



Scotchlok™

Insulated Electrical Spring Connector R (Red)

Data Sheet



Application

Use a Scotchlok™ connector R to electrically connect two or more conductor ends in a pigtail application and insulate the connection, or insulate a single conductor end.

Wire Range

AWG Range: solid or stranded copper conductors only. No. 18 thru No. 10 (1,0 mm² thru 6,0 mm²)

Construction

- Spring** Spring steel, Corrosion resistant coating
- Shell** Steel, Corrosion resistant coating
- Insulator** Flame Retardant Flexible Polyvinyl Chloride
Color- red

Weight

.0084 lb. (3.81 gm)

Engineering Specification

Scotchlok Electrical Spring Connector (3M part No. Scotchlok R) capable of connecting two or more wires in a pigtail application, in the wire range of No. 18 thru No. 10 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

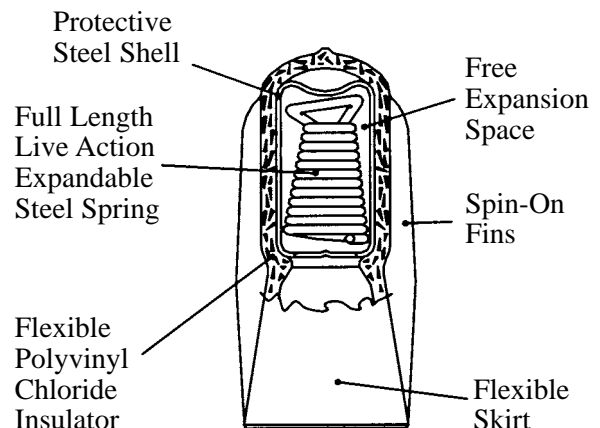
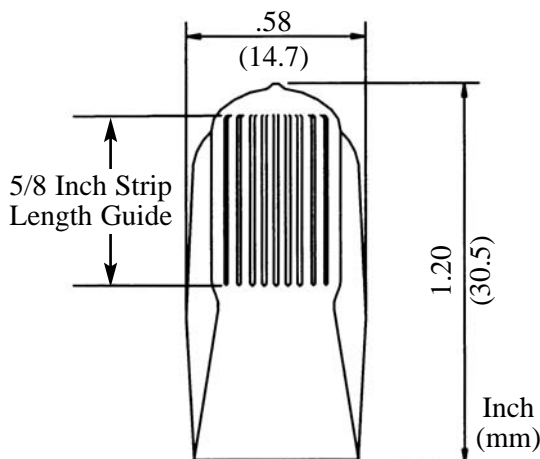
CSA Certified-CSA Standard C22.2 No. 0, 188-M1983

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



Scotchlok™ Insulated Electrical Spring Connector R

AWG Wire Combinations
Copper to Copper Conductors



□ = 300 volts
● = 600 volts

All wire combinations are 600 volt UL Listed when using conductors with insulation thickness such as TW and THHN.

UL Listed single wire terminations:
No: 10, 12 and 14 AWG



All wire combinations are 600 volts CSA Certified

18 STR	1																				
	2																				
	3			□																	
	4			□ □																	
	5			□ □ □																	
18 SOL	1																				
	2																				
	3			□																	
	4			□ □																	
	5			□ □ □																	
16 STR	1																				
	2			□																	
	3			□ □																	
	4			□ □ □																	
16 SOL	1																				
	2			□																	
	3			□ □																	
	4			□ □ □																	
14 STR	1																				
	2			●																	
	3			● ●																	
	4			● ● ●																	
14 SOL	1																				
	2			●																	
	3			● ●																	
	4			● ● ●																	
12 STR	1																				
	2			●																	
	3			● ●																	
	4			● ● ●																	
12 SOL	1																				
	2			●																	
	3			● ●																	
	4			● ● ●																	
10 STR	1																				
	2			●																	
10 SOL	1																				
	2			●																	
		1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2	1 2						
		18 STR	18 SOL	16 STR	16 SOL	14 STR	14 SOL	12 STR	12 SOL	10 STR	10 SOL										

How to read this chart:

Example 1:
1 No. 12 str.
+ 4 No. 14 sol. (5)

Example 2:
1 No. 10 sol.
+ 2 No. 10 str. (3)

Installation Instructions

WARNING

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

1. Strip wire insulation 5/8 inch (15,9 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 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
5,0mm ²	16,0mm ²

Conductor Combinations		
Quantity	Size	Type
5-6	1,0mm ²	sol/str
4-6	1,5mm ²	sol/str
2-5	2,5mm ²	sol/str
2-4	4,0mm ²	sol/str
2	6,0mm ²	sol/str

Only AWG combinations are UL Listed or CSA Certified.

3M and Scotchlok are trademarks of 3M Company.

 is a trademark of Underwriters Laboratories.

 is a trademark of Canadian Standards Association.

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 FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**

3M

Electrical Products Division

6801 River Place Blvd.
Austin, TX 78726-9000
www.3M.com/elpd

Litho in USA
©3M 2003 78-8126-5904-9-A