

Armorlite® Type MC THHN/THWN Circuit Size Copper Conductor Dashed-Blue Armor

Copper THHN/THWN Insulated Singles. Green Insulated Copper Grounding Conductor. UL Listed 600 Volts. Rated VW-1. Lightweight Dashed-Blue Aluminum Interlocked Armor.

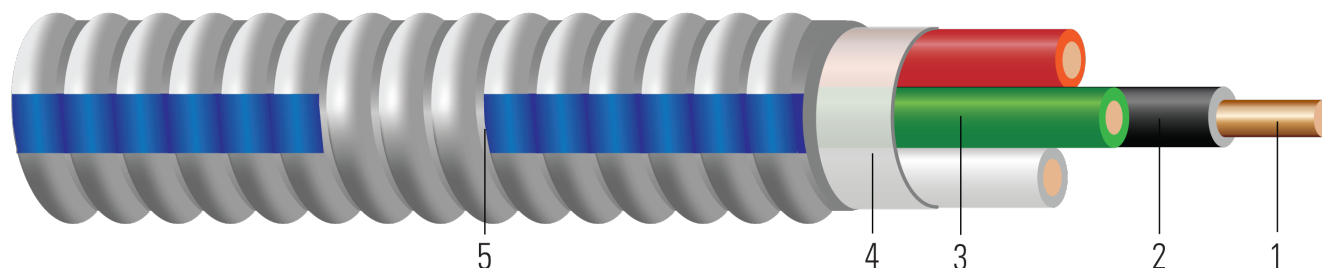


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3 and ASTM B8
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Ground:** Green insulated ground. Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
4. **Binder:** Mylar tape
5. **Armor:** Dashed-Blue Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire Armorlite® Type MC Cable is suitable for use as follows:

- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Environmental air-handling spaces per NEC 300.22 (C).
- Power, lighting, control, and signal circuits.
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC Article 645
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.
- Binder tape bearing the print legend is wrapped around the assembly
- Type THHN/THWN rated 90°C Dry.
- Anti-Short bushing not required

Southwire Armorlite® Type MC Cable - meets or exceeds the following requirements:

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) (www.ul.com)
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 330
- Listed for use in UL 1, 2 and 3 Hour Through Penetration Firestop Systems

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com



Southwire

**CABLETECH
SUPPORT™**

Services

- UL 83 Thermoplastic Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1479 Standard for Safety Fire Tests of Penetration Firestops
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- REACH/RoHS-2 (Chemical Limit) Compliant
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify “Made in the USA Only!” when ordering to ensure your project receives American made products.
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE E96627 {UL} TYPE MC XX AWG THHN OR THWN CDRS FOR USE IN CABLE TRAYS 600 VOLTS

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft
552764◇	14	2	BK/WE	0.064	Solid	20	1x14	0.451	80
552768◇	12	2	BN/GY	0.080	Solid	20	1x12	0.487	107
552765◇	12	3	BK/RD/WE	0.080	Solid	20	1x12	0.518	134
552770◇	12	4	BK/RD/BE/ WE	0.080	Solid	20	1x12	0.553	162
552771◇	10	2	BK/WE	0.101	Solid	25	1x10	0.554	154
552762◇	10	3	BK/RD/WE	0.101	Solid	25	1x10	0.593	194
552988◇	10	4	BN/YW/ PE/GY	0.101	Solid	25	1x10	0.637	235

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

Note: Conductor number = number of phase conductors plus neutral. Does not include green ground.

Table 2 – Electrical and Engineering Data

Cond. Size	Conductor Number	Min. Bend Radius	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
14	2	3.1	2.631	3.170	0.032	15	20	25
12	2	3.4	1.662	2.002	0.030	20	25	30
12	3	3.6	1.662	2.002	0.030	20	25	30
12	4	3.8	1.662	2.002	0.038	16	20	24
10	2	3.8	1.040	1.253	0.030	30	35	40
10	3	4.1	1.040	1.253	0.030	30	35	40
10	4	4.4	1.040	1.253	0.038	24	28	32

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

