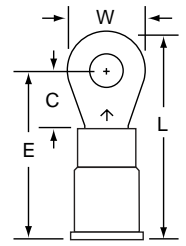




# Scotchlok™ Terminals

MVU18-2R/S thru MVU10-38R/S

Ring Tongue, Vinyl Insulated, Butted Seam



## Data Sheet



UNDERWRITERS  
LABORATORIES  
STANDARD NO. UL 486A  
3M FILE NO. E23438



CANADIAN STANDARDS  
ASSOCIATION  
STANDARD NO. C22.2  
NO. 0. 65  
3M FILE NO. LR22190

### Specifications

|                          |   |
|--------------------------|---|
| Wire Size:               | See Table Above   |
| Barrel Seam:             | Butted  |
| Max. Voltage Rating:     | 600 V Building Wire<br>1000 V Signs, Fixtures<br>and Luminaires |
| Max. Temperature Rating: | 221°F (105°C)   |
| Max. Current:            | Same as Wire  |
| Insulator Material:      | Vinyl   |
| Terminal Material:       | ETP Copper  |
| Terminal Plating:        | Tin   |

### Installation Information

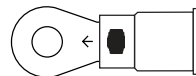
#### **WARNING**

Turn power off before installing or removing terminal. All electrical work should be done according to appropriate electrical codes.

UL Listed and CSA Certified for use on stranded copper (AWG) wire only.

Strip away the end 3/8 inch of wire insulation.

Make the crimp in the proper station of a recommended 3M™ crimp tool: TH-440, TH-450 (scissor style), or TR-490 (ratchet style) hand tools.



Barrel Crimp (Electrical)

| Product Number | Wire Range (AWG) | Stud Size | W    | C    | L    | E    | Thickness | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|------------------|-----------|------|------|------|------|-----------|---------------|-------------|-----------------------------|
| MVU18-2R/S     | 22-18            | 2         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-4R/S     | 22-18            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-6R/S     | 22-18            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-8R/L     | 22-18            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-8R/S     | 22-18            | 8         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-10R/L    | 22-18            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-14R/S    | 22-18            | ¼         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-516R/S   | 22-18            | ⅝         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU18-38R      | 22-18            | ⅜         | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.070       | 0.145                       |
| MVU14-4R/S     | 16-14            | 4         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-6R/S     | 16-14            | 6         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-8R/S     | 16-14            | 8         | 0.25 | 0.22 | 0.80 | 0.67 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-8R       | 16-14            | 8         | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-8R/L     | 16-14            | 8         | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-10R      | 16-14            | 10        | 0.33 | 0.29 | 0.90 | 0.74 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-10R/L    | 16-14            | 10        | 0.31 | 0.33 | 0.93 | 0.78 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-14R/S    | 16-14            | ¼         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-516R/S   | 16-14            | ⅝         | 0.47 | 0.40 | 1.08 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU14-38R      | 16-14            | ⅜         | 0.56 | 0.40 | 1.13 | 0.85 | 0.030     | 0.25          | 0.090       | 0.170                       |
| MVU10-4R/S     | 12-10            | 4         | 0.28 | 0.29 | 0.98 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-6R       | 12-10            | 6         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-8R       | 12-10            | 8         | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-10R      | 12-10            | 10        | 0.38 | 0.29 | 1.03 | 0.84 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-12R      | 12-10            | ½         | 0.75 | 0.57 | 1.50 | 1.12 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-14R/S    | 12-10            | ¼         | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-516R/S   | 12-10            | ⅝         | 0.53 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                       |
| MVU10-38R/S    | 12-10            | ⅜         | 0.54 | 0.44 | 1.26 | 0.99 | 0.040     | 0.25          | 0.135       | 0.250                       |

## Engineering Specification

Crimp-type terminals shall, electrically and mechanically, connect to a pre-stripped end of a stranded copper wire, and have a flat tongue portion with a central opening for mounting around a screw or stud.

The terminal line shall offer tongue variations in hole (stud) size (6, 8 10, etc.) and configuration (ring, fork, block fork, flanged block fork, locking fork, etc.), and barrel variations in wire (AWG) size (22-18, 16-14, 12-10, etc.) and construction (non-insulated brazed seam, vinyl insulated butted seam, nylon insulated with insulation grip, etc.). The terminal line shall have regulatory agency coverage (UL Listing, CSA Certification). The terminal tongue shall be marked with the wire range and manufacturer's symbol (↑).

The vinyl-insulated, butted seam block fork terminal shall be tin-plated, annealed copper, with the tongue having a specified stud hole (size 2 thru 1/2 in.) and a butted seam barrel covered by a molded vinyl funnel entry sleeve, color coded and sized for a specified (AWG) wire range (22-18, 16-14, 12-10).

Insulated terminals shall be UL Listed and CSA Certified for 600 Volts maximum building wire: 1000 Volts maximum in signs, fixtures and luminaries and have a maximum operating temperature of 221°F (105°C).

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#### **IMPORTANT NOTICE**

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