



CONSTRUCTION

- 1- Conductor:** Class B compact stranded 1350 aluminum as per ASTM B-400.
- 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 tape shield:** 5 mils bare copper tape helically applied with 25 % minimum overlap.
- 6- Jacket:** black sunlight linear low density thermoplastic polyethylene (LLDPE).

FEATURES AND APPLICATIONS

- INDULINK AL 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.
- 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.
- UL listed as MV-90 under file E-500191.

STANDARDS

ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
UL 1072 - Medium-Voltage Power Cables

ALUMINUM 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)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
828301045	4	0.21	0.518	0.581	0.727	88	128	260	84	91	3
828301047	2	0.27	0.572	0.635	0.781	140	139	307	115	120	3
828301048	1	0.30	0.604	0.667	0.842	176	146	353	130	135	3
828301049	1/0	0.33	0.641	0.704	0.880	223	154	392	150	155	3
828301050	2/0	0.37	0.680	0.743	0.919	279	163	436	175	175	3
828301051	3/0	0.42	0.727	0.790	0.966	354	173	491	200	200	3
828301052	4/0	0.47	0.781	0.844	1.020	445	185	557	230	230	3
828301053	250	0.52	0.824	0.887	1.063	527	194	614	255	250	3
828301054	350	0.61	0.919	0.981	1.157	736	214	752	310	305	3 ½
828301057	500	0.73	1.041	1.104	1.279	1061	241	955	385	370	4
828301060	750	0.90	1.206	1.269	1.445	1592	277	1272	485	455	5
828301062	1000	1.06	1.361	1.424	1.600	2133	310	1588	565	525	5

ALUMINUM 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)
						ALUMINUM	COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
830101045	4	0.21	0.569	0.631	0.777	88	138	289	84	91	3
830101047	2	0.27	0.622	0.685	0.861	140	150	355	115	120	3
830101048	1	0.30	0.654	0.717	0.893	176	157	387	130	135	3
830101049	1/0	0.33	0.691	0.754	0.930	223	165	427	150	155	3
830101050	2/0	0.37	0.731	0.794	0.970	279	174	471	175	175	3
830101051	3/0	0.42	0.777	0.840	1.016	354	184	528	200	200	3
830101052	4/0	0.47	0.831	0.894	1.070	445	195	596	230	230	3
830101053	250	0.52	0.874	0.937	1.113	527	205	654	255	250	3 ½
830101054	350	0.61	0.969	1.032	1.208	736	225	796	310	305	3 ½
830101057	500	0.73	1.091	1.154	1.330	1061	252	1003	385	370	4
830101060	750	0.90	1.256	1.319	1.495	1592	287	1324	485	455	5
830101062	1000	1.06	1.412	1.475	1.711	2133	321	1710	565	525	5

(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).

(3) Ampacities are in accordance with Section 392.80(B)(2) of the NEC for single Type MV-90 conductor cables or single conductors cabled together (triplexed, quadruplexed, etc) installed in uncovered cable tray at ambient temperature of 40°C (104°F) and conductor temperatures of 90°C (194°F) The ampacities shall not exceed 75 percent of the allowable ampacities in Table 310.60(C) (70). Where the cable trays are covered for more than 18 m (6 ft) with solid unventilated covers the ampacities for 1/0 AWG and larger single conductor cables shall not exceed 93 percent of the values shown above. Jam ratio has not been considered and should be checked to avoid possible jamming.

Values are nominal and subject to manufacturing tolerances.