Armorlite® Type MC THHN/THWN Circuit Size Copper Conductor Isolated Ground

Copper THHN/THWN Insulated Singles. Two Insulated Grounding Conductors. UL Listed 600 Volts Rated VW-1. Lightweight Aluminum Interlocked Armor.

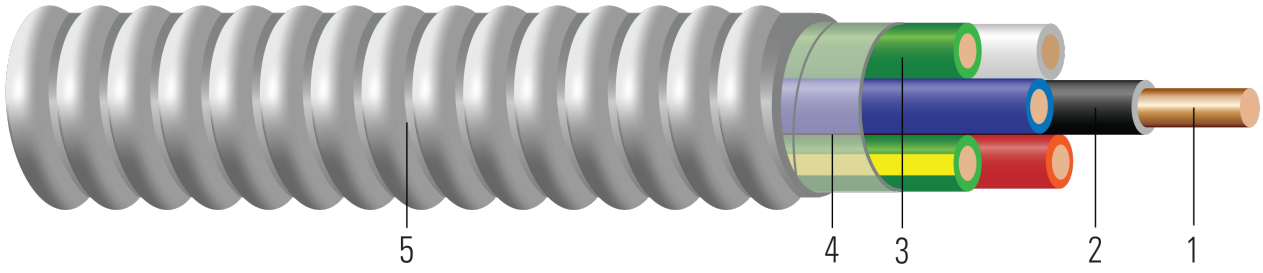

Image not to scale. See Table 1 for dimensions.

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:** Two insulated Green and Green/Yellow grounds. Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
4. **Binder:** Mylar tape
5. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire Armorlite® Type MC Cable -Isolated Ground is suitable for use as follow:

- Applications requiring redundant, dedicated or isolated grounding paths.
- 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).
- 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 645.5(D) & 645.5(D)(2)
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.
- Binder tape with print legend wrapped around assembly.
- Type THHN/THWN rated 90ºC Dry.

Southwire Armorlite® Type MC Cable - Isolated Ground 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
- 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
- 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.
- REACH - European Community Regulation

SAMPLE PRINT LEGEND:

E96627 MASTER-DESIGN {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	Conductor Stranding	Insulation Thickness	Ground Size x Num	Neutral Size x Num	Diameter Over Armor	Overall Weight
	AWG/ Kcmil				mils	No. x AWG	No. x AWG	inch	lbs/1000ft
695965◊	12	2	BK/WE	Solid	20	2 x 12	1 x 12	0.518	134
556323◊	12	2	RD/WE	Solid	20	2 x 12	1 x 12	0.518	134
556325◊	12	2	BE/WE	Solid	20	2 x 12	1 x 12	0.518	134
695999◊	10	2	BK/WE	Solid	25	2 x 10	1 x 10	0.593	194
555636◊	10	2	BE/WE	Solid	25	2 x 10	1 x 10	0.593	194
695973◊	12	3	BK/RD/WE	Solid	20	2 x 12	1 x 12	0.553	162
696005◊	10	3	BK/RD/WE	Solid	25	2 x 10	1 x 10	0.637	239
560950◊	12	3	BK/BE/WE	Solid	20	2 x 12	1 x 12	0.553	162
695981◊	12	4	BK/RD/BE/ WE	Solid	20	2 x 12	1 x 12	0.590	189
696013◊	10	4	BK/RD/BE/ WE	Solid	25	2 x 10	1 x 10	0.683	278
562419◊	12	4	BK/RD/BE/ WE	Solid	20	2 x 12	2 x 12	0.590	189
587697◊	12	6	See Table	Solid	20	2 x 12	1 x 12	0.628	240
551104◊	12	2	BK/WE	19	20	2 x 12	1 x 12	0.542	140
551298◊	10	2	BK/WE	19	25	2 x 10	1 x 10	0.630	209
551302◊	10	3	BK/RD/WE	19	25	2 x 10	1 x 10	0.678	254
551106◊	12	3	BK/RD/WE	19	20	2 x 12	1 x 12	0.565	159
551296◊	12	4	BK/RD/BE/ WE	19	20	2 x 12	1 x 12	0.617	200
555184◊	8	2	BK/WE	19	35	2 x 10	1 x 8	0.685	263
555189◊	8	4	BK/RD/BE/ WE	19	35	2 x 10	1 x 8	0.872	437

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	Neutral Stranding	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
695965◊	12	1	3.6	1.662	2.002	20	25	30
556323◊	12	1	3.6	1.662	2.002	20	25	30
556325◊	12	1	3.6	1.662	2.002	20	25	30
695999◊	10	1	4.1	1.040	1.253	30	35	40
555636◊	10	1	4.1	1.040	1.253	30	35	40
695973◊	12	1	3.8	1.662	2.002	20	25	30
696005◊	10	1	4.4	1.040	1.253	30	35	40
560950◊	12	1	3.8	1.662	2.002	20	25	30
695981◊	12	1	4.1	1.662	2.002	16	20	24
696013◊	10	1	4.7	1.040	1.253	24	28	32
562419◊	12	2	4.1	1.662	2.002	16	20	24
587697◊	12	1	4.3	1.662	2.002	16	20	24
551104◊	12	1	3.7	1.662	2.002	20	25	30
551298◊	10	1	4.4	1.040	1.253	30	35	40
551302◊	10	1	4.7	1.040	1.253	30	35	40
551106◊	12	1	3.9	1.662	2.002	20	25	30
551296◊	12	1	4.3	1.662	2.002	16	20	24
555184◊	8	1	4.7	0.653	0.786	40	50	55
555189◊	8	1	6.1	0.653	0.786	32	40	44

† 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.