



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:** one-third neutral concentric round annealed bare copper wires helically applied over the insulation shield.
- 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 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 flexibility.
- Excellent corona and moisture resistance.
- Cold bend tested at -35 °C.
- NEC guidelines must be followed for proper application.
- 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.

ICEA S-93-639 - 5-46 kV Shielded Power Cable for use in the Transmission and Distribution of Electric Energy.

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)	
821701047	2	0.27	0.682	0.745	1.069	662	614	150	155	3
821701048	1	0.30	0.714	0.777	1.106	815	697	170	175	3
821701049	1/0	0.33	0.751	0.814	1.146	1032	812	195	200	3
821701050	2/0	0.37	0.791	0.854	1.192	1291	946	225	230	3 ½
821701051	3/0	0.42	0.837	0.900	1.246	1630	1119	260	260	3 ½
821701052	4/0	0.47	0.891	0.954	1.289	2066	1338	295	295	3 ½
821701053	250	0.52	0.934	0.997	1.384	2433	1521	330	325	4
821701054	350	0.61	1.029	1.092	1.607	3390	1991	395	390	4
821701057	500	0.73	1.151	1.214	1.832	4868	2774	480	465	5
821701060	750	0.90	1.316	1.379	1.987	7359	4032	585	565	6
821701062	1000	1.06	1.472	1.535	1.069	9752	5180	675	640	6

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)	
823401047	2	0.27	0.772	0.835	1.127	662	676	150	155	3 ½
823401048	1	0.30	0.804	0.867	1.159	815	762	170	175	3 ½
823401049	1/0	0.33	0.841	0.904	1.196	1032	878	195	200	3 ½
823401050	2/0	0.37	0.880	0.943	1.235	1291	1014	225	230	3 ½
823401051	3/0	0.42	0.927	0.990	1.282	1630	1190	260	260	3 ½
823401052	4/0	0.47	0.981	1.044	1.336	2066	1412	295	295	4
823401053	250	0.52	1.024	1.087	1.379	2433	1598	330	325	4
823401054	350	0.61	1.119	1.181	1.474	3390	2073	395	390	5
823401057	500	0.73	1.241	1.304	1.756	4868	2935	480	465	5
823401060	750	0.90	1.406	1.469	1.922	7359	4139	585	565	6
823401062	1000	1.06	1.561	1.624	2.077	9752	5296	675	640	6

(1) Ampacities are in accordance with table 310.60(C)(73) of the NEC for insulated triplexed or three single-conductor copper 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)(77) of the NEC for three single-insulated copper 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.