



## 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, 8 kV 100 % INSULATION LEVEL, 115 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)	
821601045	4	0.21	0.518	0.581	0.873	488	442	110	115	3
821601047	2	0.27	0.572	0.635	0.927	662	544	150	155	3
821601048	1	0.30	0.604	0.667	0.959	815	626	170	175	3
821601049	1/0	0.33	0.641	0.704	0.996	1032	737	195	200	3
821601050	2/0	0.37	0.680	0.743	1.035	1291	869	225	230	3
821601051	3/0	0.42	0.727	0.790	1.082	1630	1038	260	260	3
821601052	4/0	0.47	0.781	0.844	1.136	2066	1253	295	295	3 ½
821601053	250	0.52	0.824	0.887	1.179	2433	1434	330	325	3 ½
821601054	350	0.61	0.919	0.981	1.274	3390	1897	395	390	4
821601057	500	0.73	1.041	1.104	1.496	4868	2666	480	465	5
821601060	750	0.90	1.206	1.269	1.722	7359	3908	585	565	5
821601062	1000	1.06	1.361	1.424	1.877	9752	5045	675	640	6

### COPPER CONDUCTOR, 8 kV 133 % INSULATION LEVEL, 140 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)	
823301045	4	0.21	0.569	0.631	0.924	488	471	110	115	3
823301047	2	0.27	0.622	0.685	0.978	662	575	150	155	3
823301048	1	0.30	0.654	0.717	1.009	815	658	170	175	3
823301049	1/0	0.33	0.691	0.754	1.046	1032	771	195	200	3
823301050	2/0	0.37	0.731	0.794	1.086	1291	903	225	230	3
823301051	3/0	0.42	0.777	0.840	1.132	1630	1074	260	260	3 ½
823301052	4/0	0.47	0.831	0.894	1.186	2066	1291	295	295	3 ½
823301053	250	0.52	0.874	0.937	1.230	2433	1473	330	325	3 ½
823301054	350	0.61	0.969	1.032	1.324	3390	1939	395	390	4
823301057	500	0.73	1.091	1.154	1.547	4868	2715	480	465	5
823301060	750	0.90	1.256	1.319	1.772	7359	3964	585	565	5
823301062	1000	1.06	1.412	1.475	1.928	9752	5106	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.