

ROME-XLP POWER CABLE, 5000 VOLTS

Single Conductor, Nonshielded, Nonjacketed
MV-90 Dry

APPLICATION:

A-Where NEC jurisdiction applies; as 5,000 volt nonshielded power cable, Type MV-90 Dry, for use at conductor temperatures not exceeding 90°C in dry locations. Cables meet requirements of Article 310.6 of the National Electrical Code.

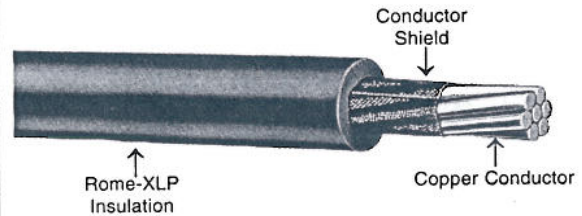
B-For other applications, as nonshielded power cables for use at 5000 volts 100% insulation level (common system voltage 4160 volts) or 3000 volts 133% insulation level (common system voltage 2400 volts), under the following conditions:

- (a) Single conductors mounted on insulators in free air in indoor or outdoor locations.
- (b) Random lay singles in metal conduit or triplexed singles in nonmetallic conduit, above grade, in dry locations.
- (c) Single conductors or triplexed singles, aerially, field-spun to grounded messenger in dry, damp or wet locations.
- (d) Triplexed singles in trays, in spaced block supports or in messenger supported rings, indoors above grade in dry locations.

C-Cables may also be direct buried in airport lighting circuits and in series lighting circuits rated up to 5000 volts open circuit voltage without protectors or full load voltage with protectors.

STANDARDS:

1. Listed by Underwriters Laboratories as 5,000 volt nonshielded cable, Type MV-90 Dry, per UL Standard 1072.
2. Conforms to ICEA S-96-659 and NEMA WC71 for Nonshielded Cables Rated 2001-5000 Volts.
3. Sizes 8-4 AWG approved under FAA AC150/5345-7E, Specification L-824 Underground Electrical Cable for Airport Lighting Circuits, Type C.



CONSTRUCTION: Annealed uncoated copper conductor, conductor shield, Rome-XLP black thermosetting chemically crosslinked polyethylene insulation, surface printed.

Size AWG or kcmil	No. of Strands	Insulation Thickness Mils	Nominal Diameter Inches	COPPER CONDUCTOR		
				Approx. Net Wt. Lb./1000 Ft.	Ampacity *	
					Conduit	Air
5000 VOLTS, NONSHIELDED						
8	7	110	.39	90	55	83
6	7	110	.42	125	75	110
4	7	110	.47	180	97	145
2	7	110	.53	260	130	190
1	19	110	.56	325	155	225
1/0	19	110	.60	400	180	260
2/0	19	110	.65	490	205	300
3/0	19	110	.70	600	240	345
4/0	19	110	.75	745	280	400
250	37	120	.82	890	315	445
350	37	120	.92	1205	385	550
500	37	120	1.05	1685	475	695
750	61	130	1.25	2500	600	900
1000	61	130	1.41	3320	690	1075

CONDUIT: Three cables in isolated conduit in air, 90°C Conductor Temperature, 40°C Ambient. **AIR:** Single conductor isolated in air, 90°C Conductor Temperature, 40°C Ambient. For other installation conditions, refer to the National Electrical Code.

Information on this sheet subject to change without notice.

Specification

ROME-XLP POWER CABLE, 5000 VOLTS

Single Conductor, Nonshielded, Nonjacketed MV-90 Dry

1. SCOPE

- 1.1 This specification describes single conductor Rome-XLP (thermosetting crosslinked polyethylene) insulated non-shielded power cable for use in circuits not exceeding 5000 volts phase to phase at conductor temperatures of 90°C continuous normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Cables are intended for use as Type MV-90 Dry, in applications meeting the requirements of Article 310.6 of the National Electrical Code. For other applications, they are intended for use as nonshielded power cables rated 5000 volts 100% insulation level or 3000 volts 133% insulation level.

2. STANDARDS

- 2.1 The following standards shall form a part of this specification to the extent specified herein:
- 2.1.1 Underwriters Laboratories Standard 1072 for Medium-Voltage Solid-Dielectric Cable.
 - 2.1.2 ICEA Pub. No. S-96-659 and NEMA Pub. WC71 for Nonshielded Cables Rated 2001-5000 Volts.

3. CONDUCTORS

- 3.1 Class B stranded annealed, uncoated copper per Part 2 of ICEA.

4. CONDUCTOR SHIELDING

- 4.1 The conductor shall be covered with a layer of semiconducting tape completely covering the conductor and firmly bonded to the cable insulation. The conductor shield shall meet the requirements of Part 3 of ICEA.

5. INSULATION

- 5.1 Directly over the conductor shielding shall be applied a homogeneous wall of black Rome-XLP insulation. The average thickness of this insulation shall be as specified in Table 4-2, Type X-1 of ICEA and Table 310.63 of the National Electrical Code. Minimum thickness at any point shall be not less than 90% of the specified thickness. *Physical and electrical properties of the insulation shall be in accordance with Table 4-5, Type X-1 of ICEA.*

6. IDENTIFICATION

- 6.1 All cable shall be identified by means of surface ink printing indicating manufacturer, size, insulation type, voltage rating, and UL designations.

7. TESTS

- 7.1 Cable shall be tested in accordance with ICEA S-96-659 and UL Standard 1072.