



## **Armorlite® Type MC THHN/THWN PVC Jacketed Aluminum Conductor Feeder Cable 120/208V Colors. Silicone Free**

Aluminum THHN/THWN Insulated Singles with 8000 series Triple E™ Aluminum Alloy. Bare AlumaFlex™ Aluminum Alloy Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor. Overall PVC Jacket. Sunlight Resistant.



Image not to scale. See Table 1 for dimensions.

### **CONSTRUCTION:**

1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B801
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Ground:** Bare aluminum 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 )
- 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

**Color Code - 3/C: Black, Red, White**

- 4/C: Black, Red, Blue, White

**SPECIFICATIONS:**

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- 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 XXX KCMIL COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 THHN OR THWN CDRS 600 VOLTS GW 1 X X AWG TYPE MC EZ-JKT FOR CT USE SUN. RES. 90 DEGREES C

**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size    | Conductor Number | Color    | Diameter Over Conductor | Conductor Stranding | Insulation Thickness | Ground Size  | Diameter Over Armor | Jacket Thickness | Approx. OD | Overall Weight |
|--------------|---------------|------------------|----------|-------------------------|---------------------|----------------------|--------------|---------------------|------------------|------------|----------------|
|              | AWG/<br>Kcmil |                  |          | inch                    |                     | mils                 | No. x<br>AWG | inch                | mil              | inch       | lbs/1000ft     |
| 555812       | 750           | 3                | BK,RD,WE | 0.908                   | 58                  | 80                   | 1x1/0        | 2.620               | 80               | 2.786      | 3553           |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

\* Strand count meets minimum number per ASTM

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 | 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                             |
| 750           | 3                | 19.5             | 13500            | 0.024                 | 0.031                 | 0.038                      | 385                             | 435                             |

\* 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.

