SIMpull MC™ THHN/THWN Circuit Size Copper Conductor 120/208V Colors

Copper THHN/THWN Insulated Singles. Green Insulated Copper Grounding Conductor. UL Listed. 600 Volts Rated VW-1. Lightweight Low Profile Aluminum Interlocked Armor.

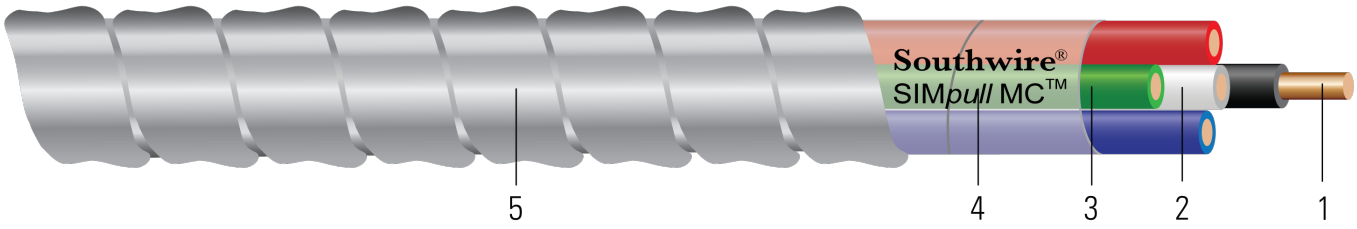


Image not to scale. See Table 1 for dimensions.

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. **Ground:** Green insulated ground. Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
4. **Binder:** Mylar tape with print legend wrapped around assembly.
5. **Armor:** Low Profile Aluminum Interlocked Armor

APPLICATIONS AND FEATURES:

- Southwire SIMpull 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
- Binder tape with print legend wrapped around assembly.
- Type THHN/THWN rated 90ºC Dry.
- Anti-Short bushing not required

Southwire SIMpull 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

Copyright © 2024 Southwire Company, LLC. All Rights Reserved

- 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)
- Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661
- 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 600 VOLTS

Copyright © 2024 Southwire Company, LLC. All Rights Reserved

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
137914	14	2	BK/WE	0.064	Solid	20	1x14	0.415	37	76
TBA	14	3	BK/WE/ BE	0.064	Solid	20	1x14	0.464	50	98
665383	14	3	BK/WE/ RD	0.064	Solid	20	1x14	0.442	50	93
TBA	14	4	BK/RD/ BE/WE	0.064	Solid	20	1x14	0.493	62	116
665378	12	2	BE/WE	0.080	Solid	20	1x12	0.451	59	104
137912	12	2	BK/WE	0.080	Solid	20	1x12	0.451	59	103
665377	12	2	RD/WE	0.080	Solid	20	1x12	0.451	59	103
137918	12	2	BN/GY	0.080	Solid	20	1x12	0.451	59	103
665381	12	2	OE/GY	0.080	Solid	20	1x12	0.451	59	103
665382	12	2	YW/GY	0.080	Solid	20	1x12	0.451	59	103
665387	12	3	BN/OE/ GY	0.080	Solid	20	1x12	0.482	79	128
665436	12	3	BK/RD/BE	0.080	Solid	20	1x12	0.482	79	128
137913	12	3	BK/RD/ WE	0.080	Solid	20	1x12	0.482	79	128
665384	12	4	BK/RD/ BE/WE	0.080	Solid	20	1x12	0.517	99	155
TBA	12	4	BK/RD/ BE/WE	0.080	Solid	20	1x12	0.536	99	162
665379	10	2	RD/WE	0.101	Solid	25	1x10	0.518	92	147
TBA	10	2	BE/WE	0.101	Solid	25	1x10	0.538	92	154
665380	10	2	BN/GY	0.101	Solid	25	1x10	0.518	92	147
137917	10	2	BK/WE	0.101	Solid	25	1x10	0.518	92	147
137916	10	3	BK/RD/ WE	0.101	Solid	25	1x10	0.557	123	187
TBA	10	4	BK/RD/ BE/WE	0.101	Solid	25	1x10	0.620	154	235
TBA	14	2	BK/WE	0.073	19	20	1x14	0.456	38	83
TBA	14	3	BK/WE/ RD	0.073	19	20	1x14	0.485	51	103
137915	12	2	BK/WE	0.090	19	20	1x12	0.472	60	107
665385	12	3	BK/RD/ WE	0.090	19	20	1x12	0.506	80	134
TBA	12	4	BK/RD/ BE/WE	0.090	19	20	1x12	0.563	100	169
665386	10	2	BK/WE	0.117	19	25	1x10	0.551	97	159
TBA	10	3	BK/RD/BE	0.117	19	25	1x10	0.616	129	209
TBA	10	4	BK/RD/ BE/WE	0.117	19	25	1x10	0.663	161	254

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

Copyright © 2024 Southwire Company, LLC. All Rights Reserved
UPDATED: March 21, 2024, 12:42 p.m.UTC REVISION: 1.000.013

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	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	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
14	2	2.9	2.631	3.170	0.058	15	20	25
14	3	3.9	2.631	3.170	0.058	15	20	25
14	3	3.1	2.631	3.170	0.058	15	20	25
14	4	4.2	2.631	3.170	0.058	12	16	20
12	2	4.0	1.662	2.002	0.054	20	25	30
12	2	3.2	1.662	2.002	0.054	20	25	30
12	2	3.2	1.662	2.002	0.054	20	25	30
12	2	3.2	1.662	2.002	0.054	20	25	30
12	2	3.2	1.662	2.002	0.054	20	25	30
12	2	3.2	1.662	2.002	0.054	20	25	30
12	3	3.4	1.662	2.002	0.054	20	25	30
12	3	3.4	1.662	2.002	0.054	20	25	30
12	3	3.4	1.662	2.002	0.054	20	25	30
12	4	3.6	1.662	2.002	0.054	16	20	24
12	4	4.5	1.662	2.002	0.054	16	20	24
10	2	3.6	1.040	1.253	0.050	30	35	40
10	2	4.5	1.040	1.253	0.050	30	35	40
10	2	3.6	1.040	1.253	0.050	30	35	40
10	2	3.6	1.040	1.253	0.050	30	35	40
10	3	3.9	1.040	1.253	0.050	30	35	40
10	4	5.0	1.040	1.253	0.050	24	28	32
14	2	3.9	2.631	3.170	0.058	15	20	25
14	3	4.1	2.631	3.170	0.058	15	20	25
12	2	3.3	1.662	2.002	0.054	20	25	30
12	3	3.5	1.662	2.002	0.054	20	25	30
12	4	4.6	1.662	2.002	0.054	16	20	24
10	2	3.9	1.040	1.253	0.050	30	35	40
10	3	5.0	1.040	1.253	0.050	30	35	40
10	4	5.3	1.040	1.253	0.050	24	28	32

* 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.