10-250L      | 12-10      | .250             | 70309         | 50            | 5         |
| MTI10-250Q      | 12-10      | .250             | 70471         | 25            | 10        |
| MTI14-187C      | 16-14      | .187             | 70227         | 100           | 5         |
| MTI14-187L      | 16-14      | .187             | 70310         | 50            | 10        |
| MTI14-250C      | 16-14      | .250             | 70228         | 100           | 5         |
| MTI14-250L      | 16-14      | .250             | 70311         | 50            | 10        |
| MTI18-187C      | 22-18      | .187             | 70229         | 100           | 5         |
| MTI18-187L      | 22-18      | .187             | 70312         | 50            | 10        |
| MTI18-250L      | 22-18      | .250             | 70313         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Male Tabs – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| MTV10-250L      | 12-10      | .250             | 70314         | 50            | 5         |
| MTV10-250Q      | 12-10      | .250             | 70472         | 25            | 10        |
| MTV14-187C      | 16-14      | .187             | 70231         | 100           | 5         |
| MTVI14-250C     | 16-14      | .250             | 70232         | 100           | 5         |
| MTV14-250L      | 16-14      | .250             | 70316         | 50            | 10        |
| MTV18-187C      | 22-18      | .187             | 70233         | 100           | 5         |
| MTV18-187L      | 22-18      | .187             | 70317         | 50            | 10        |
| MTV18-250L      | 22-18      | .250             | 70318         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Snap Plugs – Vinyl Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| SPV14-156L      | 16-14      | .156             | 70342         | 50            | 10        |
| SPV18-156L      | 22-18      | .156             | 70343         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

## 3M Highland Snap Receptacles – Nylon Fully Insulated



| Product Number† | Wire Range | Stud or Tab Size | UPC (054007-) | Terminals/Bag | Bags/Case |
|-----------------|------------|------------------|---------------|---------------|-----------|
| SRI14-156L      | 16-14      | .156             | 70340         | 50            | 10        |

†Product Number ending in Q=25; L=50; C=100

# Kits



## 3M™ Scotchlok™ Terminal Assortment Kit STK-1 (Filled)

The 3M Scotchlok Terminal Kit STK-1 is filled with 3M's most frequently purchased products, including 14 of our most popular terminals.

The STK-1 is constructed of durable metal with individual product compartments. While the compartments keep you organized, the rugged metal frame protects the contents, even in the harshest environment. Overall box size is 13-3/4"L x 10"W x 2 1/2"H.

| Product                               | UPC<br>(051138) | Color | Boxes/<br>Case |
|---------------------------------------|-----------------|-------|----------------|
| STK-1 Terminal Asst. Kit              | 25348           | Red   | 1              |
| Part #                                | Qty.            |       |                |
| Scotchlok TH-440 Crimping Tool        | 1               |       |                |
| Scotchcode SPD-0-9 Tape Dispenser     | 1               |       |                |
| 3M 06225 Cable Ties                   | 100             |       |                |
| 3M 06226 Cable Ties                   | 100             |       |                |
| Highland RV18-8 Ring Tongue Terminal  | 50              |       |                |
| Highland RV14-6 Ring Tongue Terminal  | 50              |       |                |
| Highland RV14-8 Ring Tongue Terminal  | 50              |       |                |
| Highland RV14-10 Ring Tongue Terminal | 50              |       |                |
| Highland RV10-10 Ring Tongue Terminal | 25              |       |                |
| Highland RV18-6 Ring Tongue Terminal  | 25              |       |                |
| Highland FDV14-250 Female Disconnects | 50              |       |                |
| Highland BFV14-8 Fork Terminals       | 50              |       |                |
| Highland BFV14-10 Fork Terminals      | 50              |       |                |
| Highland BFV18-8 Fork Terminals       | 50              |       |                |
| Highland BFV18-6 Fork Terminals       | 50              |       |                |
| Highland BSV18 Butt Connectors        | 50              |       |                |
| Highland BSV14 Butt Connectors        | 50              |       |                |
| Highland BSV10 Butt Connectors        | 25              |       |                |



## 3M™ Scotchlok™ Heat Shrink Terminal Box (Empty)

This rugged metal case with a customized interior of molded plastic has 20 individual terminal compartments, and one large crimp

tool compartment. Order contents separately. Overall box size is 13-3/4"L x 10"W x 2 1/2"H.

| Product                  | UPC<br>(054007) | Color | Boxes/<br>Case |
|--------------------------|-----------------|-------|----------------|
| Heat Shrink Terminal Box | 09966           | Red   | 6              |

## 3M™ Scotchlok™ Metal Terminal Box (Empty)



This metal case with plastic insert tray is divided into 14 terminal compartments, one tool compartment and two miscellaneous compartments. Order contents separately. Overall box size is 13-3/4"L x 10"W x 2 1/2"H.

| Product          | UPC<br>(054007) | Boxes/<br>Case |
|------------------|-----------------|----------------|
| Red Terminal Box | 11900           | 6              |

### 3M™ Scotchlok™ Plastic Terminal Box (Empty)



This is a plastic organizing box for terminals. It is divided into 13 compartments, including one size to hold a crimping tool. Order contents separately. Overall box size is 11"L x 7"W x 1 3/4"H.

| Product             | UPC<br>(054007) | Boxes/<br>Case |
|---------------------|-----------------|----------------|
| Yellow Terminal Box | 02351           | 24             |

### 3M™ Scotchlok™ Terminal Assortment Kit SDTK-1 (Filled)

The 3M Scotchlok SDTK-1 Terminal Assortment Kit consists of a white plastic case with 12 individual product compartments, including a space for your 3M TH-440 crimping tool.

| Product             | UPC<br>(054007-) | Color | Boxes/<br>Case |
|---------------------|------------------|-------|----------------|
| SDTK-1 Terminal Box | 41983            | White | 20             |

| Part #        | Qty. |
|---------------|------|
| 71M-250-32-NL | 8    |
| 72M-250-32-NL | 8    |
| 73M-250-32-NL | 8    |
| 801           | 8    |
| 952           | 8    |
| 722-N         | 8    |
| 71F-250-32-NL | 8    |
| 72F-250-32-NL | 8    |
| 73F-250-32-NL | 8    |
| 801           | 8    |
| 952           | 8    |
| 718-N         | 8    |
| TH-440        | 1    |

### 3M™ Scotchlok™ Terminal Assortment Kit SDTK-2 (Filled)



The 3M Scotchlok Terminal Assortment Kit SDTK-2 consists of a white plastic case with 12 individual product compartments, including a space for your 3M TH-440 crimping tool.

| Product             | UPC<br>(054007-) | Color | Boxes/<br>Case |
|---------------------|------------------|-------|----------------|
| SDTK-2 Terminal Box | 41984            | White | 20             |

| Part #       | Qty. |
|--------------|------|
| 11-10-P      | 12   |
| 12-6S-P      | 12   |
| 12-10-P      | 12   |
| 13-10-P      | 8    |
| BS-31-6-P    | 12   |
| BS-32-6-P    | 12   |
| 32-10-P      | 12   |
| 72F-250-32-P | 12   |
| 61-P         | 11   |
| 62-P         | 10   |
| 722-N        | 13   |
| 718-N        | 8    |
| TH-440       | 1    |

# Tools

## 3M™ Scissors Style TH-440

A compact, high-quality tool designed to perform the six most common electrical wiring functions.

- Made of 1.125" (28,57 mm) heat-treated carbon steel
- Handles a variety of terminal and connector styles — insulated and non-insulated
- Range of 22–10 AWG
- 3M Terminals and Connectors are UL Listed and CSA Certified when used with the TH-440



### Features:

1. Anvil-type wire cutter for clean cuts.
2. Crimp dies for 22–10 AWG insulated terminals, connectors and closed-end connectors.
3. Cut-off dies for mild steel and non-ferrous screws.
4. Crimp dies for 22–10 AWG non-insulated terminals and connectors.
5. Wire stripping stations for circumferential cutless effort.
6. Crimp die for 7 and 8 mm ignition parts.
7. Cushioned, vinyl grips.
8. Available with 3M logo, your logo or plain.

For specific tooling applications, refer to the smallest unit container or the Tool Selection Guides in the Appendix.

| Product (add package code when ordering) | UPC (054007-) | Wire Range | Tools/ Carton | Tools/ Case |
|------------------------------------------|---------------|------------|---------------|-------------|
| TH-440                                   | 30120         | 22-10      | 1             | 10          |

## 3M™ Scissors Style TH-450

The most versatile heavy-duty tool we've ever offered.

- Made of 1.40" (35,5 mm) high-strength, heat-treated carbon steel
- Tool is lightweight without sacrificing strength
- Handles a variety of terminal and conductor styles; including flags, closed-end connectors, crimp sleeves and standard parts — insulated and non-insulated
- Range of 26–6 AWG
- 3M Terminals and Connectors are UL Listed and CSA Certified when used with the TH-450



### Features:

1. Anvil-type wire cutter.
- 2, 3. Crimp dies for 26–10 AWG insulated terminals and closed-end connectors.
4. Cut-off dies for mild steel and non-ferrous screws.
5. Crimp dies for 12–6 AWG non-insulated terminals, connectors, flags, disconnects, crimp sleeves and high-temperature terminals.
6. Crimp dies for 6–8 AWG insulated terminals and butt connectors.
7. Crimp die for 26–14 AWG non-insulated terminals, connectors, flags, disconnects and crimp sleeves.
8. Wire-stripping stations for circumferential cutless effort.
9. Strip length guide.
10. Textured, cushioned grips.
11. Available with 3M logo, your logo or plain.

For specific tooling applications, refer to the smallest unit container or the Tool Selection Guides in the Appendix.

| Product (add package code when ordering) | UPC (054007-) | Wire | Tools/ Carton | Tools/ Case |
|------------------------------------------|---------------|------|---------------|-------------|
| TH-450                                   | 49575         | 26-6 | 1             | 10          |

### 3M™ Ratchet TR-482



#### Tool Capability:

Crimps barrel and insulation grip simultaneously on No. 22–10 AWG (0.35–6.0 mm<sup>2</sup>) insulated terminals and connectors — nylon or vinyl insulated, butted or brazed seam.

#### Crimping Dies:

No. 22–14 AWG (0.35–2.5 mm<sup>2</sup>) red and blue color coded.  
No. 12–10 AWG (4.0–6.0 mm<sup>2</sup>) yellow color coded.

**Field Recalibration:** Calibration of ratchet can be accomplished in the field. See calibration and maintenance instructions packaged with the tool.

**Terminal Locator:** Spring loaded locator orients, positions and holds terminals and connectors.

**Conductor Stop:** Provides proper insertion of conductor in the terminal barrel.

**Positive Closure:** Ratchet requires full closure of handles to ensure proper crimp.

**Materials and Finish:** Hardened steel jaws and handles with corrosion resistant finish.

**Weight:** 1.1 lbs.

**Grip:** Plastic.

#### Specifications:

Insulated terminals from 22–10 AWG shall be crimped with a positive-action ratchet tool and UL Listed and CSA Certified with that tool. The dies shall be of a smooth, contour shape; and crimp the conductor barrel and insulation grip simultaneously. The tool shall have a locator, which will orient the terminal, position the terminal for crimping, hold the terminals in place, and act as a wire stop. The tool shall be compound-lever type with a ratchet mechanism to ensure positive closure for full-crimping cycle. The tool shall be capable of field adjustment to proper calibration with common tools and materials specified in the maintenance and calibration section of the instruction booklet provided with the tool. The manufacturer shall provide a guide for maintenance procedures and instructions to field inspect for specified die gaps. Jaws shall be hardened steel and coated with a corrosion-resistant finish. Tool shall be a Scotchlok™ TR-482.

Insulated 3M Terminals and Connectors are UL Listed and CSA Certified with the TR-482. For specific tooling information, see Tool Selection Guide in the Appendix.

| Product (add package code when ordering) | UPC (054007-) | Wire  | Tools/ Carton | Tools/ Case |
|------------------------------------------|---------------|-------|---------------|-------------|
| TR-482                                   | 11902         | 22-10 | 1             | 10          |

### 3M™ Ratchet TR-490

#### Tool Capability:

Crimps barrel and insulation grip independently on No. 22–10 AWG (0.35–6.0 mm<sup>2</sup>) insulated and non-insulated terminals and connectors — nylon or vinyl insulated, butted or brazed seam.

#### Crimping Dies:

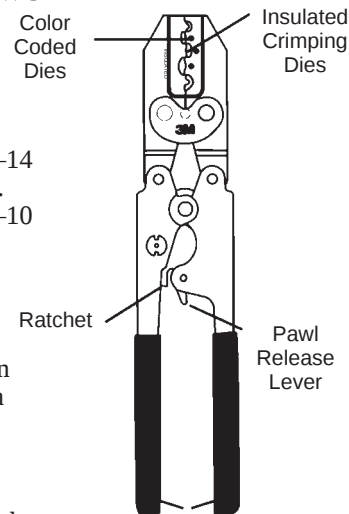
Insulated No. 22–18 AWG (0.35–0.97 mm<sup>2</sup>) red color coded. Insulated no. 16–14 AWG

(1.3–2.5 mm<sup>2</sup>) blue color coded.

Insulated No. 12–10 AWG (4.0–6.0 mm<sup>2</sup>) yellow color coded.

Non-Insulated No. 22–14 AWG (0.35–2.5 mm<sup>2</sup>).

Non-Insulated No. 12–10 AWG (4.0–6.0 mm<sup>2</sup>).



#### Field Recalibration:

Calibration adjustment of ratchet can be accomplished in the field. See calibration and maintenance instructions packaged with the tool.

**Positive Closure:** Ratchet requires full closure of handles to ensure proper crimp. Ratchet release lever allows removal of misplaced terminals.

**Materials and Finish:** Hardened steel jaws and handles with corrosion resistant finish.

**Weight:** 0.8 lbs.

**Grip:** Plastic.

#### Specifications:

Non-insulated and insulated terminals, and connectors from 22–10 AWG shall be crimped with a positive action (ratchet) tool, and be UL Listed and CSA Certified with that tool. Non-insulated die shall be of an indent shape, and insulated die shall be of a flat, smooth shape capable of crimping pre-insulated vinyl, nylon terminals and connectors. Dies shall be marked with the appropriate wire range and insulated dies shall be color coded — red for 22–18 AWG, blue for 16–14 AWG, and yellow for 12–10 AWG. The tool shall be compound lever type with a ratchet mechanism to ensure positive closure for full crimping cycle. Tool shall be capable of field adjustment to proper calibration with common tools and materials specified in the maintenance and calibration section of the instruction booklet provided with the tool. The manufacturer shall provide a guide for maintenance procedures and instructions to field inspect for specified die gaps. Jaws shall be hardened steel and coated with a corrosion-resistant finish. Tool shall be a 3M Scotchlok™ TR-490.

3M Terminals and Connectors are UL Listed and CSA Certified with the TR-490. For specific tooling information, see the Tool Selection Guide in the the Appendix.

| Product (add package code when ordering) | UPC (054007-) | Wire  | Tools/ Carton | Tools/ Case |
|------------------------------------------|---------------|-------|---------------|-------------|
| TR-490                                   | 70481         | 22-10 | 1             | 10          |

## Tools for 3M Butt, Fork and Ring Terminals

| Wire Range | Terminal Barrel                                                       |                                                                                            | Scissor Tool     |                  | Ratchet Tool     |                  |
|------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
|            | Prefix                                                                | Style / Suffix                                                                             | TH-440           | TH-450           | TR-482           | TR-490           |
| 22-18      | 11, 21, 31, 41, 51*, 61<br>332, 422, 722, BS-21<br>BS-31, L-11, SS-31 | Bare / None, S, SN<br>Vinyl / LP, P, SP<br>Nylon / N, NS, SN, WN<br>Nylon w/grip / NB, NBM | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• |
| 16-14      | 12, 22, 32, 42, 52*, 62<br>316, 416, 718, BS-22<br>BS-32, L-12, SS-31 | Bare / None, S, SN<br>Vinyl / LP, P, SP<br>Nylon / N, NS, SN, WN<br>Nylon w/grip / NB, NBM | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• |
| 16-12      | 123, 323                                                              | Bare / None, S, SN<br>Vinyl / LP, P, SP<br>Nylon / N, NS, SN, WN<br>Nylon w/grip / NB, NBM | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• |
| 12-10      | 13, 23, 33, 43, 53*, 63<br>312, 412, BS-23<br>BS-33, L-13, SS-33      | Bare / None, S, SN<br>Vinyl / LP, P, SP<br>Nylon / N, NS, SN, WN<br>Nylon w/grip / NB, NBM | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• | •<br>•<br>•<br>• |
| 8          | 14*                                                                   | Bare / None<br>Vinyl / SP<br>Nylon / WN                                                    |                  | •<br>•<br>•      |                  |                  |
| 6          | 15*                                                                   | Bare / None<br>Vinyl / SP<br>Nylon / WN                                                    |                  | •<br>•<br>•      |                  |                  |

\* Only use with the TH-450 for UL Listing and CSA Certification

## Tools for 3M Butt, Fork and Ring Terminals

| Wire Range | Terminal Barrel |                                                 | Scissor Tool |             | Ratchet Tool |             |
|------------|-----------------|-------------------------------------------------|--------------|-------------|--------------|-------------|
|            | Prefix          | Style / Suffix                                  | TH-440       | TH-450      | TR-482       | TR-490      |
| 22-18      | 71F, 71M, 751*  | Bare / None<br>Vinyl / P<br>Nylon / NB, NBL, NL | •<br>•<br>•  | •<br>•<br>• | •<br>•<br>•  | •<br>•<br>• |
| 16-14      | 72F, 72M, 752*  | Bare / None<br>Vinyl / P<br>Nylon / NB, NBL, NL | •<br>•<br>•  | •<br>•<br>• | •<br>•<br>•  | •<br>•<br>• |
| 12-10      | 73F, 73M, 753*  | Bare / None<br>Vinyl / P<br>Nylon / NB, NBL, NL | •<br>•<br>•  | •<br>•<br>• | •<br>•<br>•  | •<br>•<br>• |

\* Only use with the TH-450 for UL Listing and CSA Certification

# Terminal Stud Size Chart

| Stud Size |                                                                                     |                     | 3M Terminal Hole Diameter |                                                                                     |                 |                  |
|-----------|-------------------------------------------------------------------------------------|---------------------|---------------------------|-------------------------------------------------------------------------------------|-----------------|------------------|
| US/Inches |                                                                                     |                     | OUS/Metric                |                                                                                     |                 |                  |
| Diameter  |                                                                                     |                     | Diameter                  |                                                                                     |                 |                  |
| #2        |    | 0.086" (2,144 mm)   | M2                        |    | 2,0 mm (0.080") | 0.095" (2,4 mm)  |
| #4        |    | 0.112" (2,844 mm)   | M2,5                      |    | 2,5 mm (0.100") | 0.120" (3,0 mm)  |
| #5        |    | 0.125" (3,175 mm)   | M3                        |    | 3,0 mm (0.120") | 0.148" (3,8 mm)  |
| #6        |    | 0.138" (3,505 mm)   | M3,5                      |    | 3,5 mm (0.140") | 0.148" (3,8 mm)  |
| #8        |    | 0.164" (4,166 mm)   | M4                        |    | 4,0 mm (0.176") | 0.174" (4,4 mm)  |
| #10       |    | 0.190" (4,826 mm)   | M5                        |    | 5,0 mm (0.20")  | 0.200" (5,1 mm)  |
| 1/4       |    | 0.250" (6,350 mm)   | M6                        |    | 6,0 mm (0.24")  | 0.265" (6,7 mm)  |
| 5/16      |    | 0.3125" (7,938 mm)  | M8                        |    | 8,0 mm (0.32")  | 0.328" (8,3 mm)  |
| 3/8       |    | 0.375" (9,525 mm)   | M10                       |    | 10,0 mm (0.40") | 0.397" (10,1 mm) |
| 7/16      |    | 0.4375" (11,113 mm) | M10                       |    | 10,0 mm (0.48") | 0.450" (11,4 mm) |
| 1/2       |    | 0.500" (12,700 mm)  | M12                       |    | 12,0 mm (0.48") | 0.515" (13,1 mm) |
| 5/8       |    | 0.625" (15,875 mm)  | M16                       |    | 16,0 mm (0.64") | 0.656" (16,7 mm) |
| 3/4       |  | 0.750" (19,050 mm)  | M18                       |  | 18,0 mm (0.72") | 0.781" (19,8 mm) |

Ref: ISO 263-1973 for inch stud sizes and ISO 262-1973 for metric stud sizes.

## American Wire Gauge

| Size | Inches | Millimeters |
|------|--------|-------------|
| 4/0  | 0.4600 | 11,684      |
| 3/0  | 0.4096 | 10,040      |
| 2/0  | 0.3648 | 9,266       |
| 1/0  | 0.3249 | 8,253       |
| 1    | 0.2893 | 7,347       |
| 2    | 0.2576 | 6,543       |

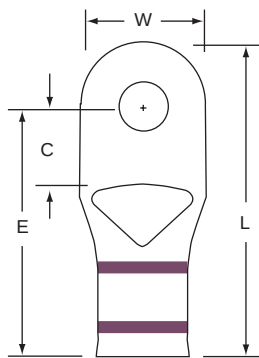
| Size | Inches | Millimeters |
|------|--------|-------------|
| 4    | 0.2043 | 5,189       |
| 6    | 0.1620 | 4,115       |
| 8    | 0.1285 | 3,264       |
| 10   | 0.1019 | 2,588       |
| 12   | 0.0808 | 2,052       |
| 14   | 0.0641 | 1,628       |

| Size | Inches | Millimeters |
|------|--------|-------------|
| 16   | 0.0508 | 1,290       |
| 18   | 0.0403 | 1,024       |
| 20   | 0.0320 | 0,813       |
| 22   | 0.0253 | 0,643       |
| 24   | 0.0201 | 0,511       |
| 26   | 0.0159 | 0,404       |

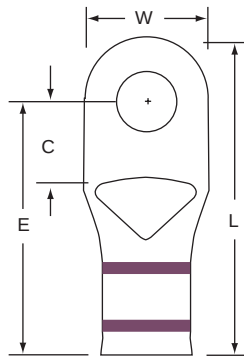
## Large Gauge Ring Tongues – Non-Insulated Copper Seamless 2 AWG



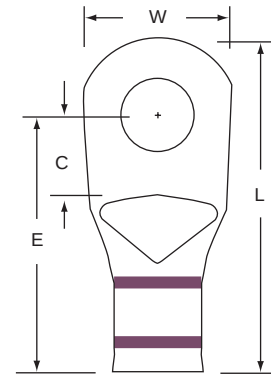
| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                  | W               | C               | L               | E               | Thickness      | Barrel Length   | Barrel I.D.     | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------|
| MC2-14RX                    | 09187         | Brown      | 2 AWG            | 1/4" (6 mm <sup>2</sup> )  | 0.63" (16,0 mm) | 0.40" (10,2 mm) | 1.62" (41,1 mm) | 1.29" (32,8 mm) | 0.11" (2,8 mm) | 0.55" (14,0 mm) | 0.341" (8,6 mm) | 10/ box         | 100       |
| MC2-516RX                   | 09188         | Brown      | 2 AWG            | 5/16" (8 mm <sup>2</sup> ) | 0.63" (16,0 mm) | 0.40" (10,2 mm) | 1.62" (41,1 mm) | 1.29" (32,8 mm) | 0.11" (2,8 mm) | 0.55" (14,0 mm) | 0.341" (8,6 mm) | 10/ box         | 100       |
| MC2-38RX                    | 09189         | Brown      | 2 AWG            | 3/8" (10 mm <sup>2</sup> ) | 0.78" (19,8 mm) | 0.46" (11,7 mm) | 1.75" (44,5 mm) | 1.35" (34,3 mm) | 0.11" (2,8 mm) | 0.55" (14,0 mm) | 0.341" (8,6 mm) | 10/ box         | 100       |



**MC2-14RX**  
Stud Size  
Wire Range  
1/4  
2



**MC2-516RX**  
Stud Size  
Wire Range  
5/16  
2

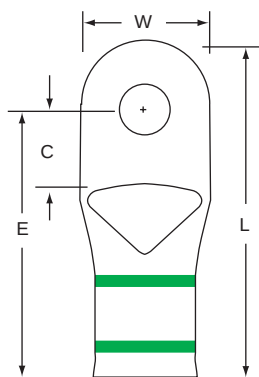


**MC2-38RX**  
Stud Size  
Wire Range  
3/8  
2

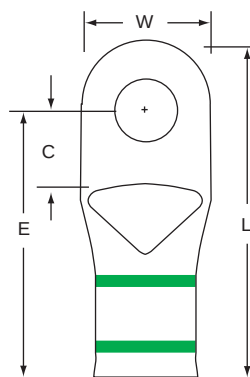
## Large Gauge Ring Tongues – Non-Insulated Copper Seamless 1 AWG



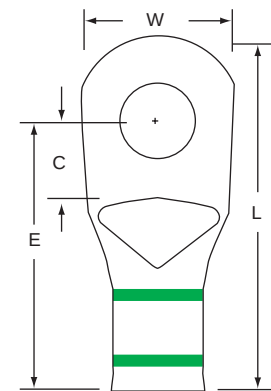
| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                  | W               | C               | L               | E               | Thickness      | Barrel Length   | Barrel I.D.     | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------|
| MC1-14RX                    | 09190         | Green      | 1 AWG            | 1/4" (6 mm <sup>2</sup> )  | 0.68" (17,3 mm) | 0.39" (9,9 mm)  | 1.72" (43,7 mm) | 1.37" (34,8 mm) | 0.11" (2,8 mm) | 0.60" (15,2 mm) | 0.365" (9,3 mm) | 10/ box         | 100       |
| MC1-516RX                   | 09191         | Green      | 1 AWG            | 5/16" (8 mm <sup>2</sup> ) | 0.68" (17,3 mm) | 0.39" (9,9 mm)  | 1.72" (43,7 mm) | 1.37" (34,8 mm) | 0.11" (2,8 mm) | 0.60" (15,2 mm) | 0.365" (9,3 mm) | 10/ box         | 100       |
| MC1-38RX                    | 09192         | Green      | 1 AWG            | 3/8" (10 mm <sup>2</sup> ) | 0.78" (19,8 mm) | 0.46" (11,7 mm) | 1.83" (46,5 mm) | 1.43" (36,3 mm) | 0.11" (2,8 mm) | 0.60" (15,2 mm) | 0.365" (9,3 mm) | 10/ box         | 100       |



**MC1-14RX**  
Stud Size  
Wire Range  
1/4  
1



**MC1-516RX**  
Stud Size  
Wire Range  
5/16  
1



**MC1-38RX**  
Stud Size  
Wire Range  
3/8  
1

<sup>†</sup>Product Number ending in X = box; Product Number ending with K = bulk

## Large Gauge Ring Tongues – Non-Insulated Copper Seamless 1/0 AWG



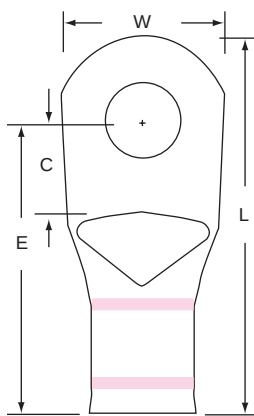
| Product Number <sup>1</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                     | W                  | C                  | L                  | E                  | Thickness         | Barrel Length      | Barrel I.D.         | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|---------------------|-----------------|-----------|
| MC1/0-14RX                  | 09193         | Pink       | 1/0 AWG          | 1/4"<br>(6 mm <sup>2</sup> )  | 0.75"<br>(19,0 mm) | 0.40"<br>(10,2 mm) | 1.83"<br>(46,5 mm) | 1.44"<br>(36,6 mm) | 0.11"<br>(2,8 mm) | 0.65"<br>(16,5 mm) | 0.412"<br>(10,5 mm) | 10/<br>box      | 100       |
| MC1/0-38RX                  | 09194         | Pink       | 1/0 AWG          | 3/8"<br>(8 mm <sup>2</sup> )  | 0.84"<br>(21,3 mm) | 0.46"<br>(11,7 mm) | 1.90"<br>(48,3 mm) | 1.52"<br>(38,6 mm) | 0.11"<br>(2,8 mm) | 0.65"<br>(16,5 mm) | 0.412"<br>(10,5 mm) | 10/<br>box      | 100       |
| MC1/0-12RX                  | 09195         | Pink       | 1/0 AWG          | 1/2"<br>(12 mm <sup>2</sup> ) | 0.84"<br>(21,3 mm) | 0.46"<br>(11,7 mm) | 1.90"<br>(48,3 mm) | 1.52"<br>(38,6 mm) | 0.11"<br>(2,8 mm) | 0.65"<br>(16,5 mm) | 0.412"<br>(10,5 mm) | 10/<br>box      | 100       |



MC1/0-14RX

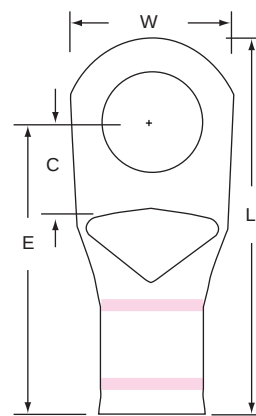
Stud Size  
Wire Range

1/4  
1/0



MC1/0-38RX

3/8  
1/0



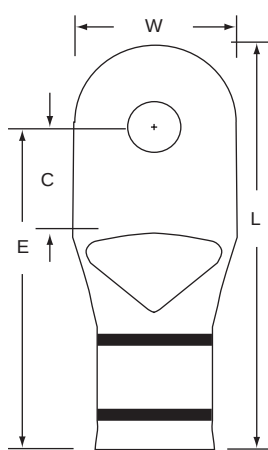
MC1/0-12RX

1/2  
1/0

## Large Gauge Ring Tongues – Non-Insulated Copper Seamless 2/0 AWG



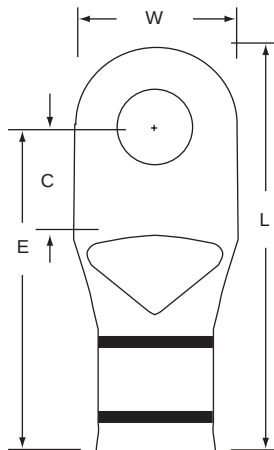
| Product Number <sup>1</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                     | W                  | C                  | L                  | E                  | Thickness         | Barrel Length      | Barrel I.D.         | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|---------------------|-----------------|-----------|
| MC2/0-14RX                  | 09196         | Black      | 2/0 AWG          | 1/4"<br>(6 mm <sup>2</sup> )  | 0.83"<br>(21,1 mm) | 0.50"<br>(12,7 mm) | 2.09"<br>(53,1 mm) | 1.63"<br>(41,4 mm) | 0.11"<br>(2,8 mm) | 0.68"<br>(17,3 mm) | 0.466"<br>(11,8 mm) | 10/<br>box      | 100       |
| MC2/0-38RX                  | 09197         | Black      | 2/0 AWG          | 3/8"<br>(10 mm <sup>2</sup> ) | 0.83"<br>(21,1 mm) | 0.50"<br>(12,7 mm) | 2.09"<br>(53,1 mm) | 1.63"<br>(41,4 mm) | 0.11"<br>(2,8 mm) | 0.68"<br>(17,3 mm) | 0.466"<br>(11,8 mm) | 10/<br>box      | 100       |
| MC2/0-12RX                  | 09198         | Black      | 2/0 AWG          | 1/2"<br>(12 mm <sup>2</sup> ) | 0.83"<br>(21,1 mm) | 0.50"<br>(12,7 mm) | 2.09"<br>(53,1 mm) | 1.63"<br>(41,4 mm) | 0.11"<br>(2,8 mm) | 0.68"<br>(17,3 mm) | 0.466"<br>(11,8 mm) | 10/<br>box      | 100       |



MC2/0-14RX

Stud Size  
Wire Range

1/4  
2/0



MC2/0-38RX

3/8  
2/0



MC2/0-12RX

1/2  
2/0

<sup>1</sup>Product Number ending in X = box; Product Number ending with K = bulk

# Large Gauge Ring Tongues – Non-Insulated Copper Seamless 3/0 AWG

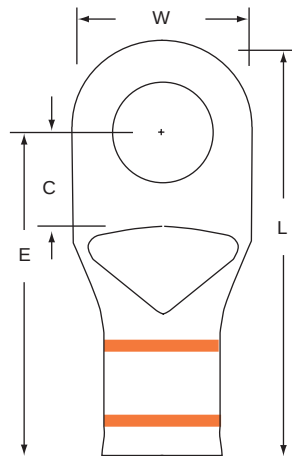


| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                  | W               | C               | L               | E               | Thickness      | Barrel Length   | Barrel I.D.      | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|----------------------------|-----------------|-----------------|-----------------|-----------------|----------------|-----------------|------------------|-----------------|-----------|
| MC3/0-38RX                  | 09199         | Orange     | 3/0 AWG          | 3/8" (10 mm <sup>2</sup> ) | 0.92" (23,4 mm) | 0.50" (12,7 mm) | 2.16" (54,9 mm) | 1.69" (42,9 mm) | 0.12" (3,1 mm) | 0.70" (17,8 mm) | 0.516" (13,1 mm) | 6/ box          | 60        |
| MC3/0-12RX                  | 09200         | Orange     | 3/0 AWG          | 1/2" (12 mm <sup>2</sup> ) | 0.92" (23,4 mm) | 0.50" (12,7 mm) | 2.16" (54,9 mm) | 1.69" (42,9 mm) | 0.12" (3,1 mm) | 0.70" (17,8 mm) | 0.516" (13,1 mm) | 6/ box          | 60        |



**MC3/0-38RX**  
Stud Size 3/8  
Wire Range 3/0

Stud Size  
Wire Range



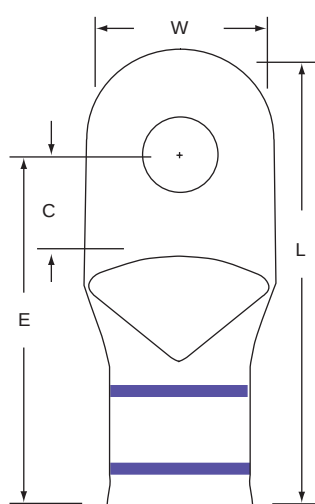
**MC3/0-12RX**  
Stud Size 1/2  
Wire Range 3/0

<sup>†</sup>Product Number ending in X = box; Product Number ending with K = bulk

# Large Gauge Ring Tongues – Non-Insulated Copper Seamless 4/0 AWG-250 kcmil

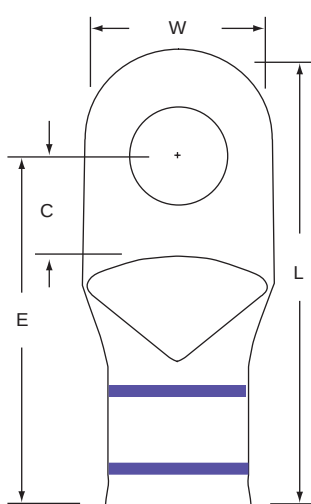


| Product Number <sup>1</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size                     | W                  | C                  | L                  | E                  | Thickness         | Barrel Length      | Barrel I.D.         | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|---------------------|-----------------|-----------|
| MC4/0-38RX                  | 09201         | Purple     | 4/0 AWG          | 3/8"<br>(10 mm <sup>2</sup> ) | 1.00"<br>(25,4 mm) | 0.54"<br>(13,7 mm) | 2.35"<br>(59,7 mm) | 1.84"<br>(46,7 mm) | 0.13"<br>(3,3 mm) | 0.73"<br>(18,5 mm) | 0.564"<br>(14,3 mm) | 6/<br>box       | 60        |
| MC4/0-12RX                  | 09202         | Purple     | 4/0 AWG          | 1/2"<br>(12 mm <sup>2</sup> ) | 1.00"<br>(25,4 mm) | 0.54"<br>(13,7 mm) | 2.35"<br>(59,7 mm) | 1.84"<br>(46,7 mm) | 0.13"<br>(3,3 mm) | 0.73"<br>(18,5 mm) | 0.564"<br>(14,3 mm) | 6/<br>box       | 60        |
| MC250-38RX                  | 09203         | Yellow     | 250 kcmil        | 3/8"<br>(10 mm <sup>2</sup> ) | 1.05"<br>(26,7 mm) | 0.54"<br>(13,7 mm) | 2.39"<br>(60,7 mm) | 1.86"<br>(47,2 mm) | 0.13"<br>(3,3 mm) | 0.73"<br>(18,5 mm) | 0.595"<br>(15,1 mm) | 6/<br>box       | 60        |
| MC250-12RX                  | 09204         | Yellow     | 250 kcmil        | 1/2"<br>(12 mm <sup>2</sup> ) | 1.05"<br>(26,7 mm) | 0.54"<br>(13,7 mm) | 2.39"<br>(60,7 mm) | 1.86"<br>(47,2 mm) | 0.13"<br>(3,3 mm) | 0.73"<br>(18,5 mm) | 0.595"<br>(15,1 mm) | 6/<br>box       | 60        |



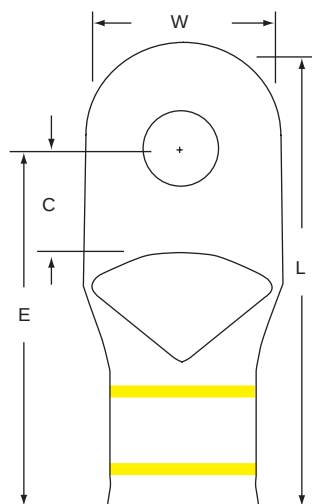
MC4/0-38RX

Stud Size 3/8  
Wire Range 4/0



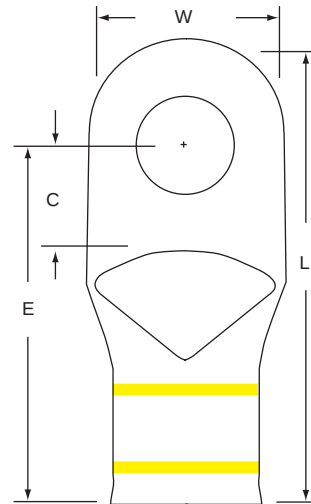
MC4/0-12RX

Stud Size 1/2  
Wire Range 4/0



MC250-38RX

Stud Size 3/8  
Wire Range 250



MC250-12RX

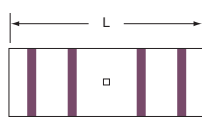
Stud Size 1/2  
Wire Range 250

<sup>1</sup>Product Number ending in X = box; Product Number ending with K = bulk

# Large Gauge Butt Connectors – Non-Insulated Copper Seamless

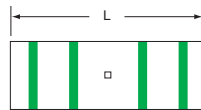


| Product Number <sup>1</sup> | UPC (054007-) | Color Code | Wire Range | L                  | Barrel I.D.         | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------|--------------------|---------------------|-----------------|-----------|
| MC2BCX                      | 09205         | Brown      | 2 AWG      | 1.35"<br>(34,3 mm) | 0.341"<br>(8,6 mm)  | 10/<br>box      | 100       |
| MC1BCX                      | 09206         | Green      | 1 AWG      | 1.35"<br>(34,3 mm) | 0.365"<br>(9,3 mm)  | 10/<br>box      | 100       |
| MC1/0BCX                    | 09207         | Pink       | 1/0 AWG    | 1.55"<br>(39,4 mm) | 0.412"<br>(10,5 mm) | 10/<br>box      | 100       |
| MC2/0BCX                    | 09208         | Black      | 2/0 AWG    | 1.80"<br>(45,7 mm) | 0.466"<br>(11,8 mm) | 10/<br>box      | 100       |
| MC3/0BCX                    | 09209         | Orange     | 3/0 AWG    | 1.90"<br>(48,3 mm) | 0.516"<br>(13,1 mm) | 3/<br>box       | 30        |
| MC4/0BCX                    | 09210         | Purple     | 4/0 AWG    | 2.00"<br>(50,8 mm) | 0.564"<br>(14,3 mm) | 3/<br>box       | 30        |
| MC250BCX                    | 09211         | Yellow     | 250 kcmil  | 2.00"<br>(50,8 mm) | 0.595"<br>(15,1 mm) | 3/<br>box       | 30        |



MC2BCX  
2

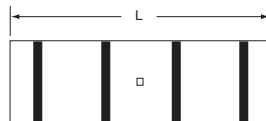
Wire Range



MC1BCX  
1

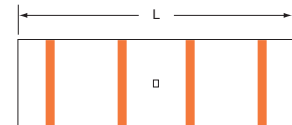


MC1/0BCX  
1/0

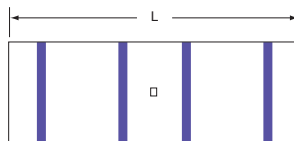


MC2/0BCX  
2/0

Wire Range

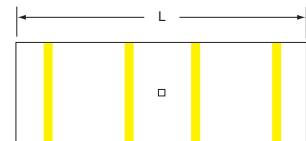


MC3/0BCX  
3/0



MC4/0BCX  
4/0

Wire Range



MC250BCX  
250

<sup>1</sup>Product Number ending in X = box; Product Number ending with K = bulk

