

## ▼ Solutions for Electronic Specialty Markets (ESM)

- ▼ Product Catalog for Electronic Specialty Markets
  - 3M™ Electronic Specialty Markets - New Product Releases
  - 3M™ Abrasives
  - 3M™ Adhesives, Cleaners & Compounds
  - 3M™ Breadboards & Test Clips
  - 3M™ Cable & Assemblies
  - 3M™ Copper Interconnects
  - 3M™ Fiber Optics
  - 3M™ Fire Protection
  - 3M™ Heat Shrink
  - 3M™ Identification Systems
  - 3M™ Occupational Health & Safety Products
  - 3M™ Protective Bumpers
  - 3M™ Reclosable Fasteners
  - 3M™ Splicing, Terminating & Ducting
  - 3M™ Static Control
  - 3M™ Tapes
  - 3M™ Terminals, Kits & Tools
  - 3M™ Vacuums & Accessories
  - 3M™ Warehousing & Packaging Supplies
  - 3M™ Wire Connectors

## ◦ Other Tools

- What's New
- Sales Contacts
- U.S. Distributors

[Product Catalog for Electronic Specialty Markets](#) > [3M™ Terminals, Kits & Tools](#) > [Butt Connectors](#) > [3M™ Scotchlok™ Butt Connectors - Nylon Insulated w/Insulation Grip Moisture Resistant](#) >

### [Printer-friendly format](#) **3M™ Scotchlok™ Nylon Insulated Moisture Resistant w/Insulation Grip Butt Conn MNG10BCM, 12-10 AWG, 500/Case**

This connector has a wire range of 12-10 AWG and a case quantity of 500. This butt connector uses chamfered barrel ends to provide fast easy wire insertion from both ends and a built in wire stop for correct positioning. It must be crimped at ends.

GTIN(UPC/EAN) : 0 00 54007 11951 7

3M Id : 80-6101-2549-6

#### Additional Information

##### Learn More . . .

[Packaging Data](#)

[MSDS \(United States\)](#)

[Butt Connectors - Nylon Insulated with Insulation Grip - Product Selection Guide \(PDF 13.3 K\)](#)

[Butt Connectors - Nylon Insulated with Insulation Grip Moisture - Product Selection Guide \(PDF 12.4 K\)](#)

[Recommended Stranded Wire Combinations - Product Selection Guide \(PDF 5.7 K\)](#)

[Scotchlok Butt Connectors MNG18BCM, MNG14BCM, MNG10BCM - Data Sheet \(PDF 26.4 K\)](#)

[Scotchlok Terminals MNG24BC thru MNG10BC - Data Sheet \(PDF 25.8 K\)](#)

[Terminal Stud Size Chart - Product Selection Guide \(PDF 5.2 K\)](#)

#### Please Note:

Adobe® Acrobat® Reader is required to view PDF documents.



#### Characteristics

<b>Agency Approvals</b>	UL and CSA
<b>Barrel Style</b>	Insulation Grip
<b>China RoHS - Below MCV</b>	Yes
<b>CSA File Number</b>	LR22190
<b>EU RoHS Compliant</b>	Yes
<b>Insulation Material</b>	Nylon
<b>Terminal Style</b>	Moisture Resistant
<b>Terminal Type</b>	Butt
<b>UL File Number</b>	E23438
<b>Wire Gauge Range</b>	10 to 12 American Wire Gauge (AWG)

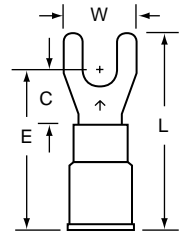
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# Scotchlok™ Terminals

MNG24-0F thru MNG10-10F

Standard Fork, Nylon Insulated with Insulation Grip



## Data Sheet

Product Number	Wire Range (AWG)	Stud Size	W	C	L	E	Thickness	Barrel Length	Barrel I.D.	Maximum Insulation Diameter
MNG24-0F*	26-24	0	0.13	0.12	0.46	0.40	0.020	0.13	0.030	0.093
MNG24-4F*	26-24	4	0.20	0.21	0.61	0.49	0.020	0.14	0.030	0.093
MNG24-6F*	26-24	6	0.25	0.28	0.69	0.56	0.020	0.13	0.030	0.093
MNG18-6F	22-18	6	0.34	0.29	0.89	0.73	0.030	0.25	0.070	0.145
MNG18-8F	22-18	8	0.34	0.29	0.89	0.73	0.030	0.25	0.070	0.145
MNG18-10F	22-18	10	0.34	0.29	0.89	0.73	0.030	0.25	0.070	0.145
MNG14-6F	16-14	6	0.34	0.29	0.91	0.75	0.030	0.25	0.090	0.170
MNG14-8F	16-14	8	0.34	0.29	0.91	0.75	0.030	0.25	0.090	0.170
MNG14-10F	16-14	10	0.34	0.29	0.91	0.75	0.030	0.25	0.090	0.170
MNG10-6F	12-10	6	0.38	0.29	1.03	0.84	0.040	0.25	0.135	0.250
MNG10-8F	12-10	8	0.38	0.29	1.03	0.84	0.040	0.25	0.135	0.250
MNG10-10F	12-10	10	0.38	0.29	1.03	0.84	0.040	0.25	0.135	0.250

\*Not UL Listed or CSA Certified.



**LISTED** 314R  
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:  
Barrel Seam:  
Max. Voltage Rating:

Max. Operating Temp.:  
Max. Current:  
Insulator Material:  
Terminal Material:  
Insulation Grip Material:  
Plating:

See Table Above  
Butted with Insulation Grip  
600 V Building Wire  
1000 V Signs, Fixtures  
and Luminaires  
221°F (105°C)  
Same as Wire  
Nylon  
ETP Copper  
Brass  
Tin

## Installation Information

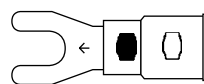
### ⚠ WARNING


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-482, TR-490 (ratchet style) hand tools.



 Barrel Crimp (Electrical)

 Insulation Crimp (Mechanical)

## 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 (26-24\*, 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 nylon-insulated, standard fork terminal with insulation grip shall be tin-plated, annealed copper, with the tongue having a specified stud slot (size 0 thru 10) and a butted seam 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 (26-24\*, 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 luminaires and have a maximum operating temperature of 221°F (105°C).

\*Not UL Listed or CSA Certified.

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### IMPORTANT NOTICE

Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

**Warranty; Limited Remedy; Limited Liability.** This product will be free from defects in material and manufacture as of the date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**

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