



# Wire Connector R/Y<sup>+</sup>

## Data Sheet

### Application

Use 3M™ Wire Connector R/Y<sup>+</sup> to electrically connect two or more conductor ends in a pigtail application and insulate the connection.

### Wire

AWG Range

COPPER conductors only, No. 22 thru No. 8 sol. and/or str.

METRIC Range

COPPER conductors only, 0,5 mm<sup>2</sup> thru 6,0 mm<sup>2</sup> 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 red/yellow

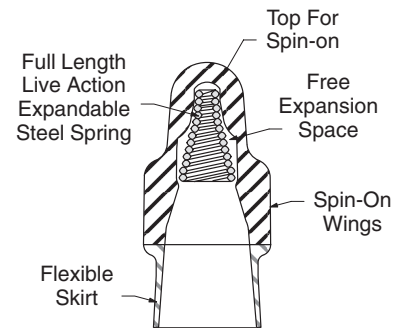
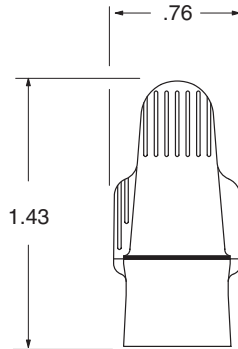
### Weight

.0071 lbs. (3,21 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 ± 2C with no effect 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 R/Y<sup>+</sup> wire connectors are capable of connecting two or more wires in a pigtail application, in the wire range of No. 22 thru No. 8 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 and 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. building wire  
1000 volts max. signs and lighting fixtures (luminaires).

**Flammability Rating:** UL94 V-2





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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# 3M

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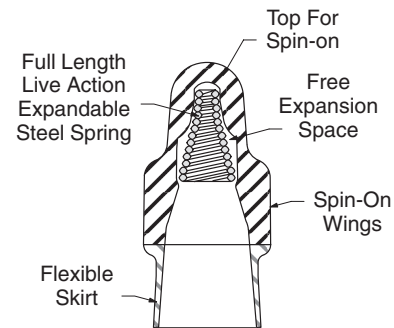
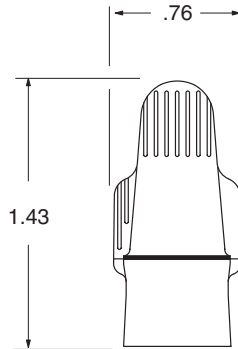
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### Regulatory Agencies

#### 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 lighting fixtures (luminaires).

**Flammability Rating:** UL94 V-2

| Type | Class | Kind | Style |
|------|-------|------|-------|
| 1    | 1     | cu   | G     |

| Metric Wire Combination                                           |                                                  |                      |           |
|-------------------------------------------------------------------|--------------------------------------------------|----------------------|-----------|
| Cross section capacity                                            | 2,0 mm <sup>2</sup> through 16,0 mm <sup>2</sup> |                      |           |
| Conductor combinations                                            | Quantity                                         | Size                 | Type      |
|                                                                   | 5 - 7                                            | 0,5 mm <sup>2</sup>  | sol./str. |
|                                                                   | 3 - 7                                            | 0,75 mm <sup>2</sup> | sol./str. |
|                                                                   | 2 - 8                                            | 1,0 mm <sup>2</sup>  | sol./str. |
|                                                                   | 2 - 7                                            | 1,5 mm <sup>2</sup>  | sol./str. |
|                                                                   | 2 - 5                                            | 2,5 mm <sup>2</sup>  | sol./str. |
|                                                                   | 2 - 4                                            | 4,0 mm <sup>2</sup>  | sol./str. |
|                                                                   | 2                                                | 6,0 mm <sup>2</sup>  | 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.

- Strip wire insulation 3/4" (19,0 mm).
- 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.
- Turn connector onto wires in clockwise direction until secure.

°C maximum  
1000 volts maximum in signs, lighting fixtures and luminaries

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