Wire Connector B/G+

Data Sheet

Application
Use 3M™ 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 mm^2 thru 10,0 mm^2 ridged (solid or stranded) and flexible.

(see wire matrix for specific wire combinations)

Construction
Spring

Spring steel, corrosion-resistant coating

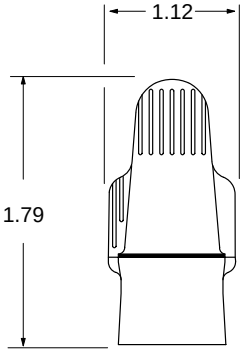
Insulator

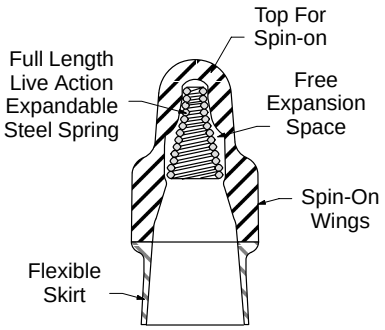
Flame-retardant, polypropylene and thermoplastic elastomer, color coded blue/gray

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°C ± 2°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 corrosion-resistant 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

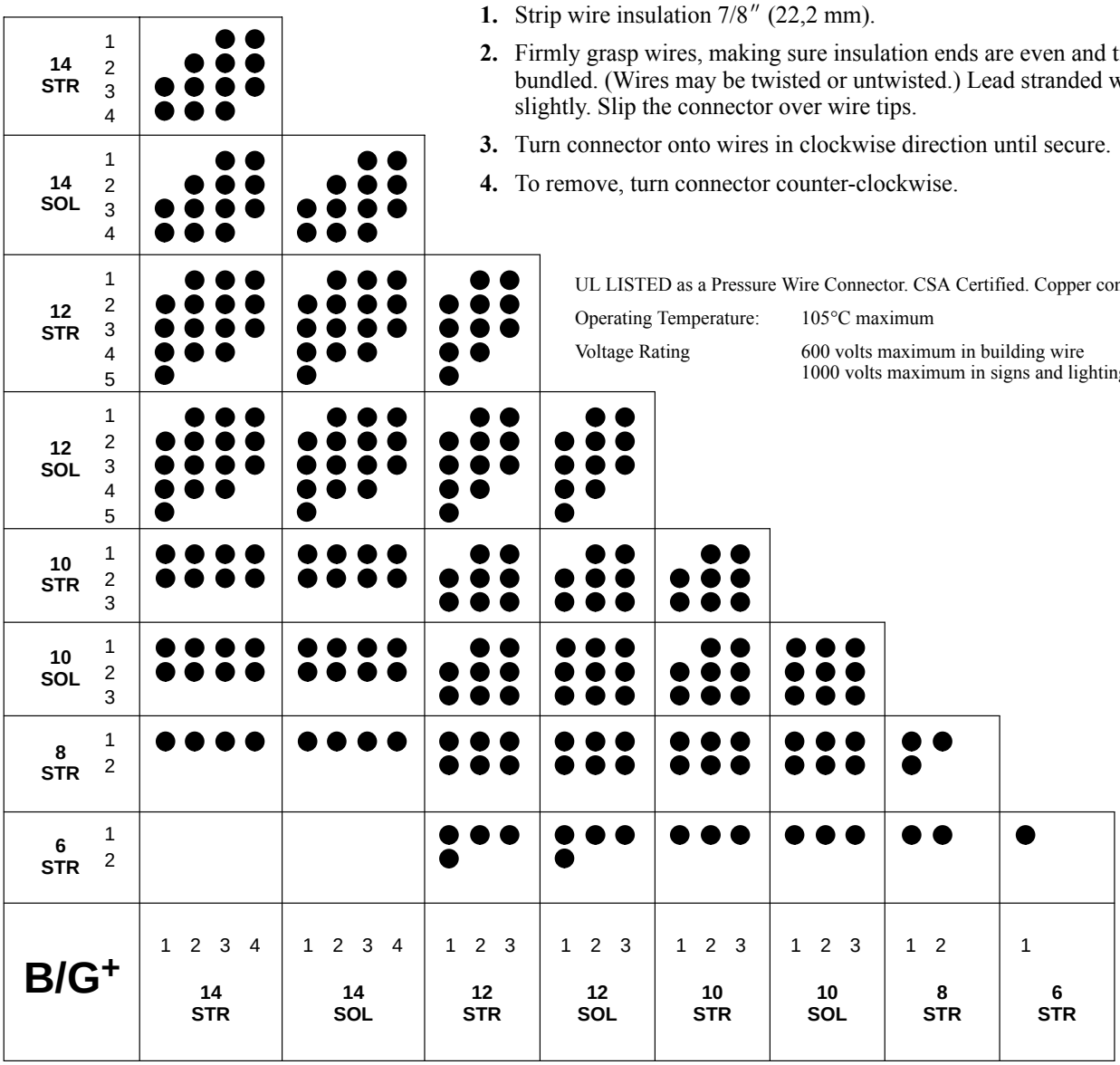
Metric Wire Combination			
Cross section capacity	10,0 mm^2 through 31,6 mm^2		
Conductor combinations	Quantity	Size	Type
	3 – 6	2,5 mm^2	sol./str.
	2 – 5	4,0 mm^2	sol./str.
	2 – 4	6,0 mm^2	sol./str.
	2	10,0 mm^2	sol./str.

* Only AWG wire size combinations are UL LISTED or CSA Certified.

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).
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.
3. Turn connector onto wires in clockwise direction until secure.
4. To remove, turn connector counter-clockwise.



UL LISTED as a Pressure Wire Connector. CSA Certified. Copper conductors only.

Operating Temperature: 105°C maximum

Voltage Rating: 600 volts maximum in building wire
1000 volts maximum in signs and lighting fixtures (luminaries)

LISTED
314R

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

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