3M

Scotchlok[™] 2 B/G Electrical Connectors



Data Sheet

Application

Use a ScotchlokTM 2 B/G Electrical Connector to electrically connect two or more conductor ends in a pigtail application and insulate the connection.

Wire

AWG Range

COPPER conductors only, No. 14 thru No. 6 sol. and/or str.

METRIC Range

COPPER conductors only, 2,5 mm² thru 10,0 mm² rigid (solid or stranded) and flexible.

(see wire matrix for specific wire combinations)

Construction

Spring

Spring steel, corrosion–resistant coating

Insulator

Flame retardant, polypropylene and thermoplastic elastomer, color coded blue/gray

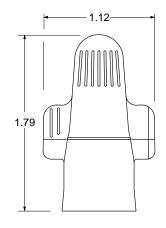
Weight

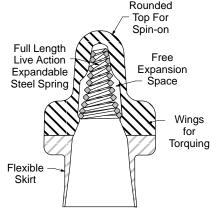
.0124 lbs. (5,647 g)

Performance Test

The following tests were performed to the specification of UL standard 486C and CSA standard C22.2 No. 188–M1983:

Static-Heating	Pass
Secureness	Pass
Pullout	Pass
Temperature	Pass
Dielectric Voltage Withstand	Pass
Secureness-Of-Insulation	Pass
Flammability	Pass





Other Tests:

Salt Spray Pass
Per MIL–STD–1344A Method 1001.1
Vibration Pass
Per MIL–STD–1344A Method 2005.1
UV Exposure Pass
Per ASTM G–53–77

Fluid Immersion Test

Connectors were immersed in the following chemicals for seven days at $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ with no affect on appearance or loss of material strength.

Typical Reagents and Materials From ASTM D 543–87 and MIL–STD–1344A

Acetic Acid

Acetone

Detergent Solution, Heavy Duty Ethyl Alcohol (95%)

Ethyl Alcohol (50%)

Heptane

Hydrogen Peroxide Solution 28%

Methyl Alcohol

Sodium Hydroxide Solution

Mineral Spirit Lubricating Oil

Engineering Specification

Electrical Connector (3M part no. ScotchlokTM 2 B/G) capable of connecting two or more wires in a pigtail application in the wire range of No. 14 thru No. 6 AWG solid and/or stranded copper conductors. The connector shall be constructed of an active (live) spring with a corrosionresistant coating. The connector shall be UL Listed and CSA Certified as a pressure wire connector. The connector shall be voltage rated 600 volts maximum for building wire and 1000 volts maximum for signs, fixtures, and luminaries. The connector shall have a maximum operating temperature of 105°C (221°F).

Regulatory Agencies

UL Listed

as a Pressure Wire 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 luminaries

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

Cross section capacity	10,0 mm	10,0 mm ² through 31,6 mm ²					
Conductor combinations	Quantity	Size	Туре				
	3 – 6	2,5 mm ²	sol./str.				
	2 – 5	4,0 mm ²	sol./str.				
	2 – 4	6,0 mm ²	sol./str.				
	2	10,0 mm ²	sol./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 7/8'' (22,2 mm).

1 14 2 STR 3		Firmly grasp wires, making sure insulation ends are even and tightly bundled. (Wires may be twisted or untwisted.) Lead stranded wires slightly. Slip the connector over wire tips.							
1 14 2 SOL 3 4		3. Turn connector onto wires in a clockwise direction until secure. 4. To remove, turn connector counter-clockwise.							
1 12 2 STR 3 4 5			UL listed as a Pressure Wire Connector. CSA certified. Copper conductors on Operating Temperature: 105°C maximum Voltage Rating 600 volts maximum in building wire 1000 volts maximum in signs, fixtures and lumin						
1 12 2 SOL 3 4									
10 1 STR 2	****	****	•••	•••	•••				
10 1 SOL 2 3	****	****	:::		:::			-	
8 1 STR 2	••••	••••	***			***	••		
6 1 STR 2			•••	•••	•••	•••	••	•	
B/G	1 2 3 4 14 STR	1 2 3 4 14 SOL	1 2 3 12 STR	1 2 3 12 SOL	1 2 3 10 STR	1 2 3 10 SOL	1 2 8 STR	1 6 STR	

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