



CONSTRUCTION

- 1- Conductor:** Compact class B stranded soft annealed bare copper as per ASTM B-496.
- 2- Conductor shield:** Extruded thermoset semi-conducting stress control layer.
- 3- Insulation:** Tree-retardant cross-linked polyethylene (TR-XLPE).
- 4- Insulation shield:** Extruded thermoset strippable semi-conducting insulation shield.
- 5- Copper wires shield:** 5 mils bare copper tape helically applied with 25 % minimum overlap
- 6- Jacket:** black flame retardant, sunlight and oil resistant I polyvinyl chloride (PVC).

FEATURES AND APPLICATIONS

- INDULINK type MV-90 is suitable for use in wet or dry locations, in open air (exposed to sunlight), raceways, troughs, ducts, trays and direct burial.
- Typical installations include feeder or branch circuits in generating stations, industrial and commercial installations.
- Rated at maximum operating temperature of 90 °C for normal operation, 130 °C for emergency overload and 250 °C for short-circuit conditions.
- Superior current carrying capacity.
- True triple and dry curing extrusion system.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- FT4 (70,000 BTU/hr) Flame test and CT use (1/0 AWG and larger).
- UL listed as MV-90 under file E-500191.

STANDARDS

- ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
- ASTM B-496 - Standard Specification for Compact Round Concentric-Lay-Stranded Copper Conductors
- UL 1072 - Medium-Voltage Power Cables I
- CEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribution of Electric Energy.
- UL 1685 - Safety Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables
- IEEE 1202 – Flame-propagation testing of wire and cable

COPPER CONDUCTOR, 15 kV 100 % INSULATION LEVEL, 175 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)		AMPACITY (A)			CONDUIT SIZE (inches)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	TRAY (3)	
837201047	2	0.27	0.682	0.745	0.921	470	1270	150	155	---	3
837201048	1	0.30	0.714	0.777	0.953	556	1429	170	175	---	3
837201049	1/0	0.33	0.751	0.814	0.990	664	1628	195	200	195	3
837201050	2/0	0.37	0.791	0.854	1.029	799	1871	225	230	225	3
837201051	3/0	0.42	0.837	0.900	1.076	968	2171	260	260	260	3
837201052	4/0	0.47	0.891	0.954	1.130	1181	2544	295	295	300	3 ½
837201053	250	0.52	0.934	0.997	1.173	1368	2867	330	325	335	3 ½
837201054	350	0.61	1.029	1.092	1.268	1846	3681	395	390	415	4
837201057	500	0.73	1.151	1.214	1.390	2577	4905	480	465	515	4
837201060	750	0.90	1.316	1.379	1.555	3773	6875	585	565	665	5
837201062	1000	1.06	1.472	1.535	1.770	4971	9037	675	640	795	5

COPPER CONDUCTOR, 15 kV 133 % INSULATION LEVEL, 220 MILS

PRODUCT CODE	COND. SIZE (AWG or kcmil)	NOMINAL CONDUCTOR DIAMETER (inches)	NOMINAL INSULATION DIAM. (inches)	NOMINAL INSULATION SHIELD DIAM. (inches)	NOMINAL DIAMETER OVER JACKET (inches)	APPROX. WEIGHT (lb/kft)		AMPACITY (A)			CONDUIT SIZE (inches)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	TRAY (3)	
839001047	2	0.27	0.772	0.835	1.011	489	1421	150	155	---	3
839001048	1	0.30	0.804	0.867	1.042	575	1584	170	175	---	3
839001049	1/0	0.33	0.841	0.904	1.080	683	1788	195	200	195	3
839001050	2/0	0.37	0.880	0.943	1.119	819	2036	225	230	225	3 ½
839001051	3/0	0.42	0.927	0.990	1.166	988	2341	260	260	260	3 ½
839001052	4/0	0.47	0.981	1.044	1.220	1200	2721	295	295	300	3 ½
839001053	250	0.52	1.024	1.087	1.263	1387	3050	330	325	335	4
839001054	350	0.61	1.119	1.181	1.357	1865	3877	395	390	415	4
839001057	500	0.73	1.241	1.304	1.479	2597	5116	480	465	515	5
839001060	750	0.90	1.406	1.469	1.705	3793	7299	585	565	665	5
839001062	1000	1.06	1.561	1.624	1.860	4990	9300	675	640	795	6

(1) Ampacities are in accordance with table 310.60(C)(74) of the NEC for insulated triplexed or three single-conductor aluminum cables in isolated conduit in air based on conductor temperatures of 90°C (194°F) and ambient air temperature of 40°C (104°F).

(2) Ampacities are in accordance with table 310.60(C)(78) of the NEC for three single-insulated aluminum conductors in underground electrical ducts (three conductors per electrical duct) based on ambient earth temperature of 20°C (68°F) electrical duct arrangement in accordance with figure 31060 detail 1 100 percent load factor thermal resistance (rho) of 90 conductor temperatures of 90°C (194°F).

Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.