Armorlite® Type MC THHN/THWN 600V Circuit 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.

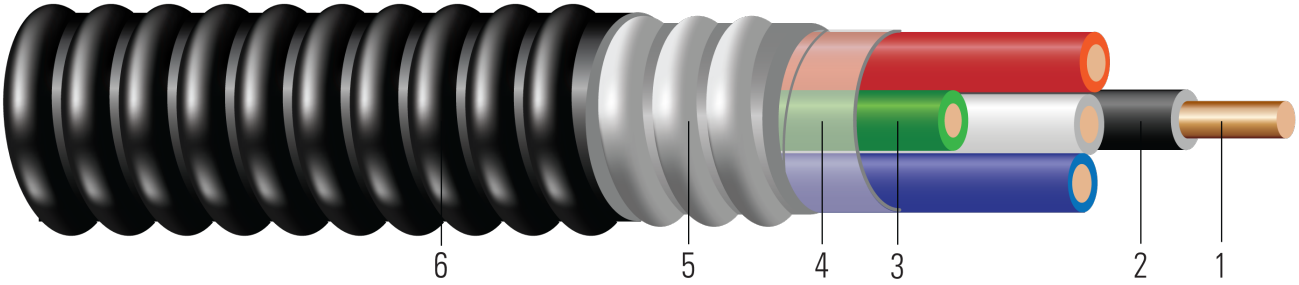

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid or 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 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 90ºC Dry/ 75ºC Wet
- 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

- 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
14 AWG | Solid												
610037◊	14	2	BK,WE	0.064	Solid	20	1x14	0.451	50	0.557	37	143
610041◊	14	3	BK,RD,WE	0.064	Solid	20	1x14	0.478	50	0.584	50	165
610045◊	14	4	BK,RD,BE,WE	0.064	Solid	20	1x14	0.508	50	0.614	62	187
12 AWG | Solid												
554666	12	2	BK,WE,GN	0.08	Solid	20	1x12	0.484	50	0.59	59	162
561045◊	12	2	BE,WE	0.080	Solid	20	1x12	0.487	50	0.593	59	175
561041◊	12	2	RD,WE	0.080	Solid	20	1x12	0.487	50	0.593	59	175
610050◊	12	2	BK,WE	0.080	Solid	20	1x12	0.487	50	0.593	59	162
610054◊	12	3	BK,RD,WE	0.080	Solid	20	1x12	0.518	50	0.624	79	207
610059◊	12	4	BK,RD,BE,WE	0.080	Solid	20	1x12	0.553	50	0.659	99	240
10 AWG | Solid												
561048◊	10	2	RD,WE	0.101	Solid	25	1x10	0.550	50	0.656	92	228
561052◊	10	2	BE,WE	0.101	Solid	25	1x10	0.554	50	0.660	92	232
610064◊	10	2	BK,WE	0.101	Solid	25	1x10	0.554	50	0.660	92	232
610068◊	10	3	BK,RD,WE	0.101	Solid	25	1x10	0.593	50	0.699	123	277
610074◊	10	4	BK,RD,BE,WE	0.101	Solid	25	1x10	0.637	50	0.743	154	324
10 AWG | 19 Strands												
678176	10	3	BK,WE,BE,GN	0.113	19	25	1x10	0.626	50	0.732	129	294
14 AWG | 19 Strands												
564289◊	14	3	BK,RD,WE	0.064	19	20	1x14	0.497	50	0.603	51	172
12 AWG | 19 Strands												
561439◊	12	2	BK,WE	0.090	19	20	1x12	0.508	50	0.614	60	183
567274◊	12	3	BK,RD,WE	0.090	19	20	1x12	0.542	50	0.648	80	215
677379◊	12	4	BK,RD,BE,WE	0.090	19	20	1x12	0.580	50	0.686	100	250
10 AWG | 19 Strands												
552808◊	10	2	BK,WE	0.117	19	25	1x10	0.583	50	0.689	97	245
585616◊	10	2	RD,WE	0.117	19	25	1x10	0.583	50	0.689	97	245
553631◊	10	3	BK,RD,WE	0.117	19	25	1x10	0.630	50	0.736	129	297
556420◊	10	4	BK,RD,BE,WE	0.117	19	25	1x10	0.678	50	0.784	161	349

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
14 AWG | Solid							
14	2	3.9	2.631	3.170	0.058	20	25
14	3	4.1	2.631	3.170	0.058	20	25
14	4	4.3	2.631	3.170	0.058	16	20
12 AWG | Solid							
12	2	4.1	1.662	2.002	0.054	25	30
12	2	4.2	1.662	2.002	0.054	25	30
12	2	4.2	1.662	2.002	0.054	25	30
12	2	4.2	1.662	2.002	0.054	25	30
12	3	4.4	1.662	2.002	0.054	25	30
12	4	4.6	1.662	2.002	0.054	20	24
10 AWG | Solid							
10	2	4.6	1.040	1.253	0.050	35	40
10	2	4.6	1.040	1.253	0.050	35	40
10	2	4.6	1.040	1.253	0.050	35	40
10	3	4.9	1.040	1.253	0.050	35	40
10	4	5.2	1.040	1.253	0.050	28	32
10 AWG | 19 Strands							
10	3	5.1	1.04	1.253	0.05	35	32
14 AWG | 19 Strands							
14	3	4.2	2.631	3.170	0.058	20	25
12 AWG | 19 Strands							
12	2	4.3	1.662	2.002	0.054	25	30
12	3	4.5	1.662	2.002	0.054	25	30
12	4	4.8	1.662	2.002	0.054	20	24
10 AWG | 19 Strands							
10	2	4.8	1.040	1.253	0.050	35	40
10	2	4.8	1.040	1.253	0.050	35	40
10	3	5.2	1.040	1.253	0.050	35	40
10	4	5.5	1.040	1.253	0.050	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.