



# 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.

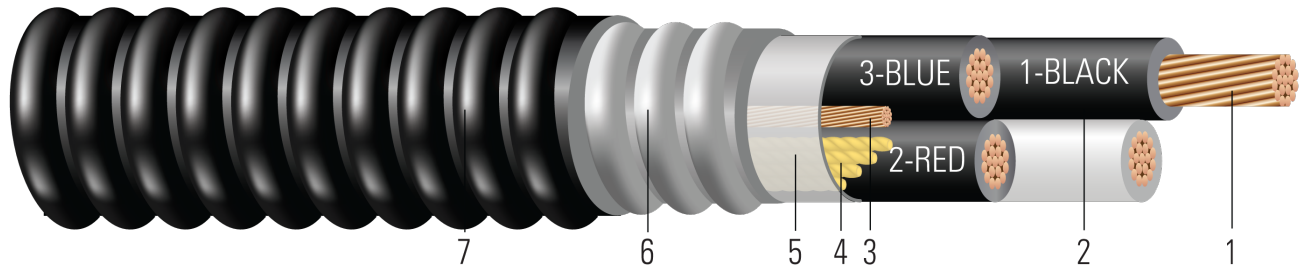


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Class B compressed stranded copper per ASTM B3 and ASTM B8
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Ground:** Bare copper ground
4. **Filler:** Fillers as needed
5. **Binder:** Mylar tape
6. **Armor:** Aluminum Interlocked Armor
7. **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](http://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:**

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 {YYYYY} {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 | Copper Weight | Overall Weight |
|--------------|---------------|------------------|-------------------------|---------------------|----------------------|--------------|---------------------|------------------|------------|---------------|----------------|
|              | AWG/<br>Kcmil |                  | inch                    |                     | mils                 | No. x<br>AWG | inch                | mil              | inch       | lbs/1000ft    | lbs/1000ft     |
| 564204◇      | 500           | 4                | 0.789                   | 37                  | 70                   | 1x1/0        | 2.495               | 80               | 2.661      | 6566          | 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 75°C | Allowable Ampacity Raceway 90°C |
|---------------|------------------|------------------|------------------|-----------------------|-----------------------|----------------------------|---------------------------------|---------------------------------|
| AWG/<br>Kcmil |                  | Inches           | Lbs              | Ω/1000ft              | Ω/1000ft              | Ω/1000ft                   | Amp                             | Amp                             |
| 500           | 4                | 18.6             | 12800            | 0.022                 | 0.029                 | 0.039                      | 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.

