3M

Wire Connector B/G⁺

Data Sheet

Application

Use $3M^{TM}$ Wire Connectors B/G^+ 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 ridged (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

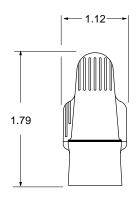
Weight

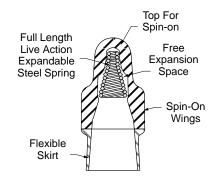
.0124 lbs. (5,647 g)

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
Dielectric Voltage Withstand	Pass
Secureness-Of-Insulation	Pass
Flammability	Pass





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

3M B/G⁺ wire connectors are 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, 1000 volts maximum, for signs, lighting fixtures (luminaires). 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., for building wire 1000 volts max., for signs, lighting fixtures (luminaires).

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 lighting fixtures (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	

Metric Wire Combination						
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).
- Firmly grasp wires making sure insulation ends are even and tightly

14 2 STR 3		2. 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		3. Turn connector onto wires in clockwise direction until secure.							
14 2 SOL 3			4. To	remove, tui	rn connector	counter-clo	ockwise.		
1	•••	• • •	• •	UL LISTE	ED as a Pressur	e Wire Connec	tor. CSA Certif	fied. Copper co	onductors only.
12 ² STR ³				Operating	Temperature:	105°C max	ximum		
STR 3 4 5				Voltage Rating 600 volts maximum in building wire 1000 volts maximum in signs and lighting fixtures (l			ng fixtures (luminaries)		
1 12 2 SOL 3 4									
10 1 STR 2 3									
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	



Underwriters Laboratories Standard NO. UL 486C 3M File NO. E23438



Canadian Standards Association Standard NO. 22.2 NO. 188–M1983 3M File NO. LR15503



IEC Publications 685–1 and 685–2–4 3M File NO. E95240

3M is a trademark of 3M Company. UL is a trademark of Underwriters Laboratories. CSA is a trademark of Canadian Standards Association. IEC is a trademark of International Electrotechnical Commission.

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. 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. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time 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 direct, indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.



Electrical Markets Division

6801 River Place Blvd. Austin, TX 78726-9000 800-245-3573 Fax 800-245-0329 www.3M.com/electrical

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

B/G+POUCH 7000058825 7100127167