# THHN/THWN-2 Copper Conductors **PVC** Insulation Separator Tape Interlocked Aluminum or Galvanized Steel Armor Removable SmartColorID® Label (patent pending) SmartColorID\*

## **ENGINEERING SPECIFICATIONS:**

#### Standards:

Underwriters Laboratories Standards UL-66, UL-83, UL-1479, UL-1569, UL-1581, UL-2556 Federal Specification A-A-59544

ASTM-B3 and B8



### CONSTRUCTION:

## Conductors:

Lighting (Power or Class 1) - Solid or Stranded 12-10 AWG soft, uncoated copper per ASTM-B3 Class 2 and Class 3 - Solid 16 AWG soft, uncoated copper per ASTM-B3

## Insulation:

Color-coded Polyvinyl Chloride (PVC) compound meeting the required thickness of Type THHN or TFN with a heat-stabilized Nylon rated for 90°C in dry locations.

#### Class 2 and 3 Conductors:

Color-coded (pink/gray) 16 AWG twisted jacketed pair with 600V insulation. NEC Section 300.3(C)(1) permits conductors of circuits rated 1000 volts or less to occupy the same cable provided all conductors are rated for the maximum circuit voltage in the cable. NEC Section 725.130 permits Class 1 wiring methods to be used for Class 2 and 3 circuits where they are installed using a Chapter 3 wiring method which includes MC Cable [725.46]. NEC Section 725.136(I)(2) permits electric light and power circuit conductors in an MC Cable with class 2 and 3 circuits if separated by a firmly fixed nonconductor, such as the flexible tubing on the twisted pair along with each individual conductor's insulation.

## Applications:

Type MC-LED cable is designed for use with LED and Fluorescent dimming systems and smart building technology that offers optimal control over the building's lighting systems. MC-LED may be surface mounted, fished and/or embedded in plaster in normally dry locations. MC-LED eliminates the need to install a separate low-voltage cable and traditional lighting/power MC Cable to a single luminaire. UL Classified for 1, 2 and 3 hour through penetrations (Fire-Stop). Meets acceptable uses in accordance with NEC 250.118(10)(a), 300.22(C), 392, 396, 330, 501, 502, 503, 504, 505, 518, 520, 530, 645 and 725.

### Assembly:

Two conductors and a green equipment grounding conductor cabled together with an individually-jacketed twisted pair included. The entire assembly is wrapped with separator tape containing the information print legend. Interlocked aluminum or galvanized steel armor is applied over the entire assembly.

## TYPE MC-LED LIGHTING CABLE - COPPER CONDUCTOR - THHN/THWN-2 INNERS

			Twisted Jacketed Pair			Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps)*		
Size (AWG)	Number of Strands	Ground Wire Size (AWG)	Size	Jacket Thickness	Outside Diameter Over Armor (in)	Aluminum	Steel	75°C	90°C	Standard Packaging (ft)
12/2	Solid	12 AWG Green Insulated	16/2 Solid	0.015	0.529	132.20	200.84	25	30	250' 1000'
10/2	Solid	10 AWG Green Insulated	16/2 Solid	0.015	0.584	176.58	253.53	35	40	250' 1000'
12/3	Solid	12 AWG Green Insulated	16/2 Solid	0.015	0.566	157.72	231.95	25	30	250' 1000'
12/2	Stranded	12 AWG Green Insulated	16/2 Solid	0.015	0.534	133.95	-	25	30	250' 1000'

<sup>\*</sup>Ampacity of conductors are based on the National Electrical Code (NFPA 70) Table 310.15(B)(16). See 110.14(C) and 240.4(D) for other limitations where applicable.

## Standard Conductor Color Coding

Phase Conductors	120V/208Y		Phase Conductors	277V/480Y	
2	Black/White	П	2	Brown/Gray	
2	Red/White	Ш	2	Orange/Gray	
2	Blue/White	Ш	2	Yellow/Gray	
3	Black/White/Red	П	3	Brown/Orange/Gray	
Ground	Green	П	Ground	Green	





Sub-Assembly					
2	Pink/Gray				

Listed E-301130

