

Armorlite® Type MC THHN/THWN PVC Jacketed Copper Conductor Feeder Cable. Silicone Free

Copper THHN/THWN Insulated Singles. Bare Copper Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor. PVC Jacketed, Sunlight Resistant.

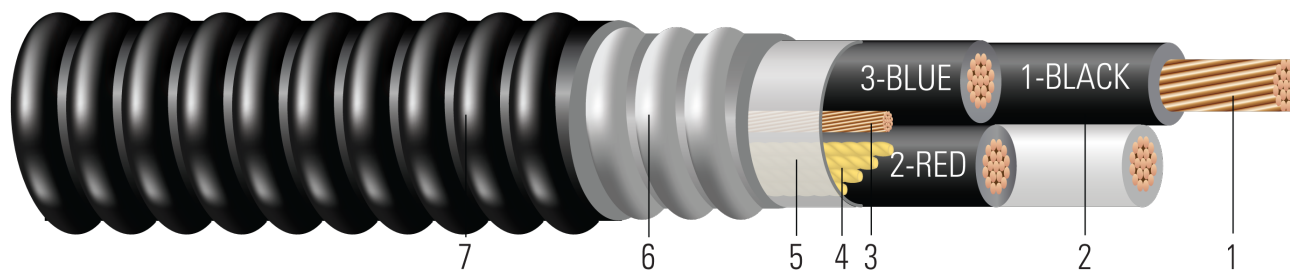


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded copper per ASTM B3 and ASTM B8
- Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
- Ground:** Bare copper ground
- Filler:** Fillers as needed
- Binder:** Mylar tape
- Armor:** Aluminum Interlocked Armor
- Jacket:** Polyvinyl Chloride (PVC) sunlight resistant, and corrosion resistant

APPLICATIONS AND FEATURES:

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

- Feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or of hydrochloric acids.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Suitable for Wet Location per NEC 330.10(A)(11)
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5.
- Installation in cable tray and approved raceways, or as aerial cable on a messenger.
- 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.
- Type THHN/THWN rated 90°C Dry/ 75°C Wet

Southwire Armorlite® Type MC Feeder 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



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Southwire

**CABLETECH
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Services

- 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:

SOUTHWIRE {UL} E96627 X/C AWG XXX CU THHN OR THWN CDRS 600 VOLTS GW 1 X AWG X TYPE MC EZ-JKT FOR CT USE SUN. RES. 90 DEGREES C {YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Conductor Number | Diameter Over Conductor | Conductor Stranding | Insulation Thickness | Ground Size | Diameter Over Armor | Jacket Thickness | Approx. OD | Overall Weight |
|--------------|---------------|------------------|-------------------------|---------------------|----------------------|--------------|---------------------|------------------|------------|----------------|
| | AWG/ Kcmil | | inch | | mils | No. x AWG | inch | mil | inch | lbs/1000ft |
| 554293◇ | 1 | 3 | 0.322 | 19 | 60 | 1x6 GG | 1.268 | 50 | 1.378 | 1286 |
| 554288◇ | 2/0 | 3 | 0.405 | 19 | 60 | 1x6 | 1.339 | 50 | 1.449 | 1783 |
| 555161◇ | 3/0 | 3 | 0.456 | 19 | 60 | 1x4 | 1.447 | 50 | 1.547 | 2187 |
| 553989◇ | 4/0 | 3 | 0.512 | 19 | 60 | 1x4 | 1.639 | 60 | 1.771 | 2752 |
| 564193◇ | 350 | 3 | 0.661 | 37 | 70 | 1x3/0 | 2.242 | 60 | 2.374 | 4727 |
| 555668◇ | 500 | 3 | 0.789 | 37 | 70 | 1x2 | 2.260 | 75 | 2.426 | 5876 |
| 554290◇ | 1/0 | 4 | 0.361 | 19 | 60 | 1x6 | 1.362 | 50 | 1.460 | 1864 |
| 554384◇ | 2/0 | 4 | 0.405 | 19 | 60 | 1x6 | 1.573 | 60 | 1.693 | 2371 |
| 554291◇ | 3/0 | 4 | 0.456 | 19 | 60 | 1x4 | 1.694 | 60 | 1.975 | 2957 |
| 554331◇ | 4/0 | 4 | 0.512 | 19 | 60 | 1x4 | 1.795 | 60 | 1.927 | 3548 |
| 554948◇ | 350 | 4 | 0.661 | 37 | 70 | 1x3 | 2.242 | 60 | 2.362 | 5514 |
| 555766◇ | 500 | 4 | 0.789 | 37 | 70 | 1x2 | 2.499 | 75 | 2.649 | 7568 |
| 564204◇ | 500 | 4 | 0.789 | 37 | 70 | 1x1/0 | 2.495 | 75 | 2.661 | 7802 |

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. Does not include ground

Note: GG = Green insulated 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 |
| 1 | 3 | 9.6 | 2008 | 0.128 | 0.154 | 0.046 | 110 | 130 | 145 |
| 2/0 | 3 | 10.1 | 3194 | 0.081 | 0.097 | 0.043 | 145 | 175 | 195 |
| 3/0 | 3 | 10.8 | 4027 | 0.064 | 0.078 | 0.042 | 165 | 200 | 225 |
| 4/0 | 3 | 12.3 | 5078 | 0.051 | 0.062 | 0.041 | 195 | 230 | 260 |
| 350 | 3 | 16.6 | 8400 | 0.031 | 0.039 | 0.040 | 260 | 310 | 350 |
| 500 | 3 | 16.9 | 12000 | 0.022 | 0.029 | 0.039 | 320 | 380 | 430 |
| 1/0 | 4 | 10.2 | 3379 | 0.102 | 0.122 | 0.044 | 100 | 120 | 136 |
| 2/0 | 4 | 11.8 | 4259 | 0.081 | 0.097 | 0.043 | 116 | 140 | 156 |
| 3/0 | 4 | 13.8 | 5369 | 0.064 | 0.078 | 0.042 | 132 | 160 | 180 |
| 4/0 | 4 | 13.4 | 6771 | 0.051 | 0.062 | 0.041 | 156 | 184 | 208 |
| 350 | 4 | 16.5 | 11200 | 0.031 | 0.039 | 0.040 | 208 | 248 | 280 |
| 500 | 4 | 18.5 | 16000 | 0.022 | 0.029 | 0.039 | 256 | 304 | 344 |
| 500 | 4 | 18.6 | 16000 | 0.022 | 0.029 | 0.039 | 256 | 304 | 344 |

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

