Data Sheet 3M

Scotchlok® G (Gray) Insulated Electrical Spring Connector





Application:

Use a G Scotchlok[®] connector to electrically connect two or more conductor ends in a pigtail application and insulate the connection, or insulate a single conductor end.

Wire:

AWG Range COPPER conductors only, No. 14 thru No. 8 sol. or str.

METRIC Range

COPPER conductors only, 2,5mm² thru 8,0mm² ridged (solid or stranded) and flexible.

(see wire matrix for specific wire combinations)

Construction:

Spring —Spring steel, Corrosion resistant coating

Shell –Steel, Corrosion resistant coating

Insulator -Flame Retardant, Flexible Polyvinyl

Chloride –Color – Gray

Weight:

.0154 lb. (7.00 gm)

Abbreviations:

UL: Underwriters Laboratories CSA: Canadian Standards Association

AWG: American Wire Gauge

CU: Copper

sol.: solid, str.: stranded

mm²: square millimeters, mm: millimeters °C: degrees Celsius, °F: degrees Fahrenheit

gm: gram, lb.: pounds

Engineering Specification:

Electrical Spring Connector (3M, part No. G Scotchlok) capable of connecting two or more wires in a pigtail application, in the wire range of No. 14 thru No. 8 AWG solid or stranded copper conductors. The connector shall be constructed of an active (live) spring and a steel shell covered by a vinyl insulator. The spring shall have a corrosion resistant coating. The connector shall be UL Listed and CSA Certified as a pressure cable connector. The connector shall be voltage rated 600 volts maximum, building wire, 1000 volts maximum, signs, fixtures and luminaires. The connector shall have a maximum operating temperature of 105°C.

Regulatory Agencies:

UL Listed as a Pressure Cable Connector Tested per UL Standard 486C UL File No. E23438

OPERATING TEMPERATURE: 105°C (221°F)

VOLTAGE RATING: 600 volts max. building wire; 1000 volts max. signs and fixtures

FLAMMABILITY RATING: UL94 V-2

CSA Certified – CSA Standard C22.2 No. 0, 188–M1983 CSA File No. LR15503

OPERATING TEMPERATURE: 105°C (221°F)

VOLTAGE RATING: 600 volts max. building wire 1000 volts max. signs and luminaires.

FLAMMABILITY RATING: C22.2 No. 0.6 V-2

FEDERAL SPECIFICATION W-S-610:

"Commercial Package only"
Type Class Kind Style
1 1 cu G

G Scotchlok®

AWG Wire Combinations

			,	copper to copper conductors						
14 STR	1 2 3 4	• • • •		All wire combinations are 600 volts CSA Certified.					= 300 volts = 600 volts All wire combinations are 600 volt UL Listed when using insulation thickness such as TW	
14 SOL	1 2 3 4	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •							
	1	• • •	• • •	• • • • □					and THHN.	
12 STR	2 3 4 5	• • •	• • •	UL Listed single wire terminations: No. 2, 4, 6, and 8 AWG						
12 SOL	1 2 3 4 5	• • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • •			7	_	E x	ow to read this chart; cample 1: No. 12 sol. + 5 No. 12 sol. (6)	
10 STR	1 2	• • • □	• • • □	• • • □	• • • □	• •	←	- E	Example 2:	
10 SOL	1 2	• • • -	• • • -	• • • ·	• • • □	• •	• •		1 No. 10 str. + 2 No. 10 str. (3)	
8 STR	1	• • • □	• • • □	• •	• • □ □	• •	• •	•		
		1 2 3 4	1 2 3 4	1 2 3 4 5	1 2 3 4 5	1 2	1 2	1		
		14 STR	14 SOL	12 STR	12 SOL	10 STR	10 SOL	8 STR		

Installation Instructions:

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

- 1. Strip wire insulation 3/4 inch (19,0 mm) from the end of the wires to be connected.
- 2. Firmly grasp wires, making sure insulation ends are even and tightly bundled, (wires may be twisted or untwisted). Slip connector over wire tips.
- 3. Turn connector onto the wires in a clockwise direction until secure.
- 4. To remove, turn connector counter-clockwise.

Metric Wire Combinations

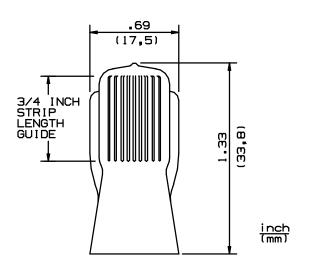
Copper conductors only

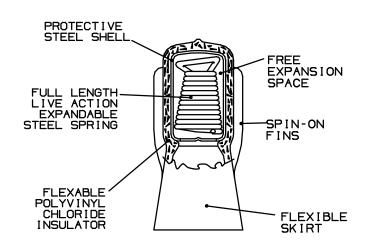
Cross Section Capacity Minimum Maximum 8,0mm² 24,0mm²

Conductor Combinations								
Quantity	Size	Type						
4–6	2,5mm ²	sol/str						
2–6	$4,0 \text{mm}^2$	sol/str						
2–4	$6,0 \text{mm}^2$	sol/str						
2	$8,0 \text{mm}^2$	sol/str						

Only AWG combinations UL Listed or CSA Certified.

G Scotchlok





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