

Armorlite® Type MC THHN/THWN 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 and Direct Burial.

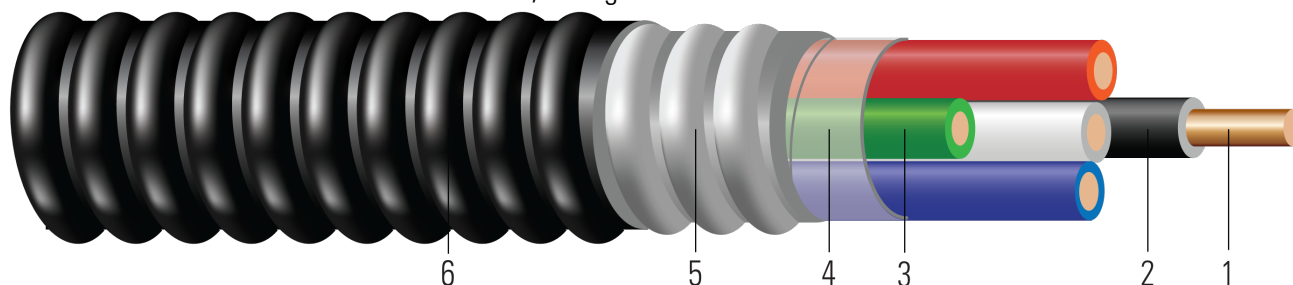


Image not to scale. See Table 1 for dimensions.

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

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.
- Direct burial applications, embedded in concrete, and 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(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
- 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 Standard Specification for Soft or Annealed Copper Wire



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Southwire

**CABLETECH
SUPPORT™**

Services

- 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
- 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:

{SQFTG} SOUTHWIRE MASTER-DESIGN {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. DIRECT BURIAL 90{D}C



Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size x Num	Diameter Over Armor	Jacket Thickness ¹	Approx. OD	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	mil	inch	lbs/1000ft
610037◇	14	2	BK/WE	0.064	Solid	20	1x14	0.451	50	0.557	143
610041◇	14	3	BK/RD/WE	0.064	Solid	20	1x14	0.478	50	0.584	165
564289◇	14	3	BK/RD/WE	0.064	Solid	20	1x14	0.497	50	0.603	172
610045◇	14	4	BK/RD/BE/WE	0.064	Solid	20	1x14	0.508	50	0.614	187
561045◇	12	2	BE/WE	0.08	Solid	20	1x12	0.487	50	0.593	175
561041◇	12	2	RD/WE	0.08	Solid	20	1x12	0.487	50	0.593	175
610050◇	12	2	BK/WE	0.08	Solid	20	1x12	0.487	50	0.593	162
610054◇	12	3	BK/RD/WE	0.08	Solid	20	1x12	0.518	50	0.624	207
610059◇	12	4	BK/RD/BE/WE	0.08	Solid	20	1x12	0.553	50	0.659	240
561052◇	10	2	BE/WE	0.101	Solid	25	1x10	0.554	50	0.660	232
561048◇	10	2	RD/WE	0.101	Solid	25	1x10	0.554	50	0.660	232
610064◇	10	2	BK/WE	0.101	Solid	25	1x10	0.554	50	0.660	232
610068◇	10	3	BK/RD/WE	0.101	Solid	25	1x10	0.593	50	0.699	277
610074◇	10	4	BK/RD/BE/WE	0.101	Solid	25	1x10	0.637	50	0.743	324
561439◇	12	2	BK/WE	0.09	19	20	1x12	0.508	50	0.614	183
567274◇	12	3	BK/RD/WE	0.09	19	20	1x12	0.542	50	0.648	215
677379◇	12	4	BK/RD/BE/WE	0.09	19	20	1x12	0.580	50	0.686	250
585616◇	10	2	RD/WE	0.117	19	25	1x10	0.587	50	0.693	248
552808◇	10	2	BK/WE	0.117	19	25	1x10	0.587	50	0.693	248
553631◇	10	3	BK/RD/WE	0.117	19	25	1x10	0.630	50	0.736	297
556420◇	10	4	BK/RD/BE/WE	0.117	19	25	1x10	0.678	50	0.784	349

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

Stock Number	Cond. Size	Min. Bend Radius	DC Resistance at 25°C	AC Resistance at 75°C	Allowable Ampacity Raceway 60°C [†]	Allowable Ampacity Raceway 75°C [†]	Allowable Ampacity Raceway 90°C [†]
	AWG/Kcmil	Inches	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
6100370	14	3.8	2.631	3.170	15	20	25
6100410	14	4.0	2.631	3.170	15	20	25
5642890	14	4.2	2.631	3.170	15	20	25
6100450	14	4.2	2.631	3.170	12	16	20
5610450	12	4.1	1.662	2.002	20	25	30
5610410	12	4.1	1.662	2.002	20	25	30
6100500	12	4.1	1.662	2.002	20	25	30
6100540	12	4.3	1.662	2.002	20	25	30
6100590	12	4.6	1.662	2.002	16	20	24
5610520	10	4.6	1.040	1.253	30	35	40
5610480	10	4.6	1.040	1.253	30	35	40
6100640	10	4.6	1.040	1.253	30	35	40
6100680	10	4.8	1.040	1.253	30	35	40
6100740	10	5.2	1.040	1.253	24	28	32
5614390	12	4.2	1.662	2.002	20	25	30
5672740	12	4.5	1.662	2.002	20	25	30
6773790	12	4.8	1.662	2.002	16	20	24
5856160	10	4.8	1.04	1.253	30	35	40
5528080	10	4.8	1.040	1.253	30	35	40
5536310	10	5.1	1.040	1.253	30	35	40
5564200	10	5.4	1.040	1.253	24	28	32

[†] Ampacities have been adjusted for more than Three Current-Carrying Conductors

[†] 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). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

