MC-AP™ HCF Type MC All Purpose Health Care Facility Multi Neutral THHN/THWN Circuit Size Copper Conductor Green Aluminum Armor

Copper THHN Insulated Conductors. Full-Sized Aluminum Equipment Grounding/Bonding Conductor. UL Listed 600 Volt. Rated VW1. Lightweight Aluminum Interlocked Armor is Part of Equipment Bonding/Grounding Path.

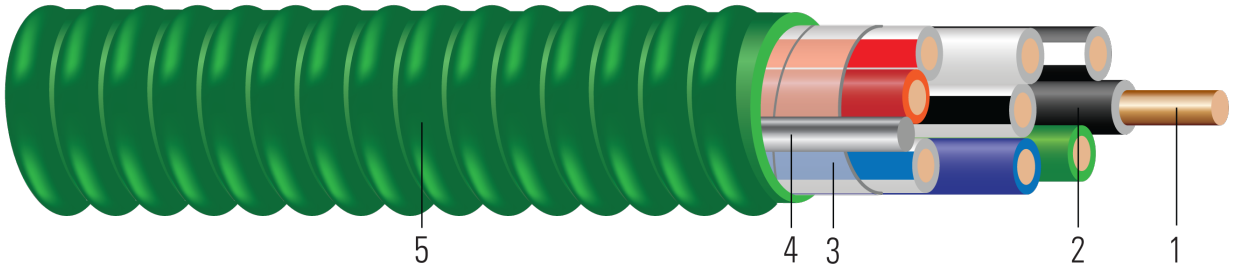

Image not to scale. See Table 1 for dimensions.

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. **Binder:** Mylar tape
4. **Ground:** Solid bare 8000 series aluminum grounding/bonding conductor
5. **Armor:** Green Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire MC-AP HCF Type MC All Purpose Multiple Circuits Health Care Facility Cable is suitable for use as follows:

- Multiple circuits for branch-circuit wiring for patient care areas of hospitals, medical centers, and other health care facilities (when installed in accordance with NEC® Articles 517 and 330, and mechanically protected per Article 300.4). Such areas include nursing homes, dental offices, clinics, and outpatient facilities. Use in hazardous anesthetizing areas is prohibited.
- Applications requiring redundant, dedicated or isolated grounding paths.
- 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.
- Use with UL Listed MCI-A fittings.
- Binder tape with print legend wrapped around assembly.
- Type THHN/THWN rated 90ºC Dry.
- Armor is in contact with aluminum grounding/bonding conductor and serves as a redundant equipment grounding path component

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
- 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.

SAMPLE PRINT LEGEND:

E96627 {UL} TYPE MC XX AWG THHN OR THWN CDRS FOR USE IN CABLE TRAYS 600 VOLTS -- ARMOR IS EQUIPMENT GROUNDING PATH COMPONENT

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Num x Neutral Size	Diameter Over Armor	Copper Weight	Overall Weight
	AWG/ Kcmil		inch		mils	No. x AWG	No. x AWG	inch	lbs/1000ft	lbs/1000ft
12 AWG | Solid										
557738◊	12	4	0.080	Solid	20	1x10	2x12	0.573	99	172
567224◊	12	8	0.080	Solid	20	1x10	4x12	0.684	179	278
10 AWG | Solid										
567226◊	10	4	0.101	Solid	25	1x8	2x10	0.663	154	251
562716◊	10	6	0.101	Solid	25	1x8	3x10	0.709	216	329
567228◊	10	8	0.101	Solid	25	1x8	4x10	0.853	278	444
12 AWG | 19 Strands										
567238◊	12	4	0.090	19	20	1x10	2x12	0.606	100	179
567236◊	12	6	0.090	19	20	1x10	3x12	0.640	140	231

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	Neutral Stranding	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
12 AWG | Solid								
12	4	2	4.0	1.662	2.002	0.054	20	24
12	8	4	4.8	1.662	2.002	0.054	17	21
10 AWG | Solid								
10	4	2	4.6	1.040	1.253	0.050	28	32
10	6	3	5.0	1.040	1.253	0.050	28	32
10	8	4	6.0	1.040	1.253	0.050	24	28
12 AWG | 19 Strands								
12	4	2	4.2	1.662	2.002	0.054	20	24
12	6	3	4.5	1.662	2.002	0.054	20	24

* 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.