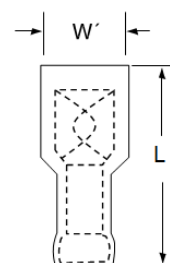


# 3M™ Scotchlok™ Terminals

MNGI18-250DFI, MNGI14-50DFI,  
MNGI10-250DFI

Female Disconnect, Nylon Fully Insulated  
with Insulation Grip, Interlock Barrel



## Data Sheet

August 2014

| Product Number | Wire Range (AWG) | Mates with Male Tab Width (W' ) x Thickness | L    | Barrel Length | Barrel I.D. | Maximum Insulation Diameter |
|----------------|------------------|---------------------------------------------|------|---------------|-------------|-----------------------------|
| MNGI18-250DFI  | 22-18            | 0.250 x 0.032                               | 0.83 | 0.25          | 0.080       | 0.145                       |
| MNGI14-250DFI  | 16-14            | 0.250 x 0.032                               | 0.83 | 0.25          | 0.080       | 0.145                       |
| MNGI10-250DFI  | 12-10            | 0.250 x 0.032                               | 0.94 | 0.25          | 0.165       | 0.250                       |

## Specifications

|                                            |                                                            |
|--------------------------------------------|------------------------------------------------------------|
| UL Standard No. 310, 3M File No. E750512   |                                                            |
| CSA Standard No. 22.2, 3M File No. LR22190 |                                                            |
| Max. Voltage Rating:                       | 600 V Building Wire<br>1000 V Signs, Fixtures (Luminaires) |
| Max. Operating Temp:                       | 221°F (105°C)                                              |
| Max. Current:                              | Same as Wire                                               |
| Wire Size                                  | See Table above                                            |
| Barrel Seam:                               | Interlock with Insulation Grip                             |
| Insulator Material:                        | Nylon                                                      |
| Terminal Material:                         | Brass                                                      |
| Insulator Grip Material:                   | Brass                                                      |
| Plating:                                   | Tin                                                        |

# 3M™ Scotchlok™ Terminals MNGI18-250DFI, MNGI14-50DFI, MNGI10-250DFI

## Installation Information

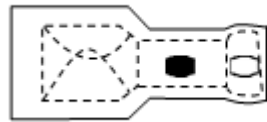
### **WARNING**

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™ Scotchlok™ Crimp Tool: TH-440, TH-450 (scissor style), or TR-482, TR-490 (ratchet style) hand tools.



Barrel Crimp (Required)



Insulation Crimp (Mechanical)

Suitable for factory installation on steel or brass tabs, UL and CSA.

Suitable for field application on brass tabs, strain relief is required, UL only.

## Engineering Specification

Crimp-Type Female Disconnect shall, electrically and mechanically, connect permanently to the prestripped end of a stranded copper wire: and have a tongue portion with fingers which grip a Male Disconnect in a separable, reusable manner, forming a Quick Connect Wiring Termination.

The connector line shall offer tongue variations (sized to 0.250" x 0.032" or 0.187" x 0.020") and barrel variations in wire (AWG) size (22-18, 16-14, 12-10) and construction (non-insulated, vinyl insulated, nylon fully insulated, etc.). The female disconnect shall have regulatory agency coverage (UL Listed, CSA Certification). The tongue portion shall be marked with the wire range and manufacturer's symbol (↑).

The Nylon Fully Insulated 0.250" Female Disconnect with Insulation Grip and interlocking barrel shall be tin plated 0.020" thick brass with a tongue for gripping a 0.250" x 0.032" Male Tab per ANSI/NEMA CD-2 and a 0.25" long barrel with a tin plated brass funnel entry insulation grip, covered by a molded nylon sleeve, color coded and sized for a specified (AWG) wire range (22-18, 16-14, 12-10).

Insulated connectors shall be UL Listed and CSA Certified for 600 V building wire: 1000 V signs or lighting fixtures (luminaires) and temperature rated 221°F (105°C) maximum.

Female Disconnects shall be suitable for field or factory wiring, with a UL Recognized strain relief required.

# 3M™ Scotchlok™ Terminals MNGI18-250DFI, MNGI14-50DFI, MNGI10-250DFI

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**Shelf Life & Storage**

3M™ Scotchlok™ Terminals MNGI18-250DFI, MNGI14-50DFI and MNGI10-250DFI have a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (10°C/50°F to 27°C/80°F and <75% relative humidity).

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**Availability**

Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1-800-472-1190.

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