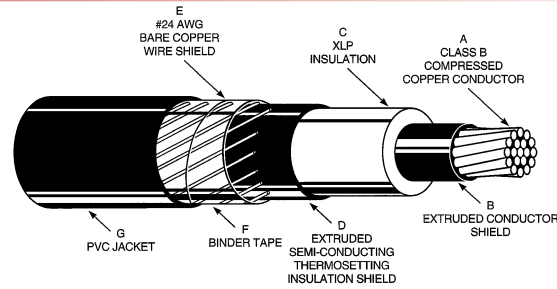


# MV-90 POWER CABLE

1/C 15kV 100% XLP

**DESCRIPTION:**

- Copper conductor
- Thermosetting conductor shield
- Cross-linked polyethylene XLP insulation
- Thermosetting insulation shield
- Copper wire shield
- PVC Jacket



PWC Catalog#	Size	Conductor Diameter	0.175" Insulation Diameter	Extruded Insulation Shield Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacities+	
	AWG or kcmil							inch	inch
03-0437	2	0.285	0.700	0.775	0.080	0.990	532	155	150
03-0438	1	0.325	0.735	0.810	0.080	1.025	602	175	170
03-0439	1/0	0.365	0.775	0.850	0.080	1.065	689	200	195
03-0440	2/0	0.409	0.820	0.895	0.080	1.110	796	230	225
03-0441	3/0	0.460	0.870	0.945	0.080	1.160	928	260	260
03-0442	4/0	0.516	0.925	1.000	0.080	1.215	1120	295	295
03-0443	250	0.562	0.985	1.060	0.080	1.275	1240	325	330
03-0444	350	0.666	1.090	1.175	0.080	1.390	1624	390	395
03-0445	500	0.795	1.220	1.305	0.080	1.520	2160	465	480
03-0446	750	0.975	1.410	1.495	0.080	1.710	3023	565	585
03-0447	1000	1.126	1.560	1.655	0.110	1.930	4022	640	675

+Ampacities are based on the NEC 1999 Edition. Duct ampacities are based on Table 310-77 three conductors in one underground duct, 90°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310-73 three cables in isolated conduit in air, 90°C conductor, 40°C ambient temperature.

## 15kV Type MV-90 CABLE CONSTRUCTION

<b>Conductor</b>	The conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM Specs B3 and B8 and ICEA Part 2, Section 2.1 and 2.5.
<b>Conductor Shield</b>	The conductor shall be shielded with an extruded semi-conducting thermosetting polymeric layer, which shall be firmly bonded to the insulation. The thickness shall be in accordance with the referenced standards.
<b>Insulation</b>	The insulation shall be XLP meeting the requirements of the referenced standards. The average thickness shall be 0.175" and the minimum spot thickness shall be not less than 90% of the average thickness.
<b>Insulation Shield</b>	The insulation shall be shielded with an extruded semi-conducting thermosetting polymeric layer which shall be identified as semi-conducting. The thickness shall be in accordance with the referenced standards. Over this layer shall be applied a concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape.
<b>Jacket</b>	The cable shall be covered with a black sunlight resistant PVC jacket conforming to the requirements specified for polyvinyl chloride jackets in ICEA. The average thickness shall be in accordance with Table 4-3 of ICEA, and the minimum spot thickness shall be not less than 80% of the average thickness.
<b>Identification</b>	Cable shall be identified by surface printing on the jacket.

**APPLICATIONS:**

- As permitted by the NEC:
- Aerial installations
  - Conduit
  - Direct burial
  - Underground duct installations

These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000V, 100% insulation level (grounded system).

**SCOPE:**

This specification covers single conductor XLP (Cross-linked thermosetting polyethylene) insulated, shielded, thermoplastic jacketed power cable for use in aerial, direct burial, conduit, and underground duct installations. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000 volts, 100% insulation level.

**SPECIFICATIONS:**

Manufactured and tested in accordance with the latest revisions of ICEA Pub. No. S-66-524, NEMA Pub. No. WC7, AEIC No. 5, and UL 1072.