

# Armorlite® Type MC THHN/THWN Intermediate Size Copper Conductor PVC Jacketed 120/208V Colors. Silicone Free

Copper THHN/THWN Insulated Singles. Green Insulated Copper Grounding Conductor. UL Listed. 600 Volts Rated VW-1. Lightweight Aluminum Interlocked Armor. PVC Jacketed, Sunlight Resistant.

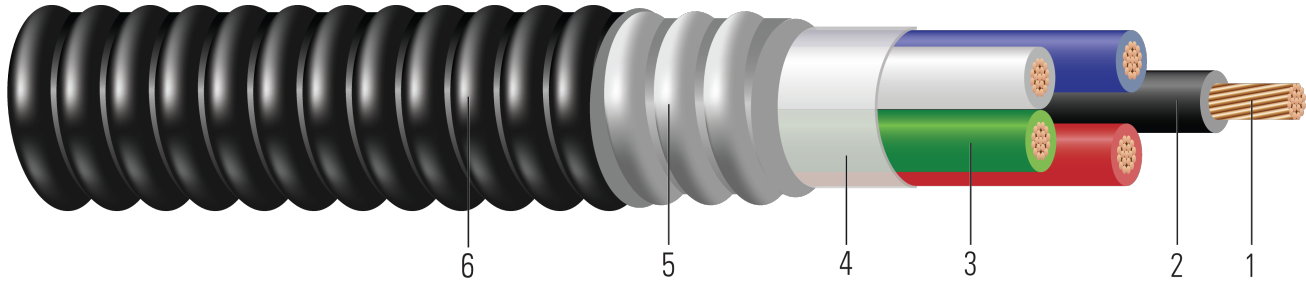


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** 19 strands class C compressed 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:** Aluminum Interlocked Armor
6. **Jacket:** Polyvinyl Chloride (PVC) Jacket, sunlight resistant, corrosion resistant

## APPLICATIONS AND FEATURES:

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

- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or of hydrochloric acids.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Suitable for Wet Location per NEC 330.10(A)(11)
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Installation in cable tray and approved raceways, or as aerial cable on a messenger.
- 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.
- Type THHN/THWN rated 90°C Dry/ 75°C Wet

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

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://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
- 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
- RoHS-2 (European Directive 2011/65/EU)
- 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:**

{SQFTG} SOUTHWIRE {UL} E96627 X/C XX AWG CU THHN OR THWN CDRS 600 VOLTS GG 1 X X AWG CU TYPE MC EZ-JKT FOR CT USE SUN. RES.90°C

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Jacket Thickness	Approx. OD	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	mil	inch	lbs/ 1000ft	lbs/ 1000ft
610073◇	8	2	BK,WE	0.143	19	35	1x10	0.645	50	0.745	135	300
610103◇	8	3	BK,RD,WE	0.143	19	35	1x10	0.739	50	0.839	186	384
610094◇	8	4	BK,RD,BE,WE	0.143	19	35	1x10	0.793	50	0.893	238	458
674460	6	2	BK,RD	0.179	19	35	1x8	0.786	50	0.834	163	408
610081◇	6	2	BK,WE	0.179	19	35	1x8	0.786	50	0.892	215	431
610084◇	6	3	BK,RD,WE	0.179	19	35	1x8	0.855	50	0.961	296	543
610099◇	6	4	BK,RD,BE,WE	0.179	19	35	1x8	0.929	50	1.035	378	657
653054	4	2	BK,RD	0.226	19	50	1x8	0.890	50	1.004	260	564
610108◇	4	3	BK,RD,WE	0.226	19	50	1x8	0.985	50	1.091	442	744
554285◇	3	3	BK,RD,WE	0.254	19	50	1x6	1.053	55	1.163	574	900
TBA	2	2	BK,RD	0.286	19	50	1x6	0.985	50	1.090	494	827
610112◇	2	3	BK,RD,WE	0.286	19	50	1x6	1.130	50	1.236	702	1047
555638◇	2	4	BK,RD,BE,WE	0.286	19	50	1x6	1.233	50	1.339	909	1336

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	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
8	2	5.2	264	0.653	0.786	0.052	50	55
8	3	5.9	396	0.653	0.786	0.052	50	55
8	4	6.3	422	0.653	0.786	0.052	40	44
6	2	5.8	419	0.411	0.495	0.051	65	75
6	2	6.2	419	0.411	0.495	0.051	65	75
6	3	6.7	629	0.411	0.495	0.051	65	75
6	4	7.2	671	0.411	0.495	0.051	52	60
4	2	7.0	667	0.258	0.310	0.048	85	95
4	3	7.6	1001	0.258	0.310	0.048	85	95
3	3	8.1	1262	0.205	0.246	0.047	100	115
2	2	7.6	1061	0.162	0.195	0.045	115	130
2	3	8.7	1592	0.162	0.195	0.045	115	130
2	4	9.4	1698	0.162	0.195	0.045	92	104

\* 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.

