SIMpull MC-AP™ Type MC All Purpose THHN/THWN Circuit Size Copper Conductor 120/208V Colors

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. Lightweight Low Profile Aluminum Interlocked Armor.

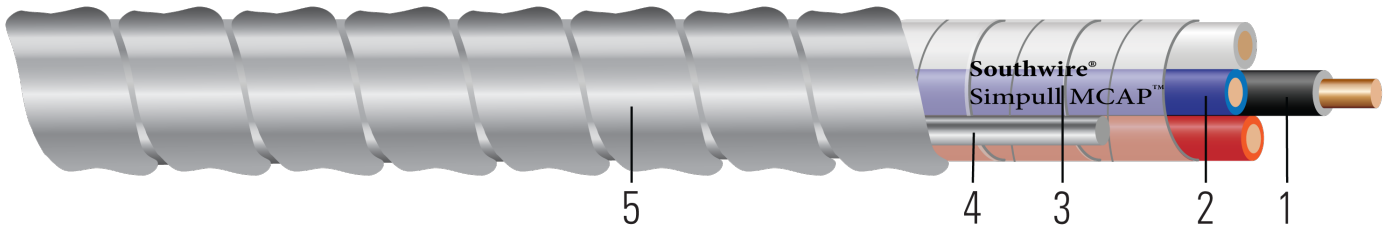

Image not to scale. See Table 1 for dimensions.

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. **Binder:** Mylar tape
4. **Ground:** Full-sized bare 8000 series aluminum grounding/bonding conductor. Armor and bare aluminum conductor form the equipment ground path.
5. **Armor:** Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

Southwire SIMpull MCAP™ All Purpose Type MC Cable is suitable for use as follows:

- 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 SIMpull MCAP™ 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

UPDATED: March 17, 2026, 8:53 p.m.UTC REVISION: 1.000.003

- 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.

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	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Diameter Over Armor	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	inch	lbs/1000ft	lbs/1000ft
14 AWG | Solid									
TBA	14	2	BK,WE	0.064	Solid	20	0.451	25	70
TBA	14	3	BK,RD,WE	0.064	Solid	20	0.468	37	87
TBA	14	4	BK,RD,BE,WE	0.064	Solid	20	0.495	50	105
12 AWG | Solid									
TBA	12	2	BK,RD	0.08	Solid	20	0.481	39	91
TBA	12	3	RD,WE,BE	0.08	Solid	20	0.512	59	118
TBA	12	3	BK,WE,BE	0.08	Solid	20	0.506	59	117
TBA	12	6	BK,RD,BE,WE/BK,WE/ RD,WE/BE	0.08	Solid	20	0.61	119	199
TBA	12	6	BK,BK/WE,RD/WE,RD,WE/ BK,WE	0.08	Solid	20	0.61	119	199
TBA	12	8	BK,BK/WE,RD,RD/ WE,BE,BE/WE,WE,WE/BK	0.08	Solid	20	0.648	159	251
TBA	12	2	RD,WE	0.080	Solid	20	0.493	39	92
TBA	12	2	BE,WE	0.080	Solid	20	0.487	39	92
459362	12	2	BK,WE	0.080	Solid	20	0.477	40	96
459364	12	3	BK,RD,WE	0.080	Solid	20	0.497	60	121
TBA	12	4	BK,RD,BE,WE	0.080	Solid	20	0.544	79	145
12 AWG | 19 Strands									
TBA	12	3	RD,PE,WE	0.088	19	20	0.534	60	123
TBA	12	4	BK,RD,WE/BK,WE/RD	0.088	19	20	0.568	80	151
10 AWG | Solid									
TBA	10	2	BK,WE	0.101	Solid	25	0.555	61	130
TBA	10	2	BE,WE	0.101	Solid	25	0.561	61	132
TBA	10	2	RD,WE	0.101	Solid	25	0.561	61	132
459365	10	3	BK,RD,WE	0.101	Solid	25	0.571	92	172
TBA	10	4	BK,RD,WE/BK,WE/RD	0.101	Solid	25	0.619	123	210
TBA	10	4	BK,RD,BE,WE	0.101	Solid	25	0.619	123	210
TBA	10	6	BK,BK/WE,RD,RD/ WE,WE,WE/BK	0.101	Solid	25	0.709	185	292
TBA	10	6	BK,RD,BE,WE/BK,WE/ RD,WE/BE	0.101	Solid	25	0.709	185	292
10 AWG | 19 Strands									
TBA	10	4	BK,WE,RD,BE	0.113	19	25	0.656	129	225
TBA	10	6	BK,RD,BE,WE/BK,WE/ RD,WE/BE	0.113	19	25	0.731	194	325
TBA	10	6	BK,RD,BK/WE,RD/WE,WE/ BK,WE	0.113	19	25	0.755	194	310
TBA	8	2	BK,WE	0.141	19	35	0.688	102	198
TBA	8	3	BK,RD,WE	0.141	19	35	0.722	154	265
12 AWG | 19 Strands									

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Diameter Over Armor	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	inch	lbs/1000ft	lbs/1000ft
TBA	12	2	BE,WE	0.090	19	20	0.507	40	95
TBA	12	2	RD,WE	0.090	19	20	0.507	40	95
459363	12	2	BK,WE	0.090	19	20	0.497	40	99
459367	12	3	BK,RD,WE	0.090	19	20	0.519	60	126
TBA	12	4	BK,RD,BE,WE	0.090	19	20	0.562	80	150
10 AWG | 19 Strands									
TBA	10	2	BK,WE	0.117	19	25	0.586	64	139
TBA	10	3	BK,RD,WE	0.117	19	25	0.613	97	181

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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	3.2	2.631	3.170	0.058	20	25
14	3	3.3	2.631	3.170	0.058	20	25
14	4	3.5	2.631	3.170	0.058	16	20
12 AWG | Solid							
12	2	3.4	1.662	2.002	0.054	25	30
12	3	3.6	1.662	2.002	0.054	20	24
12	3	3.5	1.662	2.002	0.054	20	24
12	6	4.3	1.662	2.002	0.054	17	21
12	6	4.3	1.662	2.002	0.054	17	21
12	8	4.5	1.662	2.002	0.054	12	15
12	2	3.5	1.662	2.002	0.054	25	30
12	2	3.4	1.662	2.002	0.054	25	30
12	2	3.4	1.662	2.002	0.054	25	30
12	3	3.5	1.662	2.002	0.054	25	30
12	4	3.8	1.662	2.002	0.054	20	24
12 AWG | 19 Strands							
12	3	3.7	1.662	2.002	0.054	20	24
12	4	4	1.662	2.002	0.054	20	24
10 AWG | Solid							
10	2	3.9	1.040	1.253	0.050	35	40
10	2	3.9	1.04	1.253	0.05	35	40
10	2	3.9	1.04	1.253	0.05	35	40
10	3	4.1	1.040	1.253	0.050	35	40
10	4	4.3	1.04	1.253	0.05	28	32
10	4	4.3	1.040	1.253	0.050	28	32
10	6	5	1.04	1.253	0.05	24	28
10	6	5	1.04	1.253	0.05	24	28
10 AWG | 19 Strands							
10	4	4.6	1.04	1.253	0.05	28	32
10	6	5.1	1.04	1.253	0.05	24	28
10	6	5.3	1.04	1.253	0.05	24	28
8	2	4.8	0.653	0.786	0.052	50	55
8	3	5.1	0.653	0.786	0.052	40	44
12 AWG | 19 Strands							
12	2	3.5	1.662	2.002	0.054	25	30
12	2	3.5	1.662	2.002	0.054	25	30
12	2	3.1	1.662	2.002	0.054	25	30
12	3	3.7	1.662	2.002	0.054	25	30
12	4	3.9	1.662	2.002	0.054	20	24

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
10 AWG | 19 Strands							
10	2	4.1	1.040	1.253	0.050	35	40
10	3	4.3	1.040	1.253	0.050	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.