

### 3M Worldwide : United States : Electronics Manufacturing

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    - 3M™ Electronic
       Specialty Markets New
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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<sup>TM</sup> Scotchlok<sup>TM</sup> Nylon Insulated Moisture Resistant w/Insulation Grip Butt Connector MNG18BCMX, 22-18 AWG

This connector has a wire range of 22-18 AWG and a case quantity of 500.

GTIN(UPC/EAN): 0 00 54007 11949 4

3M Id: 80-6101-2547-0

### **Additional Information**

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.

### Learn More . . .

Packaging Data

MSDS (United States)

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

<u>Butt Connectors - Nylon Insulated with Insulation Grip</u> <u>Moisture - Product Selection Guide (PDF 12.4 K)</u>

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.



### Other Tools

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

#### Characteristics

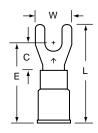
Agency Approvals	UL and CSA
Barrel Style	Insulation Grip

China RoHS - Below MCV	Yes
CSA File Number	LR22190
EU RoHS Compliant	Yes
Insulation Material	Nylon
Terminal Style	Moisture Resistant
Terminal Type	Butt
UL File Number	E23438
Wire Gauge Range	18 to 22 American Wire Gauge (AWG)

# **3M**

# Scotchlok<sup>TM</sup> Terminals

# MNG24-0F thru MNG10-10F Standard Fork, Nylon Insulated with Insulation Grip



## Data Sheet

Product Number	Wire Range (AWG)	Stud Size	w	С	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	.089	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

<sup>\*</sup>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 Crip 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**

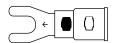
### **△WARNING**

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 (1).

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

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**Electrical Products Division**