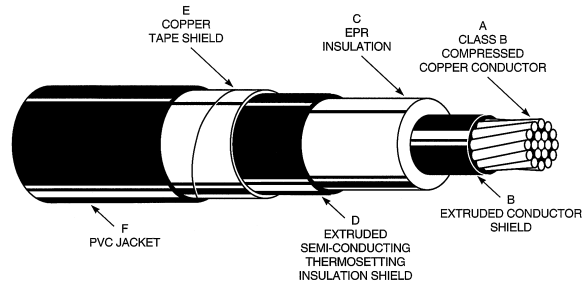


# MV-105 POWER CABLE

## 1/C 15kV 133% EPR/PVC

### DESCRIPTION:

- Copper conductor
- Thermosetting conductor shield
- EPR insulation
- Thermosetting insulation shield
- Copper tape shield
- PVC Jacket



PWC Catalog #	Size	Conductor Diameter	0.220" Insulation Diameter	Extruded Insulation Shield Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacities +	
	AWG or kcmil							inch	inch
03-0296	2	0.285	0.790	0.900	0.080	1.075	645	165	165
03-0297	1	0.325	0.825	0.935	0.080	1.110	720	185	190
03-0298	1/0	0.365	0.865	0.975	0.080	1.150	814	215	215
03-0299	2/0	0.409	0.910	1.020	0.080	1.195	930	245	255
03-0300	3/0	0.460	0.960	1.070	0.080	1.245	1072	275	290
03-0301	4/0	0.516	1.015	1.150	0.080	1.325	1253	315	330
03-0302	250	0.562	1.075	1.210	0.080	1.385	1423	345	365
03-0303	350	0.666	1.180	1.315	0.080	1.490	1803	415	440
03-0304	500	0.795	1.310	1.445	0.080	1.620	2355	500	535
03-0305	750	0.975	1.500	1.635	0.110	1.870	3355	610	655
03-0306	1000	1.126	1.655	1.825	0.110	2.060	4294	690	755

+ Ampacities are based on the NEC 1999 Edition. Duct ampacities are based on Table 310-77 three conductors in one underground duct, 105°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310-73 three cables in isolated conduit in air, 105°C conductor, 40°C ambient temperature.

### 15kV Type MV-105 CABLE CONSTRUCTION

<b>Conductor</b>	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.
<b>Conductor Shield</b>	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.
<b>Insulation</b>	The insulation shall be EPR (ethylene propylene rubber) meeting the requirements of the referenced standards. The average thickness shall be 0.220" 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 layer of semi-conducting thermosetting material which shall be identified as being semi-conducting. Over this layer shall be a helically applied, lapped, 0.005" bare copper tape. A suitable binder tape may be applied over the shielding <sup>1</sup> .
<b>Jacket</b>	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 <sup>1</sup> .
<b>Identification</b>	Cable shall be identified by surface printing on the jacket.

<sup>1</sup>For NEC Article 318 Cable Tray applications of sizes of 1/0 and larger, a special binder and jacket are required, and will be provided when requested.

### 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 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000V, 133% insulation level (ungrounded system).

### SCOPE:

This specification covers single conductor EPR (ethylene propylene rubber) 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 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000V, 133% insulation level (ungrounded system). Cable tray rated upon request.

### SPECIFICATIONS:

Manufactured and tested in accordance with the latest revisions of ICEA Pub. No. S-68-516, NEMA Pub. No. WC8, AEIC No. 6, and UL 1072.



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