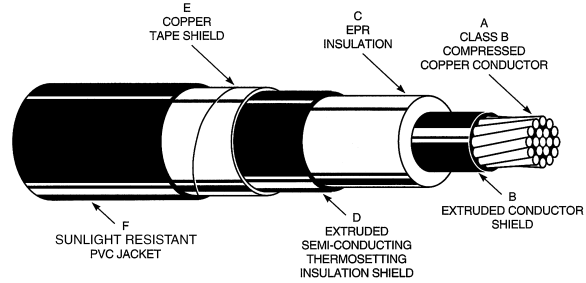


# MV-105 POWER CABLE

## 1/C 25kV 133% / 35kV 100% EPR

### DESCRIPTION:

- Copper conductor
- Shielded
- 1/0 - 1000 MCM
- EPR insulation with PVC jacket
- Single conductor
- 105°C wet or dry locations
- Insulation thickness 345 mils



PWC Catalog #	Size AWG or MCM	.345 mil Insulation Diameter	Extruded Insulation Shield Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacities+	
		inch	inch	inch	inch	lbs./Mft.	Duct	Conduit in Air
03-0318	1/0	1.08	1.15	80	1.34	1150	215	215
03-0319	2/0	1.12	1.19	80	1.38	1270	255	245
03-0320	3/0	1.16	1.24	80	1.43	1420	290	275
03-0321	4/0	1.22	1.30	80	1.49	1615	330	315
03-0322	250	1.26	1.34	80	1.52	1770	365	345
03-0323	350	1.36	1.44	80	1.62	2170	440	415
03-0324	500	1.48	1.56	110	1.80	2840	535	500
03-0325	750	1.66	1.76	110	2.00	3840	655	610
03-0326	1000	1.82	2.16	110	2.16	4765	755	690

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

### 25kV / 35kV Type MV-105 CABLE CONSTRUCTION

<b>Conductor</b>	The conductor shall be compressed Class B stranded annealed uncoated copper.
<b>Conductor Shield</b>	The conductor shall be shielded with an extruded semi-conducting co-polymer compound.
<b>Insulation</b>	The insulation shall be 105°C rated EPR (ethylene propylene rubber) per ICEA S-68-516 part 3 and UL-1072.
<b>Insulation Shield</b>	The insulation shield shall be an extruded semi-conducting co-polymer compound applied directly over the insulation. <b>The conductor shield, insulation and insulation shield are applied in one tandem operation.</b>
<b>Shield</b>	The shield shall be uncoated helically applied 5 mil bare copper tape with a minimum overlap of 12.5%.
<b>Jacket</b>	The cable shall be covered with a jacket of extruded PVC with excellent mechanical properties. Jacket is UL recognized as being "sunlight resistant".
<b>Optional Constructions</b>	Consult factory for cable specifications with alternate constructions or materials.

### APPLICATIONS:

- Conduit
- Duct
- Aerially when supported by a messenger
- Direct burial\*

These cables are UL listed and OSHA acceptable. Where NEC requirements apply, cables are suitable for use in wet or dry locations at a maximum operating temperature of 105°C for normal operation; 140°C for emergency overload conditions; and 250°C for short circuit conditions.

\*Cables are also suitable for direct burial if installed in a system with a grounding conductor that is in close proximity and conforms with Article 250-2d of the 1999 NEC.

NOTE: Sizes 1/0 AWG and larger are marked "Type MV-105 for CT USE" suitable for installation in cable tray per Article 318-12 of the 1999 NEC.

### SCOPE:

This specification covers shielded, single conductor cables having stranded, bare copper conductors; extruded semi-conducting strand shield; EPR (ethylene propylene rubber) insulation; extruded semi-conducting insulation shield with bare copper tape shield; and polyvinyl chloride (PVC) jacket. Cables are rated 25,000 volts, 105°C wet or dry locations, and meet the requirements of ICEA S-68-516 (NEMA WC-8), AEIC CS-6, Articles 326 and 310 of the National Electrical Code, and UL-1072.

### SPECIFICATIONS:

The finished cable shall be tested in accordance with and meet the requirements of ICEA S-68-516, UL-1072, and AEIC CS6.



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