



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

# Terminals, Kits and Tools

|                                       |     |                               |     |
|---------------------------------------|-----|-------------------------------|-----|
| Glossary of Terminals and Tools Terms | 48  |                               |     |
| Ring Tongues                          | 53  |                               |     |
| Multi-Stud Ring Tongues               | 78  |                               |     |
| Standard Forks                        | 79  |                               |     |
| Block Forks                           | 85  |                               |     |
| Flanged Block Forks                   | 93  |                               |     |
| Locking Forks                         | 98  |                               |     |
| Butt Connectors                       | 107 | Parallel Connectors           | 133 |
| Female Disconnects                    | 113 | Pin Terminals                 | 134 |
| Male Disconnects                      | 121 | 3M Highland™ Bagged Terminals | 135 |
| Flags                                 | 125 | Kits                          | 142 |
| Multi-Stack Disconnects               | 125 | Tools                         | 143 |
| Adapters                              | 126 | Terminal Stud Size Chart      | 146 |
| High Temperature                      | 128 | American Wire Gauge           | 146 |
| Closed End Connectors                 | 131 |                               |     |



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

- Effective and reliable performance, UL Listed and CSA Certified where appropriate.
- 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 providing 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 pages 143-144 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/tap.                        |
| 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 Terminals and Tools Terms

### ADAPTERS

To interconnect two connectors already attached to wires.

### BLOCK FORK

Same strength as the fork, but designed to use in terminal block because sides lie flat against barrier portion of terminal block.

### BULLET STYLE

Similar advantages as disconnects. 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.

### FORK

Allows rapid connection of wire. Usually used on free-standing studs, because of wider tongues.

### 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.

### RING

The standard style of tongue. The safest and most reliable. It cannot be removed unless mounting screw is removed.

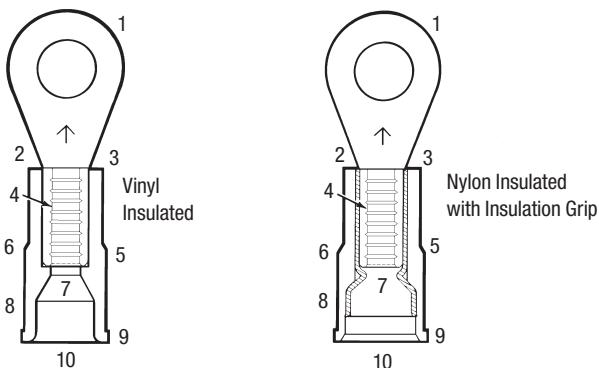
### TAB

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 holding power.
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

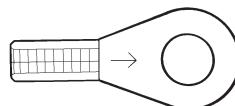
8. Nylon-insulated terminals with grip feature a brass sleeve. Sleeve provides optimum grip on insulation, strain relief and vibration protection. Brass sleeve is recessed which provides excellent flash-over protection.

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.

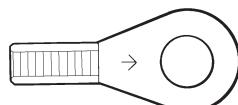
## Barrel Styles

### Non-Insulated Butted Seam



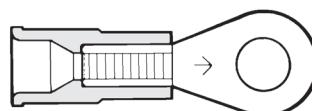
The most economical terminal—used where special performance or installation characteristics are not needed. Beveled mouth facilitates wire insertion. Maximum temperature for bare terminals: 347°F (175°C).

### 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

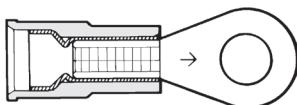


Used where insulated barrel is necessary and desirable. Terminal consists of brazed or butted part with flared, rigid molded polyvinyl chloride sleeve securely attached and funneled for easy wire entry. Wire insulation positions itself against funnel portion of vinyl sleeve thus eliminating strand hang-up. 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 1000V signs and lighting fixtures (luminaries).

### Nylon Insulated Butted Seam with Insulation Grip



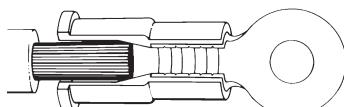
Used where insulated barrel and positive insulation grip are necessary or desirable. Terminal consists of butted seam part with flared, seamless brass sleeve securely attached and covered with flared, molded nylon sleeve. Wire insulation positions itself against funnel portion of brass sleeve. Crimping 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 1000V signs and lighting fixtures (luminaries).

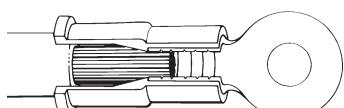
### Installation Procedure

Funnel Barrel Feature provides an excellent electrical and mechanical connection.

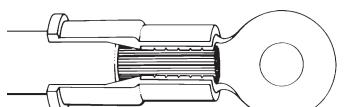
- Funnel design guides wire into position.



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

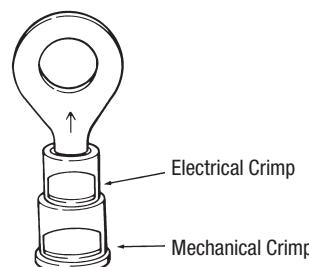


- Wire is in place, ready for crimping.

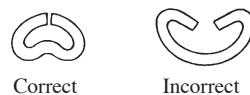


For maximum crimping performance, barrel of connector must be properly indexed in the crimp tool station.

## 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.

## 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 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.



## Application Procedure for Heat Shrink Products:

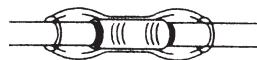
1. Strip wires to appropriate length as indicated on package label.



2. Insert wire into terminal and crimp with correct station of a recommended tool.



3. Apply heat with a recommended heat source.



## 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.

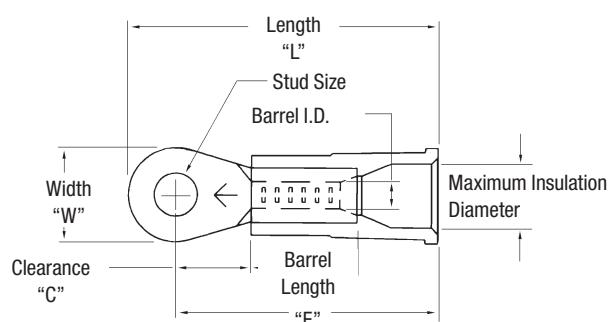
## Standard Crimp Terminal and Connector Specifications

### 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 1000V 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

| 3M Identity | Code/Barrel Style   | Wire Size Code (AWG)  | - | Stud, Tab, or Bullet Size  | Tongue Code   | Product Availability**  |
|-------------|---|---|---|--|---|---|
| M           | No Code = Bare Brazed<br>A = No Barrel (adapter)<br>I = Double Wall w/interlock<br>N = Nylon Brazed<br>NG = Nylon w/ Grip<br>NHU = Nylon/Butted<br>w/ Heat Shrink Over Top<br>NU = Nylon/Butted<br>U = Bare/Butted<br>V = Vinyl/Brazed<br>VA = Vinyl Adapter<br>VU = Vinyl/Butted | 24 = 26-24 (yellow)<br>20 = 26-20 (yellow)<br>18 = 22-18 (red)<br>14 = 16-14 (blue)<br>10 = 12-10 (yellow)<br>8 = 8 (red)<br>6 = 6 (blue)<br>4 = 4 (yellow) | - | (STUD)<br>0 = 0<br>2 = 2<br>4 = 4<br>6 = 6<br>8 = 8<br>10 = 10<br>12 = 1/2"<br>14 = 1/4"<br>38 = 3/8"<br>516 = 5/16"<br>610 = 6, 8 10<br><br>(TAB)<br>110 = 0.110" x 0.020"<br>110/32 = 0.110" x 0.032"<br>187 = 0.187" x 0.020"<br>250 = 0.250" x 0.032"<br>375 = 0.375" x 0.050"<br><br>(BULLET)<br>156 = 0.156" Dia.<br>180 = 0.180" Dia.<br>47 = 0.47 pin length<br>55 = 0.55 pin length | F = Fork<br>FB = Fork, Block<br>FBHT = Fork, Block, High Temp.<br>FFB = Fork, Flanged, Block<br>FHT = Fork, High Temp.<br>FL = Fork, Locking<br>R = Ring<br>RHD = Ring, Heavy Duty<br>RHT = Ring, High Temp.<br>/S = Short or Small<br>/L = Large or Long<br>R/Flag = Ring, Flag<br>BC = Butt Connector<br>CEC = Closed End Connector<br>P = Pin Connector<br>PC = Parallel Connector<br>BCM = Butt Connector<br>Moisture Res.<br>CEC/ST = Closed End Connector, Steel Insert<br>Disconnect<br>DF = Female<br>DFHT = Female, High Temp.<br>DFI = Female, Fully Insulated<br>DM = Male<br>DMF = Male, Female<br>DMHT = Male, High Temp.<br>DMI = Male, Fully Insulated<br>DF/Flag = Female Flag<br>Adapter<br>D = Disconnects<br>F = Female<br>FFI = Double Female, Fully Insulated<br>M = Male<br>MMI = Double Male, Fully Insulated<br>MMF = Double Male, Female<br>MFM = Male, Female, Male, Stacking<br>RR = Ring Rectangular Tongue<br>Fuse = Fuse Adapter Clip | All box (X) package terminals in this catalog are available (in the packaging quantity indicated) from local distributor stocks. All bulk (K) packaged terminals are available in full cartons only, and may require a three to five week order lead time from the factory. |

\* A dash (-) separates the wire size code from the stud, tab or bullet size code.

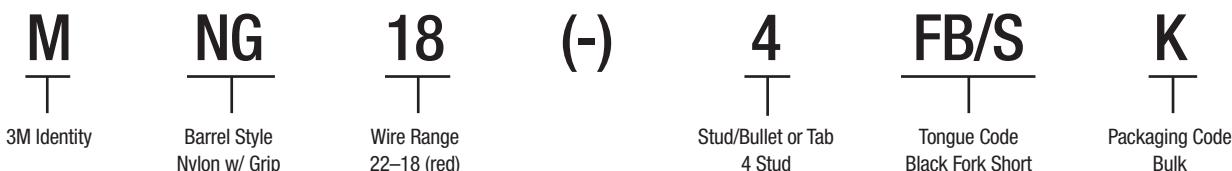
\*\* Denotes product packaging. Packaging of 3M Scotchlok™ terminals should be specified by using the appropriate terminal part number. Suffix letters are indicated within each product number. (See "Product Number" heading in ordering information charts.)

Note: Contact your local distributor or 3M sales office for price and delivery information.

## Map of Numbering System

### Example:

Catalog Number: MNG18-4 FB/SK



### 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)

<sup>1</sup>Product number ending in X = box; product number ending with K = bulk.

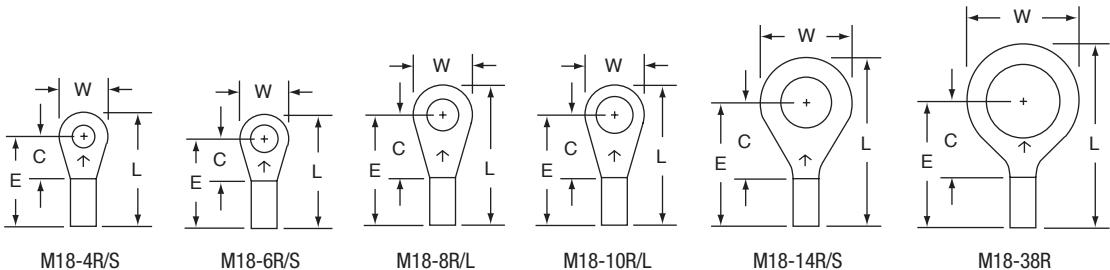


# Ring Tongues

## 3M™ Ring Tongues — Non-Insulated Brazed Seam 22-18 AWG



| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|---------------------|--------------|------|------|------|------|-----------|------------------|----------------|--------------------------|------------------------|
| M18-4R/SX                   | 49590            | 22-18               | 4            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |
| M18-4R/SK                   | 01014            | 22-18               | 4            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.070          | —                        | 1000                   |
| M18-6R/SX                   | 21635            | 22-18               | 6            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |
| M18-6R/SK                   | 01016            | 22-18               | 6            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.070          | —                        | 1000                   |
| M18-8R/LX                   | 21643            | 22-18               | 8            | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |
| M18-8R/LK                   | 01021            | 22-18               | 8            | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.070          | —                        | 1000                   |
| M18-10R/LX                  | 21650            | 22-18               | 10           | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |
| M18-10R/LK                  | 01023            | 22-18               | 10           | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.070          | —                        | 1000                   |
| M18-14R/SX                  | 49591            | 22-18               | 1/4          | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |
| M18-38RX                    | 49593            | 22-18               | 3/8          | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25             | 0.070          | 100                      | 500                    |



M18-4R/S      M18-6R/S      M18-8R/L      M18-10R/L      M18-14R/S      M18-38R

Stud Size      4                  6                  8                  10                1/4                3/8

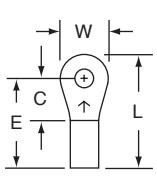
Wire Range      22-18            22-18            22-18            22-18            22-18            22-18

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

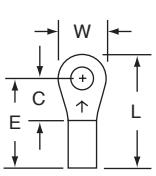
# 3M™ Ring Tongues — Non-Insulated Brazed Seam 16-14 AWG



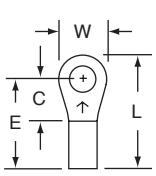
| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|---------------------|--------------|------|------|------|------|-----------|------------------|----------------|--------------------------|------------------------|
| M14-2R/SK                   | 01379            | 16-14               | 2            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-4R/SX                   | 49612            | 16-14               | 4            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |
| M14-6R/SX                   | 22294            | 16-14               | 6            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |
| M14-6R/SK                   | 01382            | 16-14               | 6            | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-6R/LK                   | 01384            | 16-14               | 6            | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-8R/LX                   | 22302            | 16-14               | 8            | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |
| M14-8R/LK                   | 13880            | 16-14               | 8            | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-10RK                    | 13929            | 16-14               | 10           | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-10R/LX                  | 22310            | 16-14               | 10           | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |
| M14-10R/LK                  | 01389            | 16-14               | 10           | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-14R/SX                  | 22328            | 16-14               | 1/4          | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |
| M14-14R/SK                  | 01390            | 16-14               | 1/4          | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-516R/SK                 | 01392            | 16-14               | 5/16         | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25             | 0.090          | —                        | 1000                   |
| M14-38RX                    | 49614            | 16-14               | 3/8          | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25             | 0.090          | 100                      | 500                    |



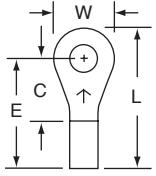
M14-2R/S



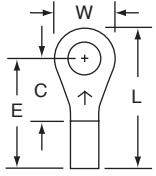
M14-4R/S



M14-6R/S



M14-6R/L



M14-8R/L

Stud Size

2

4

6

6

8

Wire Range

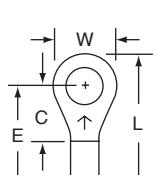
16-14

16-14

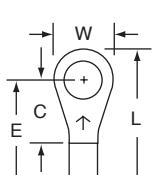
16-14

16-14

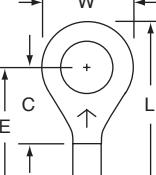
16-14



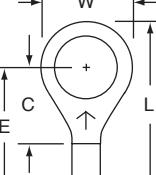
M14-10R



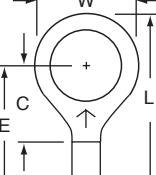
M14-10R/L



M14-14R/S



M14-516R/S



M14-38R

Stud Size

10

10

1/4

5/16

3/8

Wire Range

16-14

16-14

16-14

16-14

16-14

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

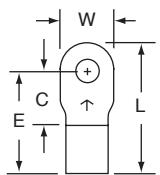


## 3M™ Ring Tongues — Non-Insulated Brazed Seam 12-10 AWG

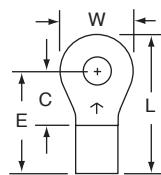


| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Carton | Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------|------|
| M10-4R/SK                   | 01890         | 12-10            | 4         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-6RX                     | 23250         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-6RK                     | 01892         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-8RX                     | 23268         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-8RK                     | 01894         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-10RX                    | 23276         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-10RK                    | 14002         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-14R/SX                  | 23284         | 12-10            | 1/4       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-14R/SK                  | 01896         | 12-10            | 1/4       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-516R/SX                 | 49637         | 12-10            | 5/16      | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-38R/SX                  | 49638         | 12-10            | 3/8       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | 50                   | 500  |
| M10-38R/SK                  | 01900         | 12-10            | 3/8       | 0.54 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | —                    | 500  |
| M10-12RK                    | 01903         | 12-10            | 1/2       | 0.75 | 0.57 | 1.19 | 0.82 | 0.040     | 0.25          | 0.135       | —                    | 500  |

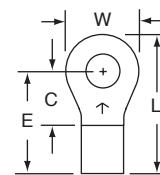
## TERMINALS, KITS AND TOOLS • Ring Tongues



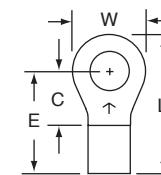
M10-4R/S



M10-6R



M10-8R



M10-10R

Stud Size

4

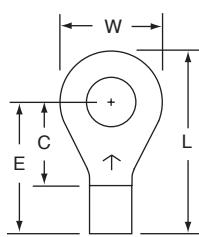
Wire Range

12-10

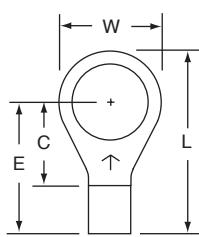
6

8

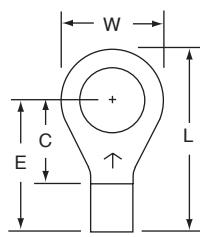
10



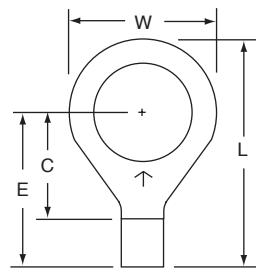
M10-14R/S



M10-516R/S



M10-38R/S



M10-12R

Stud Size

1/4

Wire Range

12-10

5/16

3/8

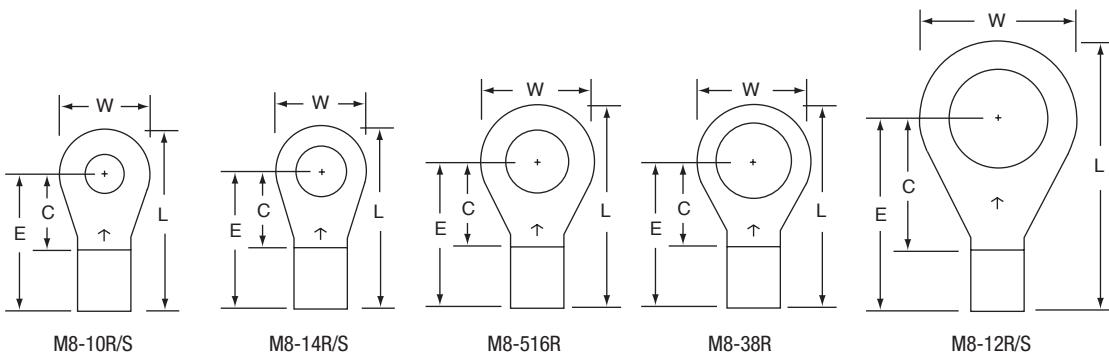
1/2

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

## 3M™ Ring Tongues — Non-Insulated Brazed Seam 8 AWG



| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|---------------------|--------------|------|------|------|------|-----------|------------------|----------------|--------------------------|------------------------|
| M8-10R/SX                   | 24118            | 8                   | 10           | 0.47 | 0.40 | 0.95 | 0.72 | 0.050     | 0.31             | 0.175          | 25                       | 250                    |
| M8-10R/SK                   | 02118            | 8                   | 10           | 0.47 | 0.40 | 0.95 | 0.72 | 0.050     | 0.31             | 0.175          | —                        | 200                    |
| M8-14R/SX                   | 24126            | 8                   | 1/4          | 0.47 | 0.40 | 0.95 | 0.72 | 0.050     | 0.31             | 0.175          | 25                       | 250                    |
| M8-516RX                    | 24134            | 8                   | 5/16         | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31             | 0.175          | 25                       | 250                    |
| M8-516RK                    | 02122            | 8                   | 5/16         | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31             | 0.175          | —                        | 200                    |
| M8-38RX                     | 24142            | 8                   | 3/8          | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31             | 0.175          | 25                       | 250                    |
| M8-38RK                     | 02123            | 8                   | 3/8          | 0.59 | 0.45 | 1.06 | 0.77 | 0.050     | 0.31             | 0.175          | —                        | 200                    |
| M8-12R/SK                   | 02126            | 8                   | 1/2          | 0.81 | 0.69 | 1.41 | 1.00 | 0.050     | 0.31             | 0.175          | —                        | 200                    |



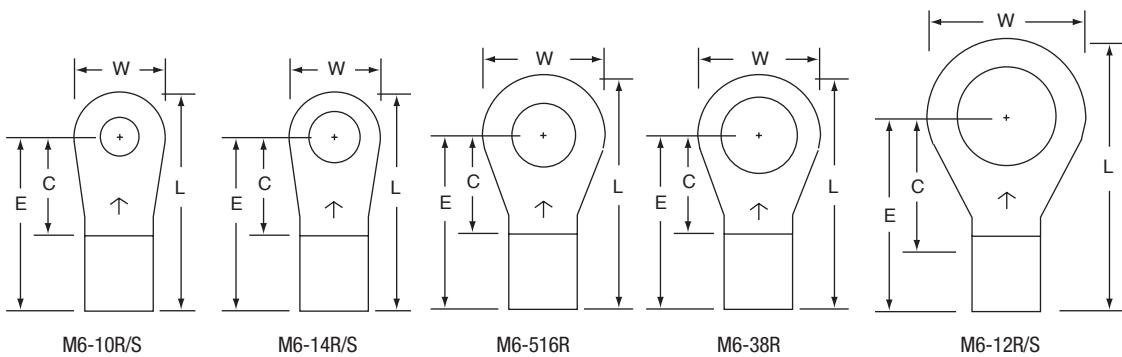
|            |    |     |      |     |     |
|------------|----|-----|------|-----|-----|
| Stud Size  | 10 | 1/4 | 5/16 | 3/8 | 1/2 |
| Wire Range | 8  | 8   | 8    | 8   | 8   |

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.



## 3M™ Ring Tongues — Non-Insulated Brazed Seam 6 AWG

| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Carton | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|----------------------|--------------------|
| M6-10R/SX                   | 24175         | 6                | 10        | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       | 20                   | 200                |
| M6-10R/SK                   | 02147         | 6                | 10        | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       | —                    | 200                |
| M6-14R/SX                   | 24183         | 6                | 1/4       | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       | 20                   | 200                |
| M6-14R/SK                   | 02149         | 6                | 1/4       | 0.47 | 0.52 | 1.14 | 0.91 | 0.050     | 0.39          | 0.250       | —                    | 200                |
| M6-516RX                    | 24191         | 6                | 5/16      | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       | 20                   | 200                |
| M6-516RK                    | 02151         | 6                | 5/16      | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       | —                    | 200                |
| M6-38RX                     | 24209         | 6                | 3/8       | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       | 20                   | 200                |
| M6-38RK                     | 02152         | 6                | 3/8       | 0.63 | 0.52 | 1.22 | 0.91 | 0.050     | 0.39          | 0.250       | —                    | 200                |
| M6-12R/SK                   | 02155         | 6                | 1/2       | 0.81 | 0.63 | 1.42 | 1.02 | 0.050     | 0.39          | 0.250       | —                    | 200                |



Stud Size

10

1/4

5/16

3/8

1/2

Wire Range

6

6

6

6

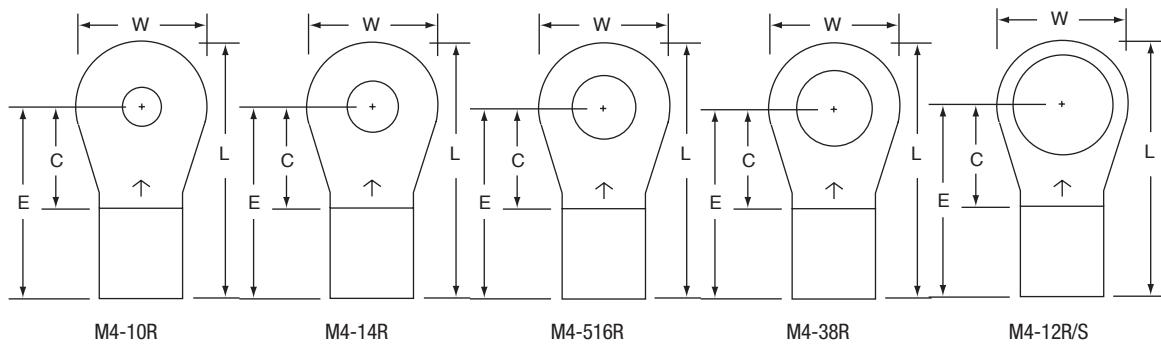
6

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

## 3M™ Ring Tongues — Non-Insulated Brazed Seam 4 AWG



| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|---------------------|--------------|------|------|------|------|-----------|------------------|----------------|--------------------------|------------------------|
| M4-10RX                     | 49648            | 4                   | 10           | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | 20                       | 200                    |
| M4-10RK                     | 02176            | 4                   | 10           | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | —                        | 200                    |
| M4-14RX                     | 24241            | 4                   | 1/4          | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | 20                       | 200                    |
| M4-14RK                     | 02177            | 4                   | 1/4          | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | —                        | 200                    |
| M4-516RX                    | 24258            | 4                   | 5/16         | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | 20                       | 200                    |
| M4-516RK                    | 02178            | 4                   | 5/16         | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | —                        | 200                    |
| M4-38RX                     | 24266            | 4                   | 3/8          | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | 20                       | 200                    |
| M4-38RK                     | 02179            | 4                   | 3/8          | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | —                        | 200                    |
| M4-12R/SK                   | 02182            | 4                   | 1/2          | 0.68 | 0.53 | 1.34 | 1.00 | 0.075     | 0.47             | 0.280          | —                        | 200                    |

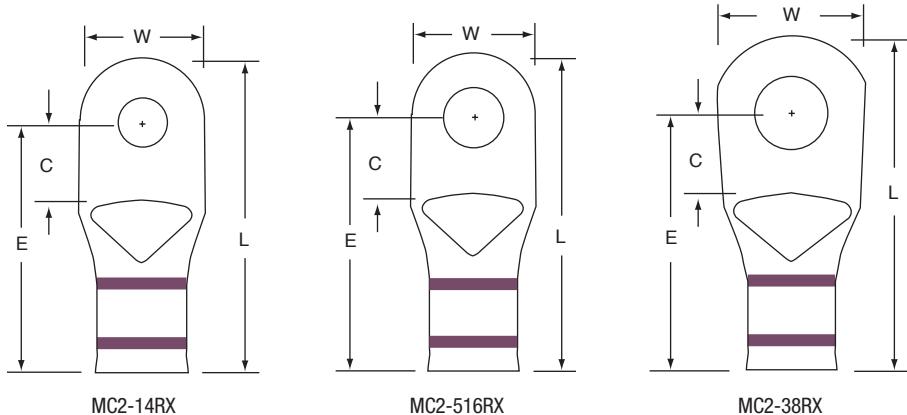


|            |    |     |      |     |     |
|------------|----|-----|------|-----|-----|
| Stud Size  | 10 | 1/4 | 5/16 | 3/8 | 1/2 |
| Wire Range | 4  | 4   | 4    | 4   | 4   |

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

# 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 2 AWG

| Product Number <sup>a</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                     | C         | L         | Thickness | Barrel I.D. | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-----------|-----------------------|-----------|-----------|-----------|-------------|-----------------|-----------|
| MC2-14RX                    | 09187         | Brown      | 2 AWG            | 1/4"      | 0.65"                 | 0.41"     | 1.69"     | 0.10"     | 0.34"       | 10/box          | 100       |
|                             |               |            |                  |           | (6 mm <sup>3</sup> )  | (16,5 mm) | (10,4 mm) | (42,9 mm) | (2,5 mm)    | (8,6 mm)        |           |
| MC2-516RX                   | 09188         | Brown      | 2 AWG            | 5/16"     | 0.65"                 | 0.41"     | 1.69"     | 0.10"     | 0.34"       | 10/box          | 100       |
|                             |               |            |                  |           | (8 mm <sup>3</sup> )  | (16,5 mm) | (10,4 mm) | (42,9 mm) | (2,5 mm)    | (8,6 mm)        |           |
| MC2-38RX                    | 09189         | Brown      | 2 AWG            | 3/8"      | 0.65"                 | 0.41"     | 1.69"     | 0.10"     | 0.34"       | 10/box          | 100       |
|                             |               |            |                  |           | (10 mm <sup>3</sup> ) | (16,5 mm) | (10,4 mm) | (42,9 mm) | (2,5 mm)    | (8,6 mm)        |           |



Stud Size

1/4

Wire Range

2

5/16

2

3/8

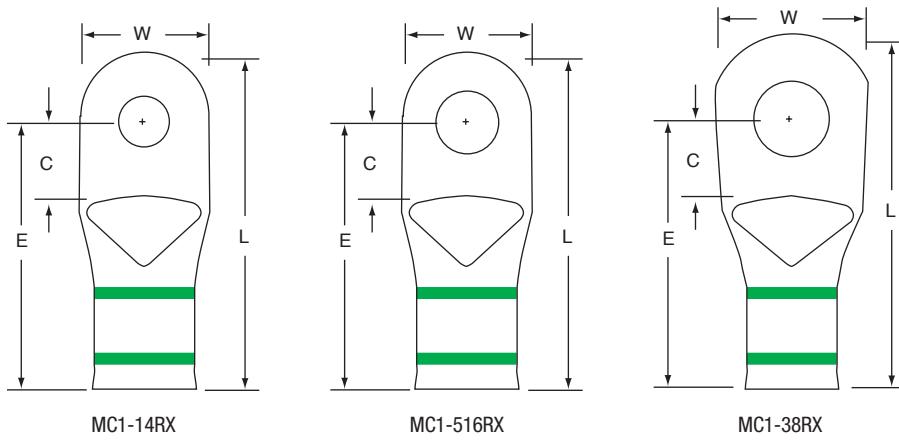
2

<sup>a</sup>Product number ending in X = box; product number ending with K = bulk.

# 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 1 AWG



| Product Number <sup>a</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                     | C         | L         | Thickness | Barrel I.D. | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-----------|-----------------------|-----------|-----------|-----------|-------------|-----------------|-----------|
| MC1-14RX                    | 09190         | Green      | 1 AWG            | 1/4"      | 0.65"                 | 0.43"     | 1.71"     | 0.10"     | 0.36"       | 10/box          | 100       |
|                             |               |            |                  |           | (6 mm <sup>3</sup> )  | (16,5 mm) | (10,9 mm) | (43,4 mm) | (2,5 mm)    |                 |           |
| MC1-516RX                   | 09191         | Green      | 1 AWG            | 5/16"     | 0.65"                 | 0.43"     | 1.71"     | 0.10"     | 0.36"       | 10/box          | 100       |
|                             |               |            |                  |           | (8 mm <sup>3</sup> )  | (16,5 mm) | (10,9 mm) | (43,4 mm) | (2,5 mm)    |                 |           |
| MC1-38RX                    | 09192         | Green      | 1 AWG            | 3/8"      | 0.68"                 | 0.43"     | 1.71"     | 0.10"     | 0.36"       | 10/box          | 100       |
|                             |               |            |                  |           | (10 mm <sup>3</sup> ) | (17,3 mm) | (10,9 mm) | (43,4 mm) | (2,5 mm)    |                 |           |



Stud Size

1/4

5/16

3/8

Wire Range

1

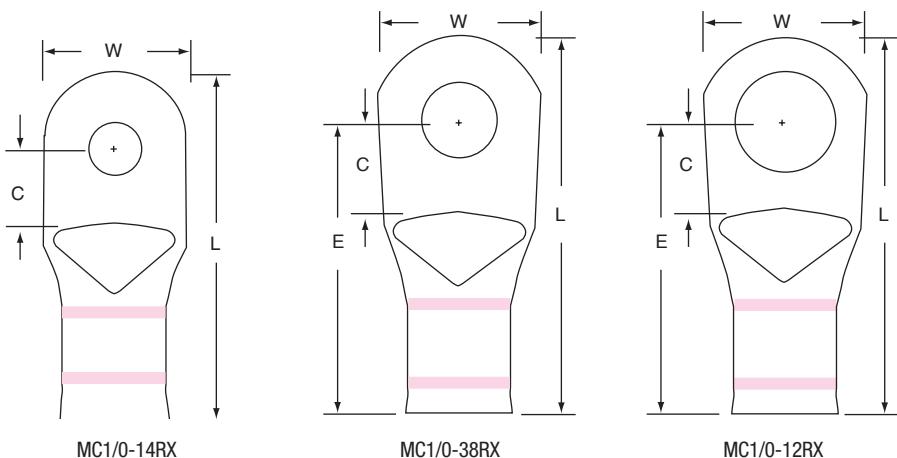
1

1

<sup>a</sup>Product number ending in X = box; product number ending with K = bulk.

## 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 1/0 AWG

| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                     | C         | L         | Thickness | Barrel I.D. | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-----------|-----------------------|-----------|-----------|-----------|-------------|-----------------|-----------|
| MC1/0-14RX                  | 09193         | Pink       | 1/0 AWG          | 1/4"      | 0.75"                 | 0.38"     | 1.84"     | 0.10"     | 0.41"       | 10/box          | 100       |
|                             |               |            |                  |           | (6 mm <sup>3</sup> )  | (19,0 mm) | (9,7 mm)  | (46,7 mm) | (2,5 mm)    | (10,4 mm)       |           |
| MC1/0-38RX                  | 09194         | Pink       | 1/0 AWG          | 3/8"      | 0.75"                 | 0.42"     | 1.84"     | 0.10"     | 0.41"       | 10/box          | 100       |
|                             |               |            |                  |           | (8 mm <sup>3</sup> )  | (19,0 mm) | (10,7 mm) | (46,7 mm) | (2,5 mm)    | (10,4 mm)       |           |
| MC1/0-12RX                  | 09195         | Pink       | 1/0 AWG          | 1/2"      | 0.75"                 | 0.42"     | 1.84"     | 0.10"     | 0.41"       | 10/box          | 100       |
|                             |               |            |                  |           | (12 mm <sup>3</sup> ) | (19,0 mm) | (10,7 mm) | (46,7 mm) | (2,5 mm)    | (10,4 mm)       |           |



Stud Size

1/4

3/8

1/2

Wire Range

1/0

1/0

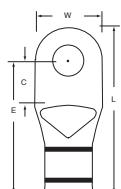
1/0

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

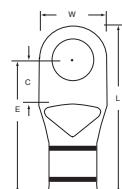
## 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 2/0 AWG

| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                     | C         | L         | Thickness | Barrel I.D. | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-----------|-----------------------|-----------|-----------|-----------|-------------|-----------------|-----------|
| MC2/0-38RX                  | 09197         | Black      | 2/0 AWG          | 3/8"      | 0.83"                 | 0.48"     | 2.05"     | 0.10"     | 0.46"       | 10/box          | 100       |
|                             |               |            |                  |           | (10 mm <sup>3</sup> ) | (21,1 mm) | (12,2 mm) | (2,5 mm)  | (11,7 mm)   |                 |           |

|            |       |       |         |      |                       |           |           |          |           |        |     |
|------------|-------|-------|---------|------|-----------------------|-----------|-----------|----------|-----------|--------|-----|
| MC2/0-12RX | 09198 | Black | 2/0 AWG | 1/2" | 0.83"                 | 0.48"     | 2.05"     | 0.10"    | 0.46"     | 10/box | 100 |
|            |       |       |         |      | (12 mm <sup>3</sup> ) | (21,1 mm) | (12,2 mm) | (2,5 mm) | (11,7 mm) |        |     |



MC2/0-38RX



MC2/0-12RX

Stud Size

3/8

1/2

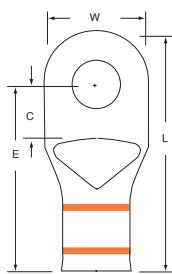
Wire Range

2/0

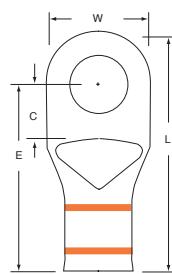
2/0

## 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 3/0 AWG

| Product Number | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                     | C         | L         | Thickness | Barrel I.D. | Inner Unit Pack | Case Qty. |
|----------------|---------------|------------|------------------|-----------|-----------------------|-----------|-----------|-----------|-------------|-----------------|-----------|
| MC3/0-38RX     | 09199         | Orange     | 3/0 AWG          | 3/8"      | 0.91"                 | 0.50"     | 2.24"     | 0.12"     | 0.51"       | 6/box           | 60        |
|                |               |            |                  |           | (10 mm <sup>3</sup> ) | (23,1 mm) | (12,7 mm) | (3,1 mm)  | (13,0 mm)   |                 |           |
| MC3/0-12RX     | 09200         | Orange     | 3/0 AWG          | 1/2"      | 0.91"                 | 0.50"     | 2.24"     | 0.12"     | 0.51"       | 6/box           | 60        |
|                |               |            |                  |           | (12 mm <sup>3</sup> ) | (23,1 mm) | (12,7 mm) | (3,1 mm)  | (13,0 mm)   |                 |           |



MC3/0-38RX



MC3/0-12RX

Stud Size

3/8

1/2

Wire Range

3/0

3/0

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

## 3M™ Large Gauge Ring Tongues — Non-Insulated Copper Seamless 4/0 AWG-250 kcmil



| Product Number <sup>†</sup> | UPC (054007-) | Color Code | Wire Range (AWG) | Stud Size | W                              | C                  | L                  | Thickness          | Barrel I.D.        | Inner Unit Pack | Case Qty. |
|-----------------------------|---------------|------------|------------------|-----------|--------------------------------|--------------------|--------------------|--------------------|--------------------|-----------------|-----------|
| MC4/0-38RX                  | 09201         | Purple     | 4/0 AWG          | 3/8"      | 1.00"<br>(10 mm <sup>3</sup> ) | 0.52"<br>(25.4 mm) | 2.29"<br>(58.2 mm) | 0.125"<br>(3.2 mm) | 0.56"<br>(14.2 mm) | 6/box           | 60        |
| MC4/0-12RX                  | 09202         | Purple     | 4/0 AWG          | 1/2"      | 1.00"<br>(12 mm <sup>3</sup> ) | 0.52"<br>(25.4 mm) | 2.29"<br>(58.2 mm) | 0.125"<br>(3.2 mm) | 0.56"<br>(14.2 mm) | 6/box           | 60        |
| MC250-38RX                  | 09203         | Yellow     | 250 kcmil        | 3/8"      | 1.13"<br>(10 mm <sup>3</sup> ) | 0.60"<br>(28.7 mm) | 2.43"<br>(61.7 mm) | 0.14"<br>(3.6 mm)  | 0.63"<br>(16.0 mm) | 6/box           | 60        |
| MC250-12RX                  | 09204         | Yellow     | 250 kcmil        | 1/2"      | 1.13"<br>(12 mm <sup>3</sup> ) | 0.60"<br>(28.7 mm) | 2.43"<br>(61.7 mm) | 0.14"<br>(3.6 mm)  | 0.63"<br>(16.0 mm) | 6/box           | 60        |

**MC4/0-38RX**

**MC4/0-12RX**

**MC250-38RX**

**MC250-12RX**

|            |     |     |             |             |
|------------|-----|-----|-------------|-------------|
| Stud Size  | 3/8 | 1/2 | 3/8         | 1/2         |
| Wire Range | 4/0 | 4/0 | 250 (kcmil) | 250 (kcmil) |

## 3M™ Ring Tongues — Non-Insulated Butted Seam 26-24 AWG

| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|--------------------|
| MU24-2RK                    | 00958         | 26-24            | 2         | 0.14 | 0.12 | 0.31 | 0.24 | 0.020     | 0.13          | 0.030       | 1000               |
| MU24-4RK                    | 00959         | 26-24            | 4         | 0.20 | 0.21 | 0.45 | 0.35 | 0.020     | 0.14          | 0.030       | 1000               |
| MU24-8RK                    | 00961         | 26-24            | 8         | 0.25 | 0.28 | 0.53 | 0.40 | 0.020     | 0.13          | 0.030       | 1000               |

**MU24-2R**

**MU24-4R**

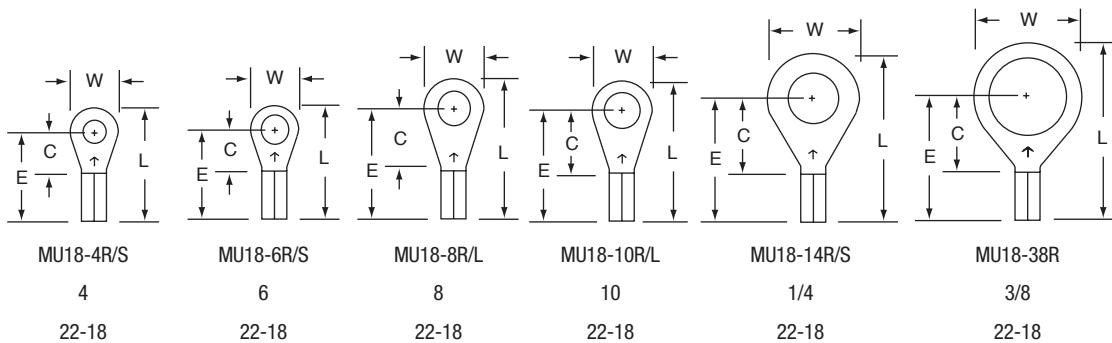
**MU24-8R**

|            |       |       |       |
|------------|-------|-------|-------|
| Stud Size  | 2     | 4     | 8     |
| Wire Range | 26-24 | 26-24 | 26-24 |

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

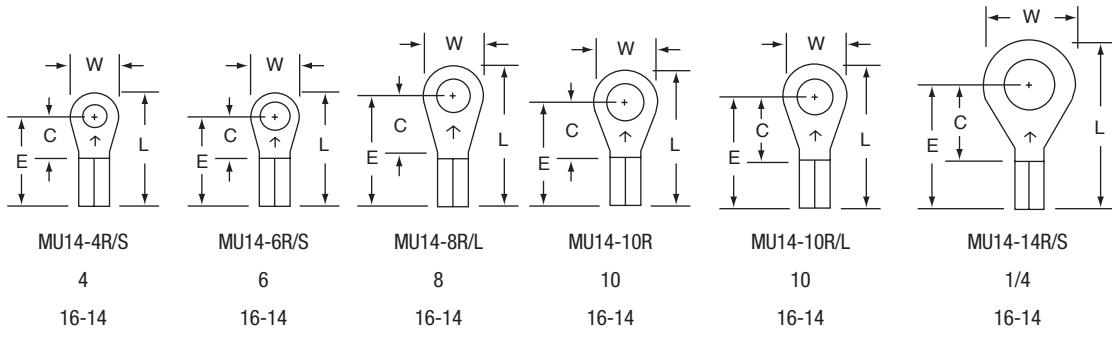
## 3M™ Ring Tongues — Non-Insulated Butted Seam 22-18 AWG

| Product Number <sup>a</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|--------------------|
| MU18-4R/SK                  | 00998         | 22-18            | 4         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       | 1000               |
| MU18-6R/SK                  | 01000         | 22-18            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.070       | 1000               |
| MU18-8R/LK                  | 01005         | 22-18            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       | 1000               |
| MU18-10R/LK                 | 01007         | 22-18            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.070       | 1000               |
| MU18-14R/SK                 | 01008         | 22-18            | 1/4       | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25          | 0.070       | 1000               |
| MU18-38RK                   | 01012         | 22-18            | 3/8       | 0.56 | 0.40 | 0.93 | 0.65 | 0.030     | 0.25          | 0.070       | 1000               |



## 3M™ Ring Tongues — Non-Insulated Butted Seam 16-14 AWG

| Product Number <sup>a</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|--------------------|
| MU14-4R/SK                  | 01364         | 16-14            | 4         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       | 1000               |
| MU14-6R/SK                  | 01366         | 16-14            | 6         | 0.25 | 0.22 | 0.60 | 0.47 | 0.030     | 0.25          | 0.090       | 1000               |
| MU14-8R/LK                  | 01371         | 16-14            | 8         | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       | 1000               |
| MU14-10RK                   | 01372         | 16-14            | 10        | 0.33 | 0.29 | 0.70 | 0.54 | 0.030     | 0.25          | 0.090       | 1000               |
| MU14-10R/LK                 | 01373         | 16-14            | 10        | 0.31 | 0.33 | 0.74 | 0.58 | 0.030     | 0.25          | 0.090       | 1000               |
| MU14-14R/SK                 | 01374         | 16-14            | 1/4       | 0.47 | 0.40 | 0.89 | 0.65 | 0.030     | 0.25          | 0.090       | 1000               |



<sup>a</sup>Product number ending in X = box; product number ending with K = bulk.



## 3M™ Ring Tongues — Non-Insulated Butted Seam 12-10 AWG

| Product Number <sup>a</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|--------------------|
| MU10-4R/SK                  | 01876         | 12-10            | 4         | 0.28 | 0.29 | 0.68 | 0.54 | 0.040     | 0.25          | 0.135       | 500                |
| MU10-6RK                    | 01878         | 12-10            | 6         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 500                |
| MU10-8RK                    | 01880         | 12-10            | 8         | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 500                |
| MU10-10RK                   | 01881         | 12-10            | 10        | 0.38 | 0.29 | 0.73 | 0.54 | 0.040     | 0.25          | 0.135       | 500                |
| MU10-14R/SK                 | 01882         | 12-10            | 1/4       | 0.53 | 0.44 | 0.96 | 0.69 | 0.040     | 0.25          | 0.135       | 500                |

MU10-4R/S      MU10-6R      MU10-8R      MU10-10R      MU10-14R/S      MU10-516R/S

Stud Size
4
6
8
10
1/4
5/16

Wire Range
12-10
12-10
12-10
12-10
12-10
12-10

## 3M™ Ring Tongues — Vinyl Insulated Brazed Seam 22-18 AWG

| Product Number <sup>a</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter | Terminals per Carton | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|-----------------------------|----------------------|--------------------|
| MV18-4R/SX                  | 21700         | 22-18            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-4R/SK                  | 01046         | 22-18            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |
| MV18-6R/SX                  | 21718         | 22-18            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-6R/SK                  | 01048         | 22-18            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |
| MV18-8R/LX                  | 21726         | 22-18            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-8R/LK                  | 01053         | 22-18            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |
| MV18-10R/LX                 | 21734         | 22-18            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-10R/LK                 | 01055         | 22-18            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |
| MV18-14R/SX                 | 21742         | 22-18            | 1/4       | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-14R/SK                 | 01056         | 22-18            | 1/4       | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |
| MV18-516R/SX                | 49594         | 22-18            | 5/16      | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-38RX                   | 21767         | 22-18            | 3/8       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       | 100                  | 500                |
| MV18-38RK                   | 01060         | 22-18            | 3/8       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       | —                    | 1000               |

MV18-4R/S      MV18-6R/S      MV18-8R/L      MV18-10R/L      MV18-14R/S      MV18-38R

Stud Size
4
6
8
10
1/4
3/8

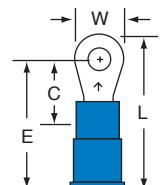
Wire Range
22-18
22-18
22-18
22-18
22-18
22-18

<sup>a</sup>Product number ending in X = box; product number ending with K = bulk.

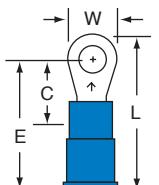
# 3M™ Ring Tongues — Vinyl Insulated Brazed Seam 16-14 AWG



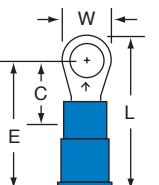
| Product Number <sup>1</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|--------------------------|------------------------|
| MV14-4R/SX                  | 22369            | 16-14                  | 4            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-4R/SK                  | 01412            | 16-14                  | 4            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-6R/SX                  | 22377            | 16-14                  | 6            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-6R/SK                  | 01414            | 16-14                  | 6            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-8R/SK                  | 01417            | 16-14                  | 8            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-8R/LX                  | 22385            | 16-14                  | 8            | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-8R/LK                  | 01419            | 16-14                  | 8            | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-10RK                   | 01420            | 16-14                  | 10           | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-10R/LX                 | 22393            | 16-14                  | 10           | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-10R/LK                 | 01421            | 16-14                  | 10           | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-14R/SX                 | 22401            | 16-14                  | 1/4          | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-14R/SK                 | 01422            | 16-14                  | 1/4          | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-516R/SX                | 49615            | 16-14                  | 5/16         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-516R/SK                | 01424            | 16-14                  | 5/16         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |
| MV14-38RX                   | 22427            | 16-14                  | 3/8          | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | 100                      | 500                    |
| MV14-38RK                   | 00546            | 16-14                  | 3/8          | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25             | 0.090          | 0.170                             | —                        | 1000                   |



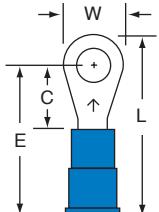
MV14-4R/S



MV14-6R/S



MV14-8R/S



MV14-8R/L

Stud Size

4

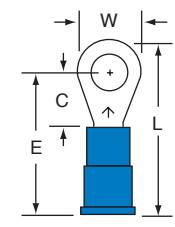
Wire Range

16-14

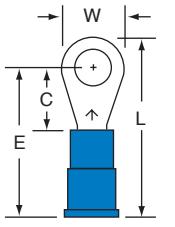
6

8

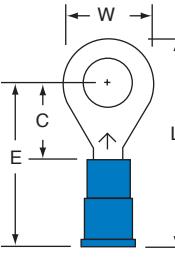
8



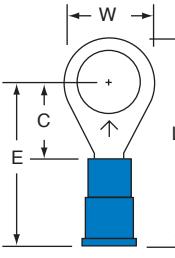
MV14-10R



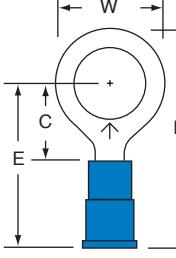
MV14-10R/L



MV14-14R/S



MV14-516R/S



MV14-38R

Stud Size

10

Wire Range

16-14

10

16-14

1/4

5/16

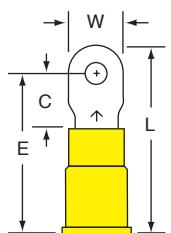
16-14

3/8

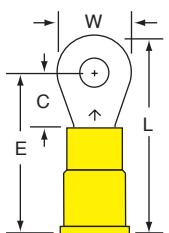


## 3M™ Ring Tongues — Vinyl Insulated Brazed Seam 12-10 AWG

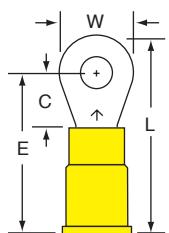
| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|--------------------------|------------------------|
| MV10-4R/SK                  | 01918            | 12-10                  | 4            | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-6RX                    | 23334            | 12-10                  | 6            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-6RK                    | 01920            | 12-10                  | 6            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-8RX                    | 23342            | 12-10                  | 8            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-8RK                    | 01922            | 12-10                  | 8            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-10RX                   | 23359            | 12-10                  | 10           | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-10RK                   | 01923            | 12-10                  | 10           | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-14R/SX                 | 23367            | 12-10                  | 1/4          | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-14R/SK                 | 01924            | 12-10                  | 1/4          | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-516R/SX                | 23375            | 12-10                  | 5/16         | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-516R/SK                | 01926            | 12-10                  | 5/16         | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-38R/SX                 | 49639            | 12-10                  | 3/8          | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-38R/SK                 | 01928            | 12-10                  | 3/8          | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |
| MV10-12RX                   | 23409            | 12-10                  | 1/2          | 0.75 | 0.57 | 1.50 | 1.12 | 0.040     | 0.25             | 0.135          | 0.250                             | 50                       | 500                    |
| MV10-12RK                   | 01931            | 12-10                  | 1/2          | 0.75 | 0.57 | 1.50 | 1.12 | 0.040     | 0.25             | 0.135          | 0.250                             | —                        | 500                    |



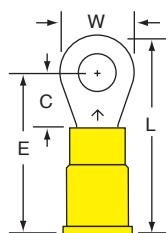
MV10-4R/S



MV10-6R



MV10-8R



MV10-10R

Stud Size

4

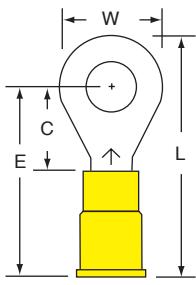
Wire Range

12-10

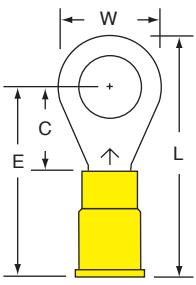
6

8

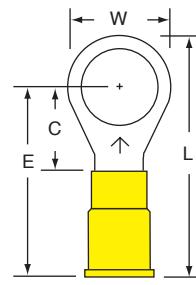
10



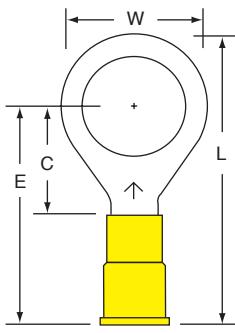
MV10-14R/S



MV10-516R/S



MV10-38R/S



MV10-12R

Stud Size

1/4

Wire Range

12-10

5/16

12-10

3/8

12-10

1/2

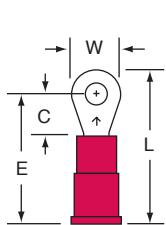
12-10

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

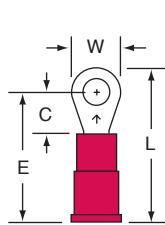
# 3M™ Ring Tongues — Vinyl Insulated Butted Seam 22-18 AWG



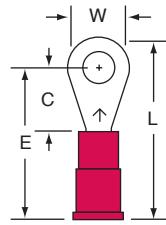
| Product Number <sup>*</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals<br>per Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|-----------------------|
| MVU18-4R/SK                 | 01078            | 22-18                  | 4            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-6R/SK                 | 01080            | 22-18                  | 6            | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-8R/LK                 | 01085            | 22-18                  | 8            | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-10R/LK                | 01087            | 22-18                  | 10           | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-14R/SK                | 01088            | 22-18                  | 1/4          | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-516R/SK               | 01090            | 22-18                  | 5/16         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |
| MVU18-38RK                  | 01092            | 22-18                  | 3/8          | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25             | 0.070          | 0.145                             | 1000                  |



MVU18-4R/S



MVU18-6R/S



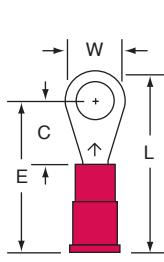
MVU18-8R/L

Stud Size

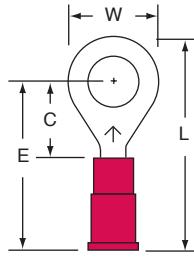
4

Wire Range

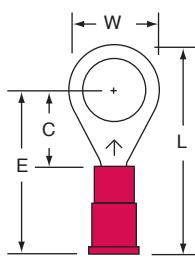
22-18



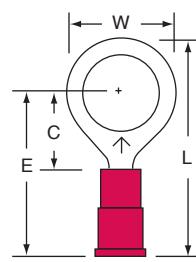
MVU18-10R/L



MVU18-14R/S



MVU18-516R/S



MVU18-38R

Stud Size

10

Wire Range

22-18

1/4

22-18

5/16

22-18

3/8

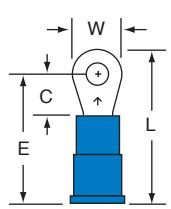
22-18

<sup>\*</sup>Product number ending in X = box; product number ending with K = bulk.

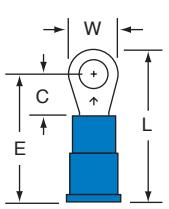


## 3M™ Ring Tongues — Vinyl Insulated Butted Seam 16-14 AWG

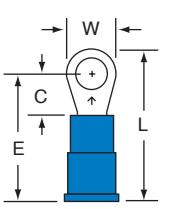
| Product Number <sup>†</sup> | UPC (054007-) | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter | Terminals per Case |
|-----------------------------|---------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|-----------------------------|--------------------|
| MVU14-4R/SK                 | 01444         | 16-14            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-6R/SK                 | 01446         | 16-14            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-8R/SK                 | 01449         | 16-14            | 8         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-8RK                   | 01450         | 16-14            | 8         | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-8R/LK                 | 01451         | 16-14            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-10RK                  | 01452         | 16-14            | 10        | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-10R/LK                | 01453         | 16-14            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-14R/SK                | 01454         | 16-14            | 1/4       | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-516R/SK               | 01456         | 16-14            | 5/16      | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |
| MVU14-38RK                  | 01458         | 16-14            | 3/8       | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       | 1000               |



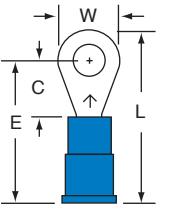
MVU14-4R/S



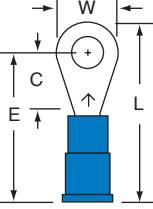
MVU14-6R/S



MVU14-8R/S



MVU14-8R



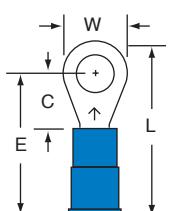
MVU14-8R/L

Stud Size

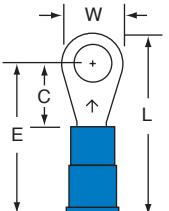
4

Wire Range

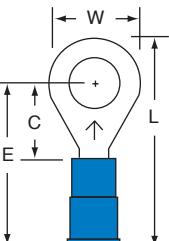
16-14



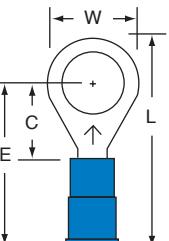
MVU14-10R



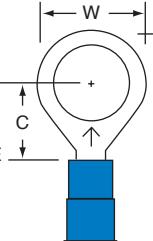
MVU14-10R/L



MVU14-14R/S



MVU14-516R/S



MVU14-38R

Stud Size

10

Wire Range

16-14

10

16-14

1/4

16-14

5/16

16-14

3/8

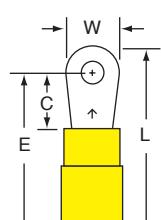
16-14

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.

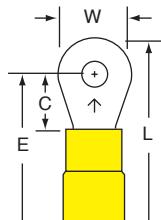
# 3M™ Ring Tongues — Vinyl Insulated Butted Seam 12-10 AWG



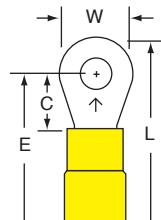
| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals<br>per Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|-----------------------|
| MVU10-4R/SK                 | 01946            | 12-10                  | 4            | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-6RK                   | 01948            | 12-10                  | 6            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-8RK                   | 01950            | 12-10                  | 8            | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-10RK                  | 01951            | 12-10                  | 10           | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-14R/SK                | 01952            | 12-10                  | 1/4          | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-516R/SK               | 01954            | 12-10                  | 5/16         | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |
| MVU10-38R/SK                | 01956            | 12-10                  | 3/8          | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25             | 0.135          | 0.250                             | 500                   |



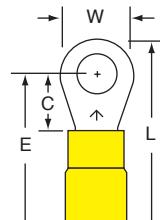
MVU10-4R/S



MVU10-6R



MVU10-8R



MVU10-10R

Stud Size

4

Wire Range

12-10

6

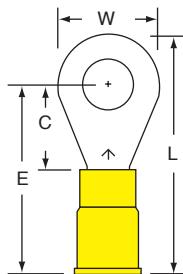
12-10

8

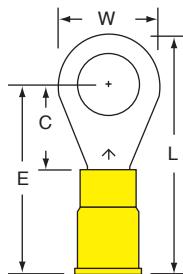
12-10

10

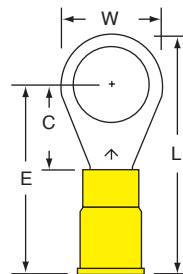
12-10



MVU10-14R/S



MVU10-516R/S



MVU10-38R/S

Stud Size

1/4

Wire Range

12-10

5/16

12-10

3/8

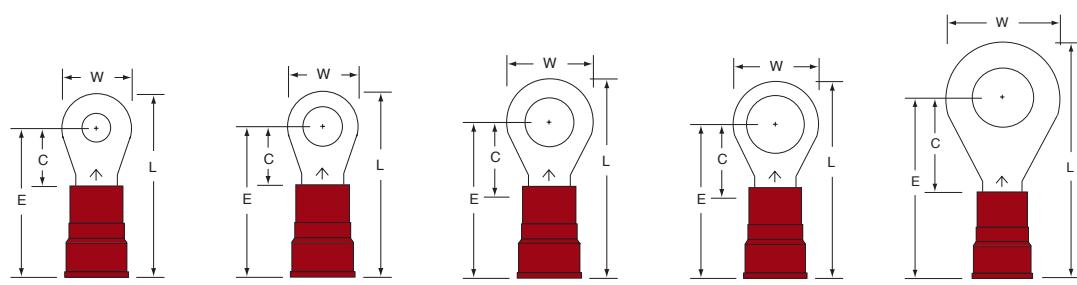
12-10

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.



## 3M™ Ring Tongues — Nylon Insulated Brazed Seam 8 AWG

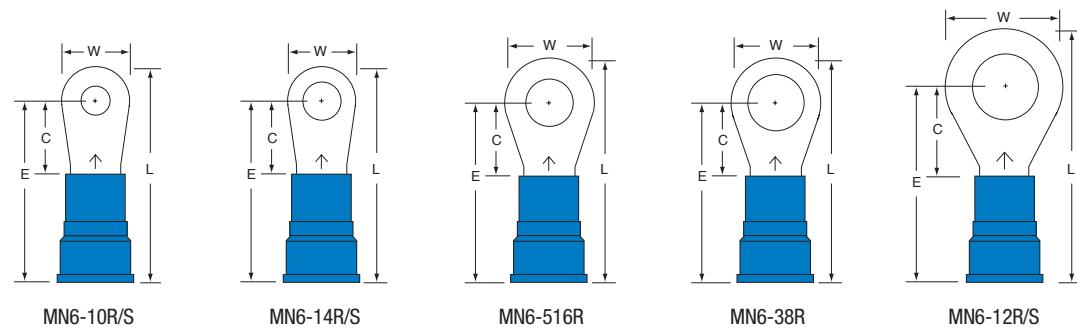
| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|--------------------------|------------------------|
| MN8-10R/SK                  | 08267            | 8                      | 10           | 0.47 | 0.40 | 1.26 | 1.03 | 0.050     | 0.31             | 0.175          | 0.340                             | —                        | 200                    |
| MN8-14R/SX                  | 15652            | 8                      | 1/4          | 0.47 | 0.40 | 1.26 | 1.03 | 0.050     | 0.31             | 0.175          | 0.340                             | 25                       | 250                    |
| MN8-14R/SK                  | 08268            | 8                      | 1/4          | 0.47 | 0.40 | 1.26 | 1.03 | 0.050     | 0.31             | 0.175          | 0.340                             | —                        | 200                    |
| MN8-516RK                   | 08269            | 8                      | 5/16         | 0.59 | 0.45 | 1.38 | 1.08 | 0.050     | 0.31             | 0.175          | 0.340                             | —                        | 200                    |
| MN8-38RK                    | 08270            | 8                      | 3/8          | 0.59 | 0.45 | 1.38 | 1.08 | 0.050     | 0.31             | 0.175          | 0.340                             | —                        | 200                    |
| MN8-12R/SK                  | 08271            | 8                      | 1/2          | 0.81 | 0.69 | 1.72 | 1.32 | 0.050     | 0.31             | 0.175          | 0.340                             | —                        | 200                    |



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

## 3M™ Ring Tongues — Nylon Insulated Brazed Seam 6 AWG

| Product Number <sup>†</sup> | UPC<br>(054007-) | Wire<br>Range<br>(AWG) | Stud<br>Size | W    | C    | L    | E    | Thickness | Barrel<br>Length | Barrel<br>I.D. | Maximum<br>Insulation<br>Diameter | Terminals per:<br>Carton | Terminals per:<br>Case |
|-----------------------------|------------------|------------------------|--------------|------|------|------|------|-----------|------------------|----------------|-----------------------------------|--------------------------|------------------------|
| MN6-10R/SK                  | 08272            | 6                      | 10           | 0.47 | 0.52 | 1.50 | 1.27 | 0.050     | 0.39             | 0.250          | 0.440                             | —                        | 200                    |
| MN6-14R/SX                  | 15660            | 6                      | 1/4          | 0.47 | 0.52 | 1.50 | 1.27 | 0.050     | 0.39             | 0.250          | 0.440                             | 20                       | 200                    |
| MN6-14R/SK                  | 08273            | 6                      | 1/4          | 0.47 | 0.52 | 1.50 | 1.27 | 0.050     | 0.39             | 0.250          | 0.440                             | —                        | 200                    |
| MN6-516RK                   | 08274            | 6                      | 5/16         | 0.63 | 0.52 | 1.58 | 1.27 | 0.050     | 0.39             | 0.250          | 0.440                             | —                        | 200                    |
| MN6-38RK                    | 08275            | 6                      | 3/8          | 0.63 | 0.52 | 1.58 | 1.27 | 0.050     | 0.39             | 0.250          | 0.440                             | —                        | 200                    |
| MN6-12R/SK                  | 08276            | 6                      | 1/2          | 0.81 | 0.63 | 1.78 | 1.38 | 0.050     | 0.39             | 0.250          | 0.440                             | —                        | 200                    |



|            |    |     |      |     |     |
|------------|----|-----|------|-----|-----|
| Stud Size  | 10 | 1/4 | 5/16 | 3/8 | 1/2 |
| Wire Range | 6  | 6   | 6    | 6   | 6   |

<sup>†</sup>Product number ending in X = box; product number ending with K = bulk.