



Armorlite® Armored Thermostat Type MC

18 AWG TFN/TEWN Insulated Singles. Green Insulated Ground. UL Listed. 600 Volts. Rated VV-1. Steel Interlocked Armor.

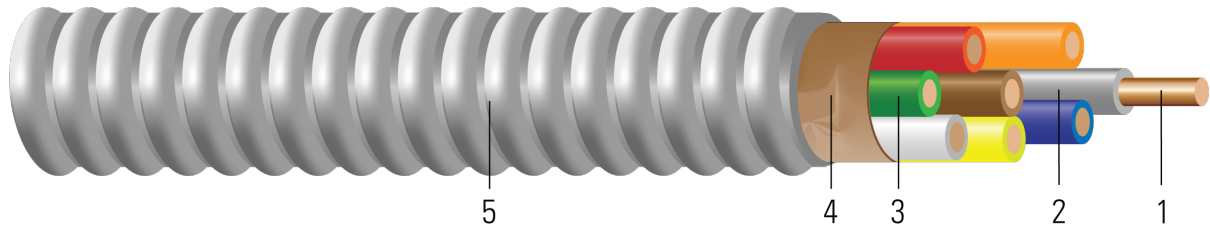


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 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 TFFN
3. **Ground:** Green insulated ground. Polyvinyl Chloride with Nylon Sheath Type TFFN
4. **Binder:** Paper tape
5. **Armor:** Steel Interlocked Armor

APPLICATIONS AND FEATURES:

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

- Signal, control, 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 Article 645
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.

Southwire Armorlite® 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
- UL 66 Fixture Wire
- UL 1569 Metal-Clad Cables
- 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.
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

E96627 {UL} TYPE MC AWG XXTHHN OR THWN CDRS FOR USE IN CABLE TRAYS 600 VOLTS

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Conductor Number | Color | Diameter Over Conductor | Conductor Stranding | Insulation Thickness | Approx. OD | Copper Weight | Overall Weight |
|----------------|---------------|------------------|-------------------------------|-------------------------|---------------------|----------------------|------------|---------------|----------------|
| | AWG/ Kcmil | | | inch | | mils | inch | lbs/1000ft | lbs/1000ft |
| 18 AWG Solid | | | | | | | | | |
| 553173◇ | 18 | 2 | BK, WE | 0.040 | Solid | 15 | 0.386 | 9 | 77 |
| 553174◇ | 18 | 3 | BK, RD, WE | 0.040 | Solid | 15 | 0.386 | 14 | 84 |
| 553170◇ | 18 | 4 | BK, RD BE, WE | 0.040 | Solid | 15 | 0.419 | 19 | 96 |
| 553171◇ | 18 | 5 | BK, RD BE, WE, GN | 0.040 | Solid | 15 | 0.442 | 24 | 109 |
| 553169◇ | 18 | 6 | BK, RD BE, WE, YW, GN | 0.040 | Solid | 15 | 0.442 | 29 | 116 |
| 554763◇ | 18 | 7 | BK, RD BE, WE, YW, BN, OE, GN | 0.040 | Solid | 15 | 0.466 | 39 | 135 |

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 plus neutral. Does not include green ground.

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 90°C |
|----------------|------------------|------------------|-----------------------|-----------------------|----------------------------|---------------------------------|
| AWG/ Kcmil | | Inches | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp |
| 18 AWG Solid | | | | | | |
| 18 | 2 | 2.7 | 6.669 | 8.035 | 0.036 | 14 |
| 18 | 3 | 2.7 | 6.669 | 8.035 | 0.036 | 14 |
| 18 | 4 | 2.9 | 6.669 | 8.035 | 0.036 | 11 |
| 18 | 5 | 3.1 | 6.669 | 8.035 | 0.036 | 11 |
| 18 | 6 | 3.1 | 6.669 | 8.035 | 0.036 | 11 |
| 18 | 7 | 3.3 | 6.669 | 8.035 | 0.036 | 9 |

* 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.

