3M™ Secure Grip Wire Connector SG-R

Data Sheet March 2019

Applications

3M™ Secure Grip Wire Connector SG-R will electrically connect and insulate copper conductors in a pigtail application. The connector has a live spring for strong reliable connections.

AWG Range: Copper conductors only, No. 18AWG through 8AWG solid and/or stranded. (See wire matrix for specific combinations)

Metric Range: Copper conductors only, 1.0mm^2 thru 6.0mm^2 (solid and/or stranded). Only AWG sizes are UL Listed.

Agency Approvals & Self Certifications

- UL Listed as a Wire Connector
- Tested per UL Standard 486C, UL File No. E23438
- For RoHS and REACH information, please visit www.3M.com/regs

Specifications

3M™ Secure Grip Wire Connector SG-R is capable of a 2 or more conductor connection in a pigtail application. The connector shall be UL Listed and be rated 600 volts maximum for building wire and 1000 volts maximum for lighting fixtures. The connector shall have a maximum operating temperature of 105°C (221°F).

Construction:

Spring: Spring steel, corrosion-resistant coating
Insulator: Red Polypropylene
Weight: 0.007 lbs. (3,3 grams)

Performance Test

The following tests were conducted to the specifications of UL Standard 486C

Static Heating	Pass
Secureness	Pass
Pullout	Pass
Dielectric Voltage Withstand	Pass
Secureness of Insulation	Pass
Flammability	V2 Min.

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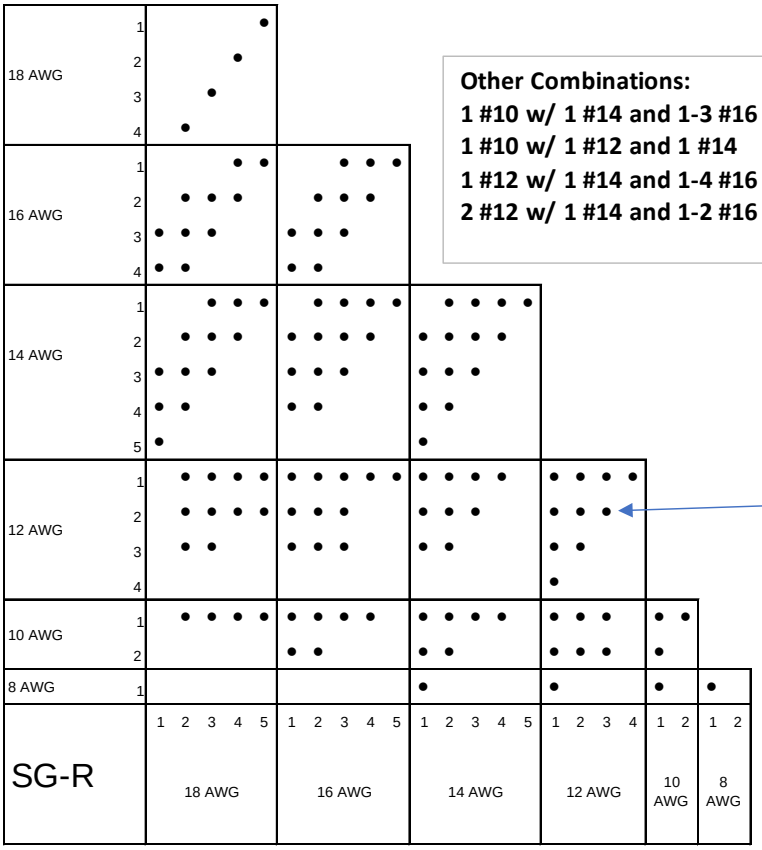
Installation Instructions:

> **Caution**
> Turn power off before installing or removing connector. All electrical work should be done according to appropriate electrical codes.

1. 18-16 AWG Strip wire insulation 3/4 inch. 14-8 AWG Strip wire insulation 5/8 inch.
2. Firmly grasp wires and ensure conductor ends are even. Conductors may be twisted or untwisted.
3. Place connector over the stripped conductor tips.
4. Turn connector on in a clockwise direction until secure.
5. To remove, turn connector counter-clockwise.

Combination Chart:



Other Combinations:

1 #10 w/ 1 #14 and 1-3 #16
1 #10 w/ 1 #12 and 1 #14
1 #12 w/ 1 #14 and 1-4 #16
2 #12 w/ 1 #14 and 1-2 #16
1 #10 w/ 2 #14 and 1 #16
1 #10 w/1 #12 and 1-2#16
1 #12 w/ 1 #14 and 1-3 #16

Read across then down
2 + 3 = 5 #12AWG

Shelf Life & Storage	The 3M™ Secure Grip Wire Connector SG-R has 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).
Availability	From your local distributor; or from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

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