**Wire Connector R/Y+**

**Data Sheet**

**Application**
Use 3M™ Wire Connector R/Y+ 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 mm² thru 6.0 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 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.

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static–Heating</td>
<td>Pass</td>
</tr>
<tr>
<td>Secureness</td>
<td>Pass</td>
</tr>
<tr>
<td>Pullout</td>
<td>Pass</td>
</tr>
<tr>
<td>Dielectric Voltage Withstand</td>
<td>Pass</td>
</tr>
<tr>
<td>Secureness–Of–Insulation</td>
<td>Pass</td>
</tr>
<tr>
<td>Flammability</td>
<td>Pass</td>
</tr>
</tbody>
</table>

**Fluid Immersion Test**
Connectors were immersed in the following chemicals for seven days at 23°C ± 2°C with no evidence of 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+ 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
CSA Certified
CSA Standard C22.2 No. 188-M1983
CSA File No. LR15503

OPERATING TEMPERATURE:
105°C (221°F)

VOLTAGE RATING:
600 volts max. building wire
1000 volts max. signs, lighting fixtures and luminaries

FLAMMABILITY RATING:
C22.2 No. 0.6 V-2

Federal Specification W-S-610
"Commercial package Only"

<table>
<thead>
<tr>
<th>Type</th>
<th>Class</th>
<th>Kind</th>
<th>Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>cu</td>
<td>G</td>
</tr>
</tbody>
</table>

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 3/4” (19.0 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.

°C maximum

1000 volts maximum in signs, lighting fixtures and luminaries

Metric Wire Combination

<table>
<thead>
<tr>
<th>Cross section capacity</th>
<th>2.0 mm² through 16.0 mm²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor combinations</td>
<td>Quantity</td>
</tr>
<tr>
<td>5 - 7</td>
<td>0.5 mm²</td>
</tr>
<tr>
<td>3 - 7</td>
<td>0.75 mm²</td>
</tr>
<tr>
<td>2 - 8</td>
<td>1.0 mm²</td>
</tr>
<tr>
<td>2 - 7</td>
<td>1.5 mm²</td>
</tr>
<tr>
<td>2 - 5</td>
<td>2.5 mm²</td>
</tr>
<tr>
<td>2 - 4</td>
<td>4.0 mm²</td>
</tr>
<tr>
<td>2</td>
<td>6.0 mm²</td>
</tr>
</tbody>
</table>

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

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.

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