TYPE MC-LED (MC-PCS) LIGHTING CABLE - COPPER CONDUCTOR
THHN/THWN-2 INNERS

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; NFPA 70 (NEC®) Article 250.118(10)(a), 300.22(C)(1), 330, 392, 396, 501, 502, 503, 504, 505, 518, 520, 530, 645, 725; ARRA 2009 Section 1605 "Buy American" Compliant; UL CRD Type MC-PCS - 12/19/2014 (Effective 2/1/2015); RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-301130

Listed E-301130

RoHS COMPLIANT

SmartColorID®

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/THWN-2 with a heat-stabilized Nylon rated for 90°C for use in dry or wet locations.

Class 2 and Class 3 Conductors
Color-coded (purple/gray) 16 AWG twisted jacketed pair with 600V insulation. The National Electrical Code (NEC) and UL 1569 permits electric light and power circuits conductors in an MC Cable with class 2 and class 3 circuits in accordance with NEC Section 725.136(I)(1).

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. MC-LED is also available in PVC Jacketed for Wet and Damp Locations.

APPLICATIONS
MC-LED (Type MC-PCS) cable is designed for use with LED and Fluorescent dimming systems and smart building technology that offers optimal control over building's lighting systems including outdoors, such as parking decks, sporting arenas, and parking lots where PVC jacketed. MC-LED may be surface mounted, fished and/or embedded in plaster in wet, damp, or 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). Jacketed MC-LED is identified for use in corrosive conditions, such as direct burial in earth or embedded in concrete. Meets acceptable uses in accordance with NEC 250.118(10)(a), 300.22(C), 330.12(2)(a), 330, 392, 396, 501, 502, 503, 504, 505, 518, 520, 530, 645 and 725.

1. Removable SmartColorID[1] Label
2. Interlocked Aluminum or Galvanized Lightweight Steel Armor
3. Separator Tape
4. PVC Nonmetallic Sheathing
5. TFN or Equivalent Copper Conductors
6. THHN/THWN-2 or Equivalent Solid or Stranded Copper Conductors

Size (AWG)	No. of Strands	Ground Wire Size (AWG)	Twisted Jacketed Pair (AWG)	Outside Diameter Over Armor (in)	Approximate Net Weight (lbs/1000 ft)		Allowable Ampacity (Amps)[2]		Standard Packaging (ft)
					Aluminum	Steel	75°	90°	
12/2	Solid	12 AWG Green Insulated	16/2 Solid	0.581	144.39	223.92	25	30	250' 1000'
10/2	Solid	10 AWG Green Insulated	16/2 Solid	0.649	190.60	280.98	35	40	250' 1000'
12/3	Solid	12 AWG Green Insulated	16/2 Solid	0.622	170.46	256.52	25	30	250' 1000'
10/3	Solid	10 AWG Green Insulated	16/2 Solid	0.679	229.03	324.21	35	40	250' 1000'
12/4	Solid	12 AWG Green Insulated	16/2 Solid	0.651	196.17	286.87	25	30	250' 1000'
12/2	Stranded	12 AWG Green Insulated	16/2 Solid	0.609	147.94	231.94	25	30	250' 1000'
10/2	Stranded	10 AWG Green Insulated	16/2 Solid	0.677	195.75	290.61	35	40	250' 1000'
12/3	Stranded	12 AWG Green Insulated	16/2 Solid	0.666	175.76	268.86	25	30	250' 1000'

[1] SmartColorID manufactured under Patent No. 7,954,530, 8,454,785, 8,826,960 & 8,905,108
[2] Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

NOW AVAILABLE

MC-LED is available with a PVC jacket for wet and damp locations. It is flame-retardant, sunlight-resistant and applied over the armor.

FEATURES
Installation costs reduced up to 50% over raceway and wire. Insulating anti-short bushings are supplied with each reel or coil, but not required per Section 330.40 of the NEC. SmartColorID labels are spaced at regular intervals on the exterior of the metal sheathing and are removable. For ease of installation and pulling, cable is reverse wound on reels. Coils are designed to be pulled from the inside.

Standard Conductor Color Coding

Phase Conductors	120V/208V/240V
2	Black/White
3	Black/White/Red
Ground	Green

Phase Conductors	277V/480V
2	Brown/Gray
3	Brown/Orange/Gray
Ground	Green

Additional colors available subject to ERQ

Sub-Assembly	
2	Purple/Gray

SmartColorID Legend: