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 <u>www.3M.com/regs</u> 						
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 coatingInsulator:Red PolypropyleneWeight:0.007 lbs. (3,3 grams)						
Performance Test	The following tests were condu	cted to the spec	ifications of UL Standard 486C				
	Static Heating	Pass					
	Secureness	Pass	1				
	Pullout	Pass]				
	Dielectric Voltage Withstand	Pass					
	Secureness of Insulation Pass						
	Flammability V2 Min.						

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.

	1	•											
18 AWG		,			(Other (Со	mbi	nati	ons:			
3					1	L #10 v	N/	1 #1	L4 a	nd 1-	3 #1	6	1 #10 w/ 2 #14 and 1 #16
4		•			1	L #10 v	N/	1 #1	L2 a	nd 1	#14		1 #10 w/1 #12 and 1-2#16
			•			L #12 v							1 #12 w/ 1 #14 and 1-3 #16
16 AWG		, 				2 #12 v	N/	1 #1	14 a	nd 1-	2 #1	6	
3			•••										
4			•••				٦						
		•	•		•	•••							
14 AWG		,	•••		•••	•••							
3			• • •	•	••	•							
4	••		• •		• •								
5	•				•					1			
	1 • • •	•	• • •	• • •	• •	• •	•	•	• •				
12 AWG	•••	•	• • •	•	• •	•	•	•	• 🗲				Read across then down
3	• •		• • •	•	• •		•	•					2 + 3 = 5 #12AWG
4	ŀ						•						
10 AWG	1 • • •	•	• • •	• •	• •	• •	•	•	•	••			
2	2		• •		• •		•	•	•	•		-	
8 AWG	1				•		•			•	•		
	1 2 3 4	5	12	345	12	3 4 5	1	2	34	12	1 2		
SG-R	18 AWG		16 A	AWG	14	AWG		12 AV	VG	10 AWG	8		
										AWG	AWG		

Combination Chart:

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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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