Armorlite® Type MC XHHW Circuit Size Copper Conductor 120/208V Colors

Copper XHHWW Insulated Singles. Green Insulated Copper Grounding Conductor. UL Listed 600/1000 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor.

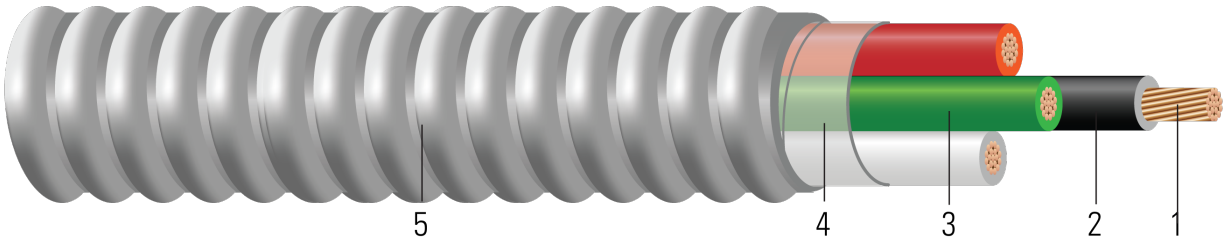

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid or 19 strands class C compressed copper per ASTM B3 and ASTM B8
2. **Insulation:** All phases are insulated cross-linked polyethylene XHHW
3. **Ground:** Green insulated ground. cross-linked polyethylene XHHW, plus bare copper ground
4. **Binder:** Mylar tape with print legend wrapped around assembly.
5. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

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

- Branch 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 Article 645
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.
- Binder tape with print legend wrapped around assembly.
- Type XHHW-2 rated 90ºC Wet or 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

- 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:

SOUTHWIRE E96627 {UL} TYPE MC XX AWG THHN OR THWN CDRS FOR USE IN CABLE TRAYS 1000 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	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft	lbs/1000ft
12 AWG | 7 Strands										
578753	12	2	BK,WE	0.088	7	30	1x12	0.58	60	136
578754	12	2	BN,GY	0.088	7	30	1x12	0.58	60	136
578755	12	3	BK,RD,WE	0.088	7	30	1x12	0.58	81	162
578756	12	3	BN,OE,GY	0.088	7	30	1x12	0.58	81	162
10 AWG | 7 Strands										
578747	10	2	BK,WE	0.113	7	30	1x10	0.66	95	182
578748	10	2	BN,GY	0.113	7	30	1x10	0.66	95	161
578749	10	3	BK,RD,WE	0.113	7	30	1x10	0.66	128	222

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 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
12 AWG | 7 Strands									
12	2	4.1	104	1.662	2.002	0.054	20	25	30
12	2	4.1	104	1.662	2.002	0.054	20	25	30
12	3	4.1	156	1.662	2.002	0.054	20	25	30
12	3	4.1	156	1.662	2.002	0.054	20	25	30
10 AWG | 7 Strands									
10	2	4.6	166	1.04	1.253	0.05	30	35	40
10	2	4.6	166	1.04	1.253	0.05	30	35	40
10	3	4.6	249	1.04	1.253	0.05	30	35	40

* 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.