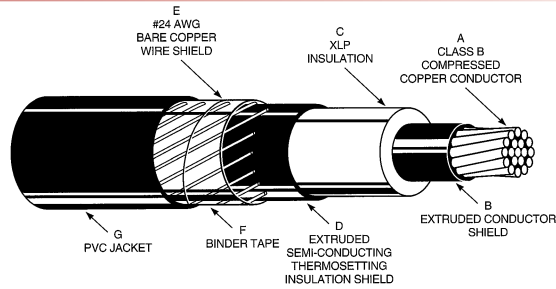


MV-90 POWER CABLE

1/C 35kV 133% XLP

DESCRIPTION:

- Copper conductor
- Thermosetting conductor shield
- XLP insulation
- Thermosetting insulation shield
- Wire shield
- PVC Jacket



PWC Catalog#	Size	Conductor Diameter	0.420" Insulation Diameter	Extruded Insulation Shield Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacities+	
	AWG or kcmil							inch	inch
03-0501	1/0	0.365	1.265	1.360	0.080	1.590	1126	200	195
03-0502	2/0	0.409	1.310	1.405	0.080	1.640	1247	230	225
03-0503	3/0	0.460	1.360	1.455	0.110	1.750	1394	260	260
03-0504	4/0	0.516	1.415	1.515	0.110	1.810	1575	295	295
03-0505	250	0.562	1.475	1.575	0.110	1.875	1742	325	330
03-0506	350	0.666	1.580	1.695	0.110	1.995	2303	390	395
03-0507	500	0.795	1.710	1.825	0.110	2.125	2880	465	480
03-0508	750	0.975	1.905	2.020	0.110	2.320	3825	565	585
03-0509	1000	1.126	2.055	2.170	0.110	2.470	4756	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.

35kV Type MV-90 CABLE CONSTRUCTION

Conductor	The conductor shall be Class B compressed soft or annealed copper in accordance with ASTM Specs B3 and B8 and ICEA Part 2, Section 2.1 and 2.5.
Conductor Shield	The conductor shall be shielded with an extruded semi-conducting thermosetting polymeric layer over the conductor, applied in tandem with and firmly bonded to the insulation.
Insulation	The insulation shall be XLP (cross-linked polyethylene) meeting the requirements of the referenced standards. The average thickness shall be 0.420" and the minimum spot thickness shall be not less than 90% of the average thickness.
Insulation Shield	The insulation shall be shielded with an extruded layer of semi-conducting thermosetting material which shall be identified as being semi-conducting. Over this layer shall be a helically applied wire shield.
Jacket	The cable shall be provided with a jacket of black sunlight resistant PVC 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.
Identification	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 35,000V, 133% (ungrounded system).

SCOPE:

This specification covers single conductor XLP (cross-linked polyethylene) insulated, shielded, thermoplastic jacketed power cable for use in aerial, direct burial, conduit, and underground duct installations. This cable is 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 35,000 volts, 133% insulation level (ungrounded system).

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.