

# 3M™ Secure Grip Wire Connector SG-Y

Data Sheet

March 2019

## Applications

3M™ Secure Grip Wire Connector SG-Y 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 10AWG solid and/or stranded.  
(See wire matrix for specific combinations)

Metric Range: Copper conductors only, 1.0mm<sup>2</sup> thru 4.0mm<sup>2</sup> (solid 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](http://www.3M.com/regs)

## Specifications

3M™ Secure Grip Wire Connector SG-Y 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: Yellow Polypropylene  
Weight: 0.004 lbs. (1,9 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.

# 3M™ Secure Grip Wire Connector SG-Y

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 5/8 inch. 14-10 AWG Strip wire insulation 1/2 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:

18 AWG	1	•	•	•	•	•									
	2	•	•	•	•	•									
	3	•	•	•	•	•									
	4	•	•	•	•	•									
	5	•	•	•	•	•									
16 AWG	1	•	•	•	•	•	•	•	•	•					
	2	•	•	•	•	•	•	•	•	•					
	3	•	•	•	•	•	•	•	•	•					
	4	•	•	•	•	•	•	•	•	•					
14 AWG	1	•	•	•	•	•	•	•	•	•	•	•	•		
	2	•	•	•	•	•	•	•	•	•	•	•	•		
	3	•	•	•	•	•	•	•	•	•	•	•	•		
12 AWG	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	2	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10 AWG	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SG-Y		1	2	3	4	5	1	2	3	4	1	2	3	1	2
		18					16				14			12	
		AWG					AWG				AWG			AWG	

Read across then down.  
 1 #12 w/ 2#12 = 3#12AWG

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**Shelf Life & Storage** The 3M™ Secure Grip Wire Connector SG-Y 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).

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**Availability** From your local distributor; or from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

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Austin, TX  
800 245.3573  
FAX: 800 245.0329  
www.3M.com/electrical

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