

ROME INTERLOCKED ARMOR CONTROL CABLE, TYPE MC

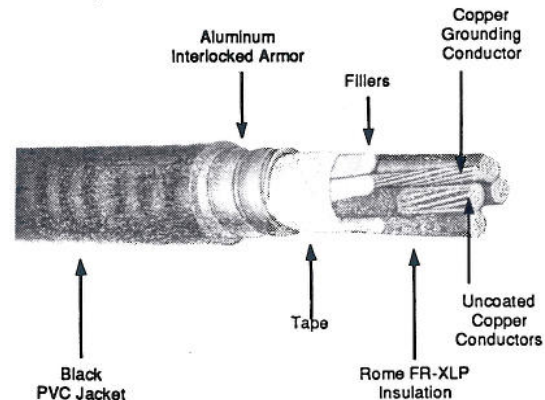
Rome FR-XLP VW-1 XHHW-2 Conductors, Aluminum Armor

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:

1. Listed by UL as Type MC cable per Article 334 of the NEC.
2. Individual conductors UL listed as Type XHHW-2, VW-1.
3. Overall jacket UL listed as Sunlight Resistant.
4. Cables pass UL and IEEE-383 ribbon burner flame tests and are UL listed for CT Use.
5. Cables pass ICEA 210,000 BTU/Hr. ribbon burner flame test.
6. Aluminum armored cables UL listed for Direct Burial.
7. Cables conform to ICEA Pub. No. S-66-524, NEMA Pub. No. WC7 for Crosslinked-polyethylene-Insulated Wire and Cable.
8. Cable conform to ICEA Pub. No. S-73-532, NEMA Pub. No. WC57, Control Cables.

CONSTRUCTION: Stranded uncoated copper conductors, 30 mils Rome FR-XLP flame-retardant crosslinked polyethylene insulation, color coded, twisted with one 7-strand uncoated 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	300	.53	50	.63	230	.48	50	.58	185
4	.64	50	.75	355	.56	50	.67	275	.53	50	.64	220
5	.69	50	.80	410	.63	50	.73	315	.55	50	.66	245
6	.75	50	.85	465	.67	50	.78	350	.59	50	.70	280
7	.75	50	.85	500	.67	50	.78	375	.59	50	.70	295
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	.85	50	.96	570	.76	50	.87	430
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	.90	50	1.00	550
18	1.12	50	1.22	1055	1.00	50	1.10	765	.90	50	1.00	570
19	1.12	50	1.22	1095	1.00	50	1.10	790	.90	50	1.00	590
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 IOO6 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 FR-XLP VW-1 XHHW-2 Conductors, Aluminum Armor

1. SCOPE

- 1.1 This specification describes multi-conductor Rome FR-XLP flame-retardant 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, VW-1 conductors.
 - 2.1.3 ICEA Pub. No. S-66-524, NEMA Pub. No. WC7 for Crosslinked-polyethylene-insulated Wire and Cable.
 - 2.1.4 ICEA Pub. No. S-73-532, NEMA Pub. No. WC57 for Control Cables.

3. CONDUCTORS

- 3.1 Conductors shall be Class B stranded uncoated 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 FR-XLP flame-retardant chemically crosslinked polyethylene, meeting the requirements of ICEA S-66-524, Par. 3.6, ICEA S-73-532, Table 3-2 (Type I-XLPE), and Type XHHW-2, VW-1 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 uncoated 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 VW-1 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".