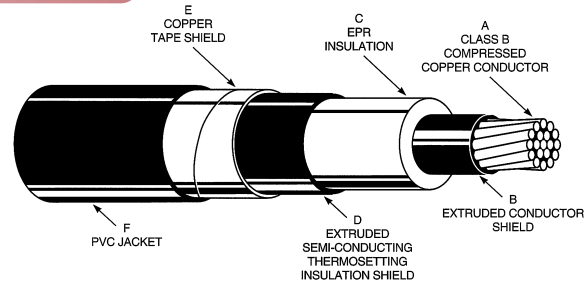


DESCRIPTION:

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



PWC Catalog #	Size AWG or kcmil	Conductor Diameter inch	0.420" Insulation Diameter inch	Extruded Insulation Shield Diameter inch	Jacket Thickness inch	Approx. O.D. inch	Approx. Net Weight lbs./Mft.	Allowable Ampacities +	
								Duct	Conduit in Air
03-0327	1/0	0.365	1.265	1.360	0.080	1.555	1308	215	215
03-0328	2/0	0.409	1.310	1.405	0.080	1.600	1438	245	255
03-0329	3/0	0.460	1.360	1.455	0.080	1.650	1597	275	290
03-0330	4/0	0.516	1.415	1.515	0.110	1.770	1896	315	330
03-0331	250	0.562	1.475	1.575	0.110	1.830	2062	345	365
03-0332	350	0.666	1.580	1.695	0.110	1.950	2536	415	440
03-0333	500	0.795	1.710	1.825	0.110	2.080	3087	500	535
03-0334	750	0.975	1.905	2.020	0.110	2.275	4064	610	655
03-0335	1000	1.126	2.055	2.170	0.110	2.425	4996	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.

35kV Type MV-105 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 EPR (ethylene propylene rubber) 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, lapped, 0.005" bare copper tape. A suitable binder tape may be applied over the shielding ¹ .
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 ¹ .
Identification	Cable shall be identified by surface printing on the jacket.

¹For 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 35,000V, 133% (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 35,000V, 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.

