Wire Connector T/R+ (Tan/Red)

Wire Connector

Canadian Standards Association Standard NO. 22.2 NO. 188-M1983 3M File NO. LR15503

PASSPORT TO EUROPEAN UNION COUNTRIES

Data Sheet

Application

Use a 3M™ T/R+ 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. 8 solid and/or stranded (see wire matrix for specific wire combinations).

METRIC Range: COPPER conductors only, 0,5 mm^2 thru 6,0 mm^2 ridged (solid) and flexible (stranded).

Construction

Spring - Spring steel, corrosion resistant coating

Insulator: - Flame retardant, polypropylene, tan and thermoplastic elastomer, red

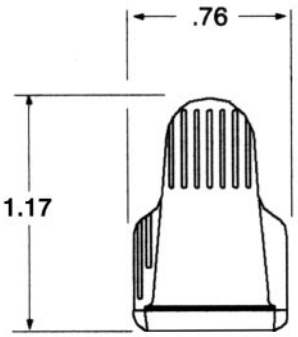
Weight

.0068 lbs. (3.1 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



Other Tests:

per MIL-STD-1344A

Method 2005.1UV Exposure	Pass
Per ASTM G-53-77 Salt Spray	Pass

Fluid Immersion Test

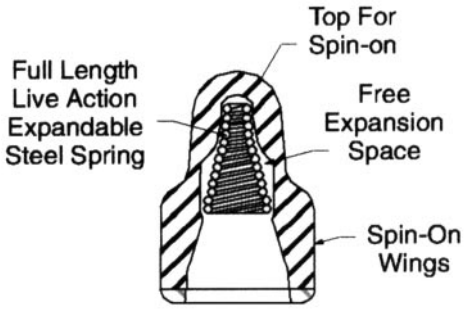
Connectors were immersed in the following chemicals for seven days at 23˚C±2˚C with no affect on appearance or loss of material strength.

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

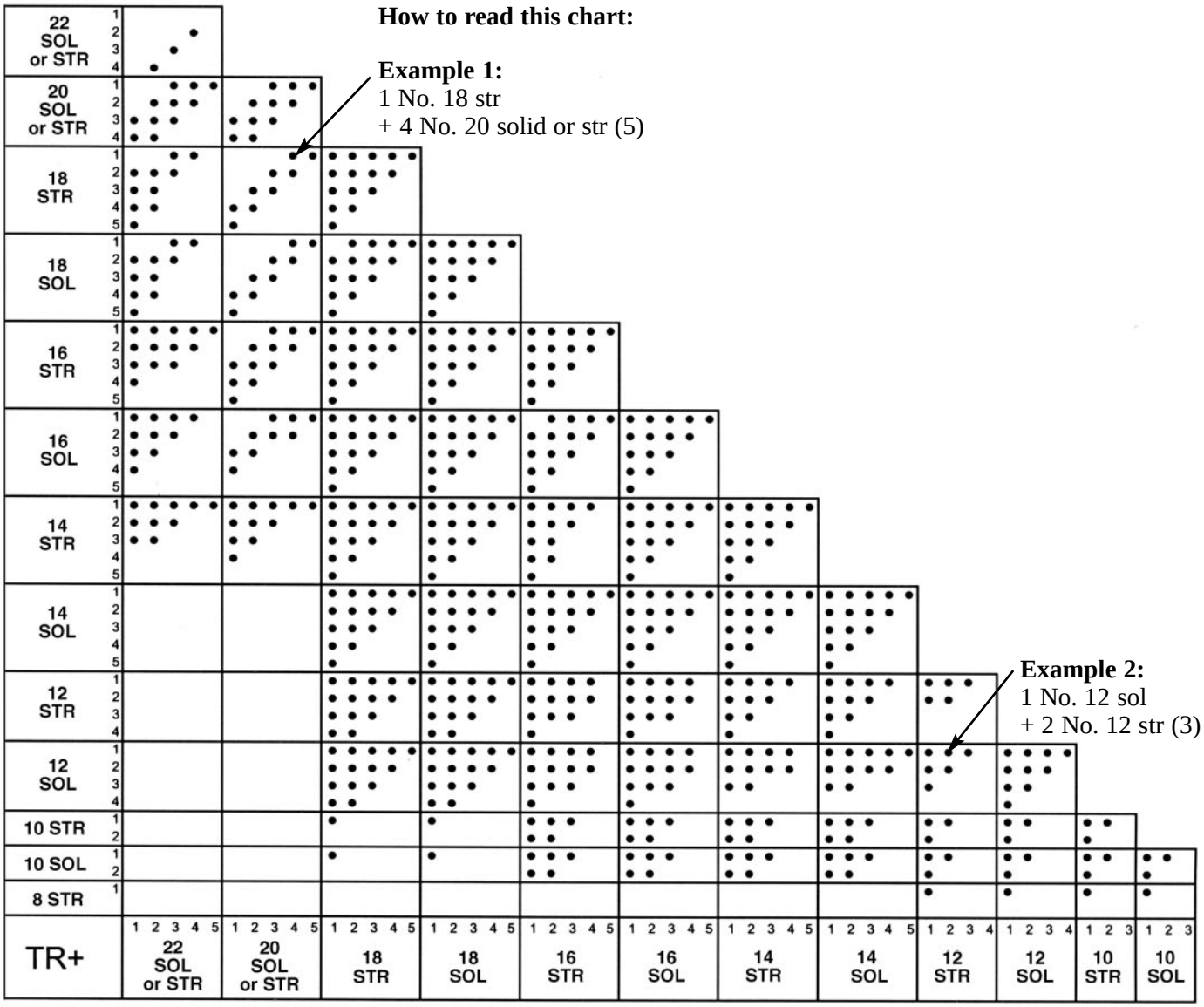
Engineering Specification

3M T/R+ Wire Connector is 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 building wire and 1000 volts maximum signs and lighting fixtures (luminaries). The connector shall have a maximum operating temperature of 105˚C (221˚F).



Wire Connector T/R+

AWG Wire Combinations
Copper to Copper Conductors



Installation Instructions

⚠WARNING

Turn power off before installing or removing terminal. All electrical work should be done according to appropriate electrical codes.

1. Strip wire insulation 1/2”.
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.

Regulatory Agencies

UL Listed as a Pressure Cable 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 fixtures
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 luminaires.
Flammability Rating: C22.2 No. 0.6 V-2
Operating Temperature: 105˚C (221˚F)
Voltage Rating: 600 volts max. building wire; 1000 volts max. signs and fixtures
Flammability Rating: UL94 V-2

Federal Specification W-S-610:
“Commercial package only”

Type	Class	Kind	Style
1	1	cu	G

Metric Wire Combinations

Copper Conductors Only

Cross Section Capacity	
Minimum	Maximum
2.0mm²	12.5mm²

Conductor Combinations		
Quantity	Size	Type
6	0,5mm²	sol/str
3-6	0,75mm²	sol/str
2-6	1,0mm²	sol/str
2-6	1,5mm²	sol/str
2.5	2,5mm²	sol/str
2.3	4.0 mm²	sol/str

Only AWG combinations are UL Listed or CSA Certified.

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