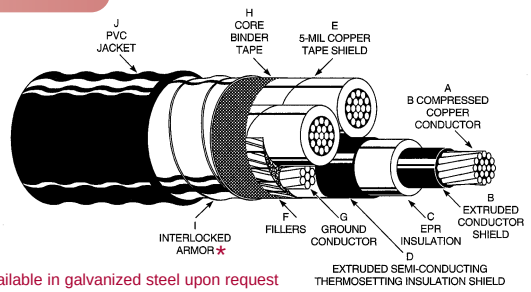
Interlocked Type MV-105 ARMORED POWER CABLE

DESCRIPTION:

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



*Available in galvanized steel upon request

PWC Catalog#	Size AWG or kcmil	Conductor Diameter inch	0.115" Insulation Diameter inch	Grd. Cond. Size AWG or kcmil	Extruded Insulation Shield Diameter inch	Armored Diameter inch	Jacket Thickness inch	Approx. O.D. inch	Approx. Net Weight lb./Mft.	Allowable Ampacity+ Direct Burial	Allowable Ampacity+ In Air
07-0182	1	0.322	0.612	4	0.69	1.851	0.060	1.971	2171	225	210
07-0183	1/0	0.362	0.652	4	0.73	1.938	0.060	2.058	2529	255	240
07-0184	2/0	0.406	0.696	4	0.775	2.033	0.060	2.153	2865	290	275
07-0185	3/0	0.456	0.746	3	0.825	2.141	0.060	2.261	3352	330	315
07-0186	4/0	0.592	0.802	3	0.880	2.262	0.075	2.412	3974	375	360
07-0187	250	0.558	0.858	3	0.94	2.382	0.075	2.532	4440	410	400
07-0188	350	0.661	0.961	2	1.04	2.605	0.075	2.755	5839	495	490
07-0189	500	0.789	1.089	1	1.19	2.925	0.075	3.075	7695	590	600
07-0190	750	0.968	1.278	1/0	1.38	3.333	0.085	3.503	10727	720	745

+Ampacities are based on the NEC 1999 Edition. Direct burial ampacities are based on Table 310-83 three conductors within an overall covering directly buried, 105°C conductor, 20°C earth ambient temperature. In air ampacities are based on Table 310-71 three conductors within an overall covering in free air, 105°C conductor, 40°C ambient temperature.

5kV or 8kV Type MV-105 CABLE CONSTRUCTION

Conductor	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.
Conductor Shield	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.
Insulation	The insulation shall be EPR (ethylene propylene rubber) meeting the requirements of the referenced standards. The average thickness shall be 0.115" 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 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.
Grounding Conductor	The ground conductor shall be Class B compressed concentric stranded bare copper in accordance with ASTM B3 and B8.
Assembly	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.
Armor	A single strip of interlocked armor of aluminum shall be applied over the assembly.
Jacket	The cable shall be covered with a yellow 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 (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr) vertical cable tray flame tests. Optional non-halogen jacket is available.
Identification	Manufacturer's identification shall be printed on the jacket

APPLICATIONS:

- Aerial installations
- Direct burial
- Metal racks
- Open trays
- Troughs or continuous rigid cable supports

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 5,000V, 133% (ungrounded system) insulation level, and 8,000V, 100% insulation level (grounded system).

SCOPE:

This specification covers three conductor EPR (ethylene propylene rubber) insulated, shielded, interlock armored, 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 5,000V, 133% insulation level, and 8,000V, 100% insulation level.

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. Passes IEEE 1202 (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr) vertical cable tray flame tests.