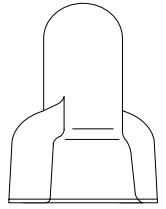




Insulated Electrical Spring Connector 312



Data Sheet

Application:

Use a 312 connector to electrically connect two or more wire ends in a pigtail application and insulate the connection, or to insulate a single wire end.

Wire Range:

AWG Range

COPPER conductors only, No. 22 thru No. 10 solid or stranded wire.

METRIC Range

COPPER conductors only, 0.75 mm² thru 4.0 mm² rigid (solid or stranded) and flexible.

(See wire matrix for specific wire combinations.)

Construction:

Spring —Spring steel, Corrosion resistant coating

Insulator —Flame retardant nylon, Color—Yellow

Weight:

0.004 lb. (1.8 gm)

Abbreviations:

UL: Underwriters Laboratories

AWG: American Wire Gauge

CU: Copper sol.: solid, str.: stranded, mm: millimeters, mm²: square millimeters,

°C: degrees Celsius, °F: degrees Fahrenheit, gm: gram, lb.: pound

Engineering Specification:

Electrical Spring Connector (3M™ part No. 312) shall be capable of connecting wires within the range of No. 22 thru No. 10 solid or stranded copper conductors, in a pigtail application. The connector shall be constructed of an active (live) spring and covered by a nylon insulator. The spring shall have a corrosion resistant coating. The connector shall be UL Listed as a pressure cable connector, and be CSA Certified. The connector shall be voltage rated 600 volts maximum, building wire, 1000 volts maximum, signs, fixtures and luminaries. The connector shall have a maximum operating temperature of 105°C.

Regulatory Agencies:

U.L. Listed — as a Pressure Cable Connector

Tested per UL Standard 486C

U.L. File No. E23438



LISTED 540H



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

OPERATING TEMPERATURE: 105°C (221°F)

VOLTAGE RATING: 600 volts maximum building wire;
1000 volts maximum in signs and lighting fixtures (luminaries).

Federal Specification W-S-610:

Commercial Package Only

Type	Class	Kind	Style
1	1	CU	G

AWG Wire Combinations copper to copper conductors

All 14 thru 10 AWG wire combination are 600 volt UL Listed when using insulation such as TW and THHN

UL Listed single wire terminations:
No. 8, 10, 12 and 14

EXAMPLE 1:

2 No. 16 sol + 4 No. 16 sol (=6) may be connected using a 312 connector

EXAMPLE 2;

3 No. 14 str + 1 No. 14 str (=4)
may be connected using a
312 connector

312

AWG Wire Combinations copper to copper conductors

- = 300 volts
- = 600 volts

All 14 thru 10 AWG wire combination are 600 volt UL Listed when using insulation such as TW and THHN

UL Listed single wire type No. 8, 10, 12 and 14

HOW TO READ

EXAMPLE 1:
2 No. 16 sol + 4 No. 14 str connected using

EXAMPLE 2:

22 SOL OR STR	1 2 3 4 5	● □ □ □ □ ● □ □ □ □ ● □ □ □ □ ● □ □ □ □ ● □ □ □ □																																																																	
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**Turn power off before installing or removing terminal.
All electrical work should be done according to
appropriate electrical codes.**

1. Strip wire insulation to length specified in , according to size.
2. Flrmly grasp wires, making sure insulation ends are even and tightly bundled (wires may be twisted or untwisted). Slip connector over wire.

3. Turn connector onto wires in a clockwise direction until secure.
4. To remove, turn connector counter-clockwise.

Conductor Size	Strip Length
22 – 16 AWG (0,75 – 1,5 mm ²)	5/8" (15,9 mm)
14 – 8 AWG (2,5 – 4,0 mm ²)	1/2" (12,7 mm)

Metric Wire Combinations

International Electrotechnical Commission

Rated Capacity: 1,5 – 10,0 mm

Voltage rating: 600 volts maximum

Reusability: Reusable for same capacity or larger

Wire Type: Copper only

See installation instructions for conductor strip lengths

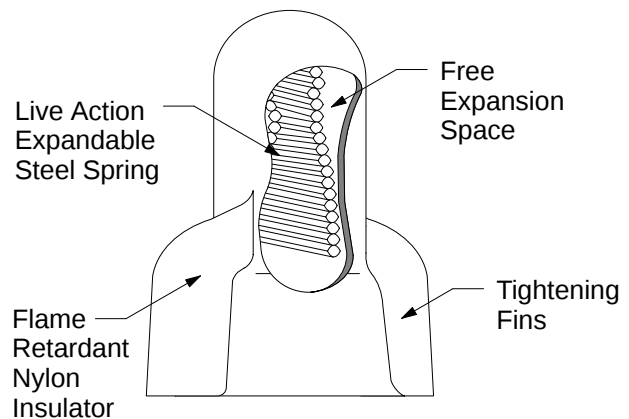
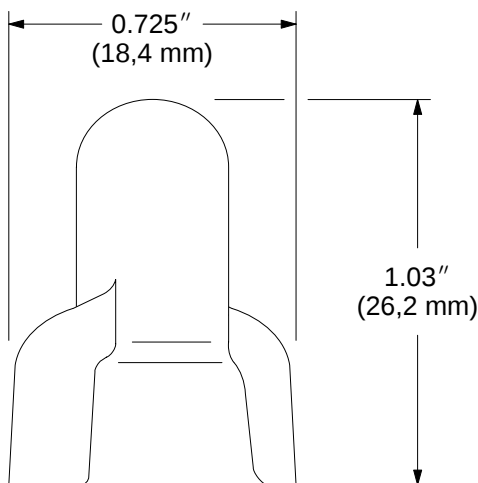
I.E.C. Metric Wire Matrix:

Twist-on connecting devices for the combination of rigid (solid or stranded) and flexible conductors.



Conductor Size	Quantity
0,75 mm ²	2 – 6
1,0 mm ²	2 – 6
1,5 mm ²	2 – 6
2,5 mm ²	2 – 4
4,0 mm ²	2

NOTE: Only AWG wire combinations are UL Listed



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