

Armorlite® Type MC Neutral Per Phase



14 AWG through 8 AWG Copper THHN/THWN Insulated Singles. Dedicated Neutral Conductor for Each Phase Conductor. Green Copper THHN Insulated Grounding Conductor. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor.

APPLICATIONS

Southwire Armorlite® Type MC Cable – Neutral Per Phase is suitable for use as follows:

- Applications affected by harmonics generated from non-linear switching loads, such as computers, variable frequency drives, electrical test equipment, and office equipment.
- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Compliance with NEC 210.7 for multiple branch circuits.
- 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 645.5(D) & 645.5(D)(2).
- Class I Div. 2, Class II Div. 2, & Class III Div. 1 Hazardous Locations.

STANDARDS & REFERENCES

Southwire Armorlite® Type MC Cable – Neutral Per Phase meets or exceeds the following requirements:

- UL 83
- UL 1569
- UL 1685
- 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
- Jacketed & Non Jacketed will both pass " UL Test" & "FT4/IEEE 1202" (70,000 Btu/hr) Vertical Cable Tray Flame Test
- REACH/RoHS-2 (Chemical Limit) Compliant

CONSTRUCTION

Southwire Armorlite® Type MC Cable – Neutral Per Phase is constructed with solid soft-drawn copper Type THHN/THWN phase conductors, a dedicated neutral per phase conductor, and an insulated copper grounding conductor. The conductors are cabled together and a binder tape bearing the print legend is applied over the conductors. Aluminum interlocking armor is applied over the cable assembly. An optional overall PVC jacket can be applied over the armor.



The Power of Connections.™



Southwire®

| CONDUCTOR SIZE AND COLORS | GROUNDING SIZE AND COLOR | STOCK NUMBER | | WEIGHT (LBS/1000') | OVERALL DIAMETER (INCHES) |
|---|--------------------------|--------------|--------------|--------------------|---------------------------|
| | | COIL (250') | REEL (1000') | | |
| SOLID CONDUCTOR COLORS 120/208V (ONE GROUND) | | | | | |
| 12/2 SOLID (BLACK/RED) 12/2 SOLID (WHITE-BLACK/WHITE-RED) | 12 SOLID (GREEN) | 55-49-91-01 | 55-49-91-03 | 155 | .539 |
| 12/3 SOLID (BLACK/RED/BLUE) 12/3 SOLID (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 12 SOLID (GREEN) | 55-49-90-01 | 55-49-90-03 | 203 | .574 |
| 10/2 SOLID (BLACK/RED) 10/2 SOLID (WHITE-BLACK/WHITE-RED) | 10 SOLID (GREEN) | 56-70-63-01 | 56-70-63-02 | 229 | .623 |
| 10/3 SOLID (BLACK/RED/BLUE) 10/3 SOLID (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 10 SOLID (GREEN) | 55-62-59-01 | 55-62-59-02 | 304 | .668 |
| SOLID CONDUCTOR COLORS 277/480V (ONE GROUND) | | | | | |
| 12/2 SOLID (BROWN/ORANGE) 12/2 SOLID (GRAY-BROWN/GRAY-ORANGE) | 12 SOLID (GREEN) | 58-08-20-01 | 58-08-20-02 | 155 | .539 |
| 12/3 SOLID (BROWN/ORANGE/YELLOW) 12/3 SOLID (GRAY-BROWN/GRAY-ORANGE/GRAY-YELLOW) | 12 SOLID (GREEN) | 56-71-38-01 | 56-71-38-02 | 203 | .574 |
| 10/2 SOLID (BROWN/ORANGE) 10/2 SOLID (GRAY-BROWN/GRAY-ORANGE) | 12 SOLID (GREEN) | 57-39-30-01 | 57-39-30-02 | 229 | .623 |
| 10/3 SOLID (BROWN/ORANGE/YELLOW) 10/3 SOLID (GRAY-BROWN/GRAY-ORANGE/GRAY-YELLOW) | 12 SOLID (GREEN) | 57-39-28-01 | 57-39-28-02 | 304 | .668 |
| STRANDED CONDUCTOR COLORS 120/208V (ONE GROUND) | | | | | |
| 12/2 STRANDED (BLACK/RED) 12/2 STRANDED (WHITE-BLACK/WHITE-RED) | 12 STRANDED (GREEN) | 56-68-01-01 | 56-68-01-02 | 178 | .564 |
| 12/3 STRANDED (BLACK/RED/BLUE) 12/3 STRANDED (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 12 STRANDED (GREEN) | 56-26-87-01 | 56-26-87-02 | 217 | .602 |
| 10/2 STRANDED (BLACK/RED) 10/2 STRANDED (WHITE-BLACK/WHITE-RED) | 10 STRANDED (GREEN) | | 56-38-22-02 | 245 | .653 |
| 10/3 STRANDED (BLACK/RED/BLUE) 10/3 STRANDED (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 10 STRANDED (GREEN) | 56-24-56-01 | 56-24-56-02 | 324 | .701 |
| STRANDED CONDUCTOR COLORS 277/480V (ONE GROUND) | | | | | |
| 12/2 STRANDED (BROWN/ORANGE) 12/2 STRANDED (GRAY-BROWN/GRAY-ORANGE) | 12 STRANDED (GREEN) | 58-65-85-01 | 58-65-85-02 | 178 | .564 |
| 12/3 STRANDED (BROWN/ORANGE/YELLOW) 12/3 STRANDED (GRAY-BROWN/GRAY-ORANGE/GRAY-YELLOW) | 12 STRANDED (GREEN) | 58-77-48-01 | 58-77-48-02 | 217 | .602 |
| 10/2 STRANDED (BROWN/ORANGE) 10/2 STRANDED (GRAY-BROWN/GRAY-ORANGE) | 10 STRANDED (GREEN) | 58-71-81-02 | 58-71-81-01 | 245 | .653 |

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| | | | | | |
|---|---|-------------|-------------|-----|------|
| 10/3 STRANDED (BROWN/ORANGE/YELLOW) 10/3 STRANDED (GRAY-BROWN/GRAY-ORANGE/GRAY-YELLOW) | 10 STRANDED (GREEN) | 58-78-10-01 | 58-78-10-02 | 324 | .701 |
| SOLID CONDUCTOR COLORS 120/208V (TWO GROUNDS) | | | | | |
| 12/2 SOLID (BLACK/RED) 12/2 SOLID (WHITE-BLACK/WHITE-RED) | 12 SOLID (GREEN) 12 SOLID (GREEN-YELLOW) | 61-06-66-01 | 61-06-66-02 | 180 | .574 |
| 12/3 SOLID (BLACK/RED/BLUE) 12/3 SOLID (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 12 SOLID (GREEN) 12 SOLID (GREEN-YELLOW) | 61-06-69-01 | 61-06-69-02 | 230 | .611 |
| 10/2 SOLID (BLACK/RED) 10/2 SOLID (WHITE-BLACK/WHITE-RED) | 10 SOLID (GREEN) 10 SOLID (GREEN-YELLOW) | 64-12-20-01 | 64-12-20-02 | 271 | .668 |
| 10/3 STRANDED (BLACK/RED/BLUE) 10/3 STRANDED (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 10 SOLID (GREEN) 10 SOLID (GREEN-YELLOW) | 61-06-73-04 | 61-06-73-02 | 367 | .714 |
| STRANDED CONDUCTOR COLORS 120/208V (TWO GROUNDS) | | | | | |
| 12/2 STRANDED (BLACK/RED) 12/2 STRANDED (WHITE-BLACK/WHITE-RED) | 12 STRANDED (GREEN) 12 STRANDED (GREEN-YELLOW) | 55-13-22-01 | 55-13-22-02 | 189 | .574 |
| 12/3 STRANDED (BLACK/RED/BLUE) 12/3 STRANDED (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 12 STRANDED (GREEN) 12 STRANDED (GREEN-YELLOW) | 55-13-24-02 | 55-13-24-02 | 244 | .642 |
| 10/2 STRANDED (BLACK/RED) 10/2 STRANDED (WHITE-BLACK/WHITE-RED) | 10 STRANDED (GREEN) 10 STRANDED (GREEN-YELLOW) | | 58-66-36-02 | 306 | .701 |
| 10/3 STRANDED (BLACK/RED/BLUE) 10/3 STRANDED (WHITE-BLACK/WHITE-RED/WHITE-BLUE) | 10 STRANDED (GREEN) 10 STRANDED (GREEN-YELLOW) | 55-13-36-01 | 55-13-36-02 | 391 | .751 |
| Consult NEC 310.15 for ampacities. Additional constructions available by request. | | | | | |

FEATURES

- A dedicated neutral conductor for each phase conductor for compliance with NEC 210.7.
- Reduces installation costs up to 50% over pipe and wire.
- Available with steel armor.
- Available with overall PVC jacket.
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.
- Anti-short bushings are not required for use with MC cable per the NEC and UL

NEC TABLE 310.15(B)(16)- ALLOWABLE AMPACITY FOR 600V CONDUCTORS

| SIZE AWG OR KCMIL | TEMPERATURE RATING OF CONDUCTOR | | |
|--|---------------------------------|---|---|
| | 60°C (140°F) | 75°C (167°F) | 90°C (194°F) |
| | Types: TW, UF | Types: RHW, THHW, THW, THWN, XHHW, USE, ZW | Types: TBS, SA, SIS, RHH, RHW-2, THHN, THHW, THW-2, THWN- 2, USE-2, XHH, XHHW, XHHW-2, ZW-2 |
| | COPPER | | |
| 18 | - | - | 14 |
| 16 | - | - | 18 |
| 14 | 15 | 20 | 25 |
| 12 | 20 | 25 | 30 |
| 10 | 30 | 35 | 40 |
| 8 | 40 | 50 | 55 |
| 6 | 55 | 65 | 75 |
| 4 | 70 | 85 | 95 |
| 3 | 85 | 100 | 115 |
| 2 | 95 | 115 | 130 |
| 1 | 110 | 130 | 145 |
| 1/0 | 125 | 150 | 170 |
| 2/0 | 145 | 175 | 195 |
| 3/0 | 165 | 200 | 225 |
| 4/0 | 195 | 230 | 260 |
| 250 | 215 | 255 | 290 |
| 300 | 240 | 285 | 320 |
| 350 | 260 | 310 | 350 |
| 400 | 280 | 335 | 380 |
| 500 | 320 | 380 | 430 |
| 600 | 350 | 420 | 475 |
| 700 | 385 | 460 | 520 |
| 750 | 400 | 475 | 535 |
| 800 | 410 | 490 | 555 |
| 900 | 435 | 520 | 585 |
| 1000 | 455 | 545 | 615 |
| 1250 | 495 | 590 | 665 |
| 1500 | 525 | 625 | 705 |
| 1750 | 545 | 650 | 735 |
| 2000 | 555 | 665 | 750 |
| Per NEC 310.15(B)(5), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor. | | | |

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