3M

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

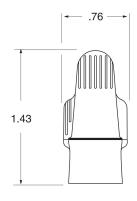
Weight

.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.

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 nofæt 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

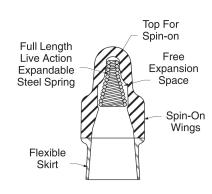
Hydrogen Peroxide Solution 28%

Methyl Alcohol

Sodium Hydroxide Solution

Mineral Spirit

Lubricating Oil



Engineering Specification

3M R/Y⁺ 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 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 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"

Type	Class	Kind	Style
1	1	cu	G

Metric Wire Combination					
Cross section capacity	2,0 mm ² through 16,0 mm ²				
Conductor combinations	Quantity	Size	Type		
	5 - 7	0,5 mm ²	sol./str.		
	3 - 7	0,75 mm ²	sol./str.		
	2 - 8	1,0 mm ²	sol./str.		
	2 - 7	1,5 mm ²	sol./str.		
	2 - 5	2,5 mm ²	sol./str.		
	2 - 4	4,0 mm ²	sol./str.		
	2	6,0 mm ²	sol./str.		
* Only AWG wire size combinations are UL LISTED or CSA Certified.					

Installation Instructions 22 SOL CAUTION: Turn power off before installing or removing connector. All electrical work should be done according to appropriate electrical codes. or STR 1. Strip wire insulation 3/4" (19,0 mm). 2. Firmly grasp wires, making sure insulation ends are 18 STR even and tightly bundled. (Wires may be twisted or untwisted.) Lead stranded wires slightly. Slip the connector over wire tips. 18 SOL 3. Turn connector onto wires in clockwise direction until secure. 16 STR °C maximum 1000 volts maximum in signs, lighting fixtures and luminaries 16 SOL 12 STR 12 SOL 10 STR •••• **** **** 10 SOL •• ••• 8 STR 123456 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 123456 1 2 3 4 5 1 2 3 4 5 1234 1234 1 2 1 2 3 1 R/Y+ STR or SOL 20 STR or SOL 16 SOL 12 STR 12 SOL 8 STR 14 STR