



O/B⁺ Wire Connector



LISTED
314R

Data Sheet

Application

Use a 3M™ O/B⁺ Wire Connector 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. 12 sol. and/or str.

METRIC Range

COPPER conductors only, 0,5 mm² thru 2,5 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 orange/blue

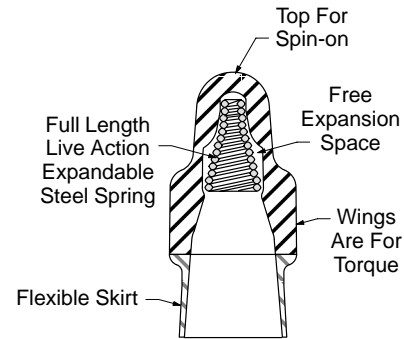
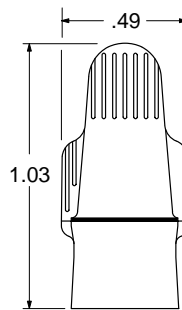
Weight

.0025 lbs. (1,13 gm)

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



Other Test

Salt Spray	Pass
Per MIL-STD-1344A Method 1001.1	
Vibration	Pass
Per MIL-STD-1344A Method 2005.1	
UV Exposure	Pass
Per ASTM G-53-77	

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 O/B⁺ wire connector is capable of connecting two or more wires in a pigtail application, in the wire range of No. 22 thru No. 12 AWG solid and/or stranded copper conductors. The connector shall be constructed with 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, building wire, 1000 volts maximum, signs and lighting fixtures (luminaries). 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 (luminaries)

FLAMMABILITY RATING:
UL94 V-2



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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