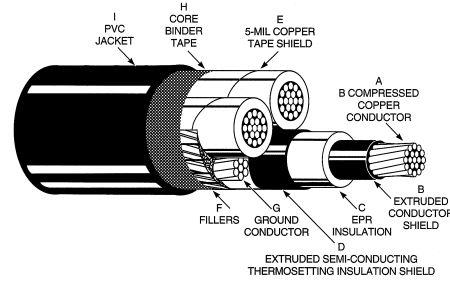


# MV-105 POWER CABLE

3/C 15kV 100% EPR

**DESCRIPTION:**

- 3 copper conductors
- Thermosetting conductor shield
- EPR insulation
- Thermosetting insulation shield
- Tape shield
- Copper ground wire
- PVC Jacket



PWC Catalog #	Size	Conductor Diameter	Grd. Cond. Size AWG	Extruded Insulation Shield Diameter	Jacket Thickness	Approx. O.D.	Approx. Net Weight	Allowable Ampacities+	
	AWG or kcmil							inch	inch
03-0359	2	0.283	6	0.738	0.110	1.862	1972	160	165
03-0360	1	0.322	4	0.778	0.110	1.949	2268	185	185
03-0361	1/0	0.362	4	0.818	0.110	2.035	2574	210	215
03-0362	2/0	0.405	4	0.858	0.110	2.121	2928	235	245
03-0363	3/0	0.456	3	0.908	0.110	2.229	3397	270	280
03-0364	4/0	0.512	3	0.963	0.110	2.348	3944	305	320
03-0365	250	0.558	3	1.018	0.110	2.479	4454	335	350
03-0366	350	0.661	2	1.123	0.140	2.706	5703	400	430
03-0367	500	0.790	1	1.248	0.140	3.029	7615	485	525

+Ampacities are based on the NEC 1999 Edition. Duct ampacities are based on Table 310-79 three conductors within an overall covering in one underground duct, 105°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310-75 three cables within an overall covering in isolated conduit in air, 105°C conductor, 40°C ambient.

## 15kV Type MV-105 CABLE CONSTRUCTION

<b>Conductor</b>	The conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM 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 EPR (ethylene propylene rubber) 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. Over this layer shall be applied a helically wrapped 5-mil copper tape.
<b>Grounding Conductor</b>	The ground conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8.
<b>Assembly</b>	The insulated and shielded power conductors shall be cabled round with fillers and with a grounding conductor in one outer interstice and covered with a binder tape.
<b>Jacket</b>	The cable shall be covered with a black PVC jacket conforming to the requirements specified for polyvinyl chloride in ICEA. The average thickness shall be in accordance with the referenced standards and the minimum spot thickness shall be not less than 80% of the average thickness. The jacket will be sunlight resistant and will meet the requirements of the IEEE 1202.

**APPLICATIONS:**

- Aerial installations
- Direct buried
- Metal racks
- Open trays
- Troughs or raceway

These cables are capable of operating continuously at maximum conductor temperature 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, 100% insulation level (grounded system).

**SCOPE:**

This specification covers three conductor EPR (ethylene propylene rubber) insulated, shielded, thermoplastic jacketed power cables with grounding conductor for use in aerial installations, metal racks, open trays, troughs, or continuous rigid cable supports. These cables are capable of operating continuously at a temperature of 105°C for normal operations, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000V, 100% (grounded system) insulation levels.

**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.



PITTSBURGH WIRE & CABLE INC.

www.pittsburghwire.com

Sales and Ordering: 1-800-458-1222