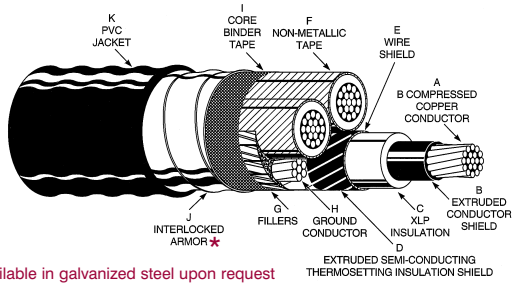
DESCRIPTION:

- 3 copper conductors
- Thermosetting conductor shield
- Cross-linked polyethylene (XLP) insulation
- Thermosetting insulation shield
- Drain wire or tape shield
- Copper ground wire
- Aluminum armor
- PVC Jacket



*Available in galvanized steel upon request

PWC Catalog#	Size AWG or kcmil	Conductor Diameter inch	0.090" 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
07-0174	1/0	0.362	0.605	4	0.685	1.872	0.060	2.017	2217	230	185
07-0175	2/0	0.406	0.650	4	0.730	1.969	0.060	2.114	2580	260	215
07-0176	3/0	0.456	0.700	3	0.780	2.077	0.060	2.222	3012	295	250
07-0177	4/0	0.512	0.755	3	0.835	2.196	0.060	2.341	3521	335	285
07-0178	250	0.558	0.815	3	0.895	2.324	0.075	2.499	4030	365	320
07-0179	350	0.661	0.915	2	0.995	2.540	0.075	2.715	5258	440	395
07-0180	500	0.789	1.045	1	1.145	2.864	0.075	3.038	7027	530	485
07-0181	750	0.968	1.240	1/0	1.340	3.283	0.085	3.478	9960	650	615

+ 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, 90°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, 90°C conductor, 40°C ambient temperature.

5kV Type MV-90 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 XLP (cross-linked polyethylene) meeting the requirements of the referenced standards. The average thickness shall be 0.090" 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 concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic 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
Available Alternatives	This cable is available with a bare copper tape in place of a wire shield.

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 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000V, 100% (grounded system) and 133% insulation levels (ungrounded system).

SCOPE:

This specification covers three conductor XLP (cross-linked thermosetting polyethylene) 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 90°C for normal operations, 130°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 5,000V, 100% (grounded system) and 133% insulation levels (ungrounded system).

SPECIFICATIONS:

Manufactured and tested in accordance with the latest revisions of ICEA Pub. No. S-66-524, NEMA Pub. No. WC7, AEIC No. 5, and UL 1072. Passes IEEE 1202 (70,000 Btu/hr) and ICEA T-29-520 (210,000 Btu/hr) vertical cable tray flame tests.