

## ROME INTERLOCKED ARMOR CONTROL CABLE, TYPE MC

Rome-XLPE XHHW-2 Conductors, Aluminum Armor, PVC Jacket, 600 Volts

**APPLICATION:** As multi-conductor Type MC cable, 90°C in wet or dry locations; for installation indoors or outdoors, aerially or in metal rack, trough, cable trays, or direct buried; for control, lighting, power and signal circuits not exceeding 600 volts in manufacturing and processing plants and substations. May be used in NEC Class I and II, Division 2 and Class III, Division 1 and 2 hazardous locations.

**STANDARDS:**

- Listed by UL as Type MC cable per Standard 1569 for Metal Clad Cables.
- Individual conductors UL listed as Type XHHW-2.
- Overall jacket UL listed as Sunlight Resistant.
- Cables pass UL and IEEE-383 ribbon burner flame tests and are UL listed For CT Use.
- Cables comply with IEEE-1202 flame test.
- Cables pass ICEA 210,000 BTU/hr. ribbon burner flame test.
- Cables UL listed for Direct Burial.
- Cables conform to ICEA S-73-532, NEMA WC57, Control Cables.

**CONSTRUCTION:** Stranded tinned copper conductors, 30 mils Rome-XLPE crosslinked polyethylene insulation, color coded, twisted with one 7-strand tinned copper uninsulated grounding conductor of same size as circuit conductors, cable tape, aluminum interlocked armor, black PVC jacket overall.

| No. of Condrs. | #10 AWG - 7 Strand           |                         |                   |                               | #12 AWG - 7 Strand           |                         |                   |                               | #14 AWG - 7 Strand           |                         |                   |                               |
|----------------|------------------------------|-------------------------|-------------------|-------------------------------|------------------------------|-------------------------|-------------------|-------------------------------|------------------------------|-------------------------|-------------------|-------------------------------|
|                | Nom. Diam. Over Armor Inches | Overall PVC Jacket Mils | Nom. Diam. Inches | Approx. Net Wt. Lb./ 1000 Ft. | Nom. Diam. Over Armor Inches | Overall PVC Jacket Mils | Nom. Diam. Inches | Approx. Net Wt. Lb./ 1000 Ft. | Nom. Diam. Over Armor Inches | Overall PVC Jacket Mils | Nom. Diam. Inches | Approx. Net Wt. Lb./ 1000 Ft. |
| 2              | .57                          | 50                      | .67               | 260                           | .52                          | 50                      | .61               | 205                           | .46                          | 50                      | .56               | 160                           |
| 3              | .58                          | 50                      | .68               | 305                           | .53                          | 50                      | .63               | 234                           | .49                          | 50                      | .59               | 187                           |
| 4              | .63                          | 50                      | .73               | 355                           | .57                          | 50                      | .67               | 270                           | .53                          | 50                      | .64               | 220                           |
| 5              | .69                          | 50                      | .80               | 410                           | .61                          | 50                      | .72               | 310                           | .57                          | 50                      | .66               | 245                           |
| 6              | .75                          | 50                      | .85               | 465                           | .66                          | 50                      | .76               | 350                           | .60                          | 50                      | .70               | 280                           |
| 7              | .75                          | 50                      | .85               | 500                           | .66                          | 50                      | .76               | 378                           | .60                          | 50                      | .70               | 292                           |
| 8              | .80                          | 50                      | .91               | 560                           | .72                          | 50                      | .83               | 420                           | .66                          | 50                      | .76               | 330                           |
| 9              | .86                          | 50                      | .96               | 620                           | .77                          | 50                      | .87               | 460                           | .68                          | 50                      | .78               | 360                           |
| 10             | .94                          | 50                      | 1.04              | 680                           | .83                          | 50                      | .93               | 505                           | .75                          | 50                      | .85               | 395                           |
| 11             | .94                          | 50                      | 1.04              | 720                           | .83                          | 50                      | .93               | 530                           | .75                          | 50                      | .85               | 415                           |
| 12             | .96                          | 50                      | 1.07              | 770                           | .84                          | 50                      | .95               | 577                           | .76                          | 50                      | .86               | 440                           |
| 13             | .98                          | 50                      | 1.08              | 815                           | .88                          | 50                      | .98               | 600                           | .78                          | 50                      | .89               | 465                           |
| 14             | 1.01                         | 50                      | 1.12              | 865                           | .91                          | 50                      | 1.01              | 630                           | .81                          | 50                      | .91               | 490                           |
| 15             | 1.06                         | 50                      | 1.17              | 920                           | .95                          | 50                      | 1.05              | 670                           | .84                          | 50                      | .95               | 515                           |
| 16             | 1.06                         | 50                      | 1.17              | 960                           | .95                          | 50                      | 1.05              | 705                           | .84                          | 50                      | .95               | 530                           |
| 17             | 1.12                         | 50                      | 1.22              | 1015                          | 1.00                         | 50                      | 1.10              | 740                           | .87                          | 50                      | .98               | 550                           |
| 18             | 1.12                         | 50                      | 1.22              | 1055                          | 1.00                         | 50                      | 1.10              | 765                           | .87                          | 50                      | .98               | 568                           |
| 19             | 1.12                         | 50                      | 1.22              | 1095                          | 1.00                         | 50                      | 1.10              | 790                           | .87                          | 50                      | .98               | 586                           |
| 20             | 1.17                         | 50                      | 1.28              | 1155                          | 1.04                         | 50                      | 1.15              | 860                           | .94                          | 50                      | 1.04              | 615                           |
| 23             | 1.22                         | 50                      | 1.33              | 1290                          | 1.09                         | 50                      | 1.20              | 960                           | .98                          | 50                      | 1.08              | 690                           |
| 25             | 1.30                         | 50                      | 1.40              | 1390                          | 1.15                         | 50                      | 1.26              | 1035                          | 1.03                         | 50                      | 1.14              | 750                           |
| 27             | 1.32                         | 50                      | 1.43              | 1480                          | 1.18                         | 50                      | 1.28              | 1095                          | 1.05                         | 50                      | 1.16              | 810                           |
| 29             | 1.34                         | 50                      | 1.44              | 1570                          | 1.19                         | 50                      | 1.29              | 1155                          | 1.06                         | 50                      | 1.17              | 860                           |
| 31             | 1.39                         | 50                      | 1.50              | 1660                          | 1.24                         | 50                      | 1.34              | 1205                          | 1.11                         | 50                      | 1.21              | 920                           |
| 32             | 1.42                         | 50                      | 1.53              | 1715                          | 1.26                         | 50                      | 1.37              | 1255                          | 1.13                         | 50                      | 1.23              | 940                           |
| 37             | 1.48                         | 50                      | 1.58              | 1935                          | 1.31                         | 50                      | 1.41              | 1395                          | 1.17                         | 50                      | 1.27              | 1110                          |

NOTES: 1. Standard color is Method 1 for NEC applications per Appendix E, Table E-2 of ICEA S-73-532 (TECH IO06 Option A).  
 2. Cables may be supplied with galvanized steel interlocked armor on request.

Information on this sheet subject to change without notice.

## Specification

### ROME INTERLOCKED ARMOR CONTROL CABLE, TYPE MC

#### Rome-XLPE XHHW-2 Conductors, Aluminum Armor, PVC Jacket, 600 Volts

#### 1. SCOPE

- 1.1 This specification describes multi-conductor Rome-XLPE XHHW-2 crosslinked polyethylene insulated, aluminum interlocked armor Type MC control cable for use in circuits not exceeding 600 volts at conductor temperatures of 90°C in wet or dry locations. Cables are intended for general purpose applications in aerial, direct burial, metal rack, trough, or cable tray installations.

#### 2. APPLICABLE STANDARDS

- 2.1 The following standards shall form a part of this specification to the extent specified herein:
  - 2.1.1 UL Standard 1569 for Type MC cable.
  - 2.1.2 UL Standard 44 for Type XHHW-2 conductors.
  - 2.1.3 ICEA Pub. No. S-73-532, NEMA Pub. No. WC57 for Control Cables.

#### 3. CONDUCTORS

- 3.1 Conductors shall be Class B stranded tinned soft copper per Part 2 of ICEA. Conductor sizes shall be 14 AWG through 10 AWG.

#### 4. SEPARATOR

- 4.1 A suitable separator over the conductor may be used at the option of the manufacturer.

#### 5. INSULATION

- 5.1 **Compound:** Each conductor shall be insulated with Rome-XLPE chemically crosslinked polyethylene, meeting the requirements of ICEA S-73-532, Table 3-2 (Type I-XLPE), and Type XHHW-2 requirements of Underwriters Laboratories.
- 5.2 **Thickness:** The average thickness of insulation shall be 30 mils. The minimum thickness at any point shall be not less than 90% of the specified thickness.

#### 6. CIRCUIT IDENTIFICATION

- 6.1 Circuit identification shall consist of Method 1 color coding for National Electrical Code applications in accordance with ICEA Pub. No. S-73-532, Appendix E, Table E-2 (TECH IOO6 Option A).

#### 7. ASSEMBLY

- 7.1 The insulated color coded conductors shall be cabled together with nonhygroscopic fillers, when necessary to make round. One 7-strand tinned copper uninsulated grounding conductor of the same size as the circuit conductors, shall be included in the assembly.

#### 8. CABLE TAPE

- 8.1 A suitable cable tape shall be applied over the assembly to hold the core together and provide bedding for the armor.

#### 9. ARMOR

- 9.1 An aluminum interlocked armor shall be applied over the cable core. Armor shall be in accordance with UL Standard 1569 and Part 4 of ICEA.

#### 10. COVERING

- 10.1 An extruded covering of PVC shall be applied over the armor. The average thickness and properties of the PVC covering shall be as specified in Part 4 of ICEA. Minimum thickness at any point shall be not less than 70% of the required average thickness. The covering shall meet the Sunlight Resistant requirements of UL.

#### 11. IDENTIFICATION

- 11.1 An ink print legend shall be applied to the surface of the PVC covering providing cable and manufacturer identification.

#### 12. TESTS

- 12.1 Individual conductors and completed cables shall be tested in accordance with UL requirements for Type MC cables having XHHW-2 insulated conductors.
- 12.2 Cables shall be capable of passing the ribbon burner cable tray flame test requirements of UL and shall be UL listed "For CT Use".