



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 mm² thru 6,0 mm² 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.

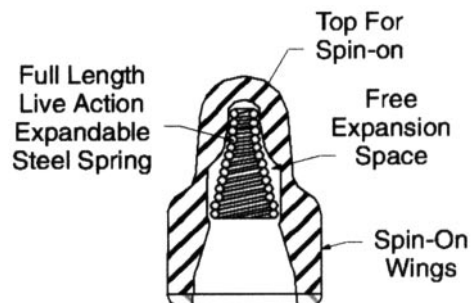
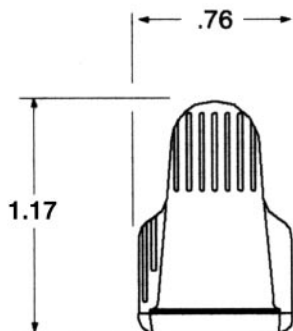
Typical Reagents and Materials

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

How to read this chart:

Example 1:
1 No. 18 str
+ 4 No. 20 solid or str (5)

Example 2:
1 No. 12 sol
+ 2 No. 12 str (3)

| | | | | | | | | | | | | | | | | | | | |
|---------------|-----------------------|---------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|---------|--------|-------|--|--|--|--|--|
| 22 SOL or STR | 1 2 3 4 | | | | | | | | | | | | | | | | | | |
| 20 SOL or STR | 1 2 3 4 | | | | | | | | | | | | | | | | | | |
| 18 STR | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 18 SOL | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 16 STR | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 16 SOL | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 14 STR | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 14 SOL | 1 2 3 4 5 | | | | | | | | | | | | | | | | | | |
| 12 STR | 1 2 3 4 | | | | | | | | | | | | | | | | | | |
| 12 SOL | 1 2 3 4 | | | | | | | | | | | | | | | | | | |
| 10 STR | 1 2 | | | | | | | | | | | | | | | | | | |
| 10 SOL | 1 2 | | | | | | | | | | | | | | | | | | |
| 8 STR | 1 | | | | | | | | | | | | | | | | | | |
| TR+ | | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 5 | 1 2 3 4 | 1 2 3 4 | 1 2 3 | 1 2 3 | | | | | |
| | | 22 SOL or STR | 20 SOL or STR | 18 STR | 18 SOL | 16 STR | 16 SOL | 14 STR | 14 SOL | 12 STR | 12 SOL | 10 STR | 10 SOL | | | | | | |

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 |
| 2.0mm ² | 12.5mm ² |

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

Only AWG combinations are UL Listed or CSA Certified.

3M is a trademark of 3M Company.



is a trademark of Underwriters Laboratories.



is a trademark of Canadian Standards Association.



is a trademark of the European Union.

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 date 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 loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**

3M

Electrical Products Division

6801 River Place Blvd.
Austin, TX 78726-9000
<http://www.3M.com/elpd>

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru

moschip.ru_4

moschip.ru_6

moschip.ru_9