



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 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 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.
- 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.
- UL listed as MV-105 under file E-500191.

STANDARDS

- ASTM B-400 - Standard Specification for Compact Round Concentric-Lay-Stranded Aluminum 1350 Conductors
- ASTM B-3 - Standard Specification for Soft or Annealed Copper Wire
- 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

ALUMINUM CONDUCTOR, 5 kV 100% INSULATION LEVEL, 90 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)	
841101045	4	0.21	0.469	0.531	0.794	88	196	750	76	86	3
841101047	2	0.27	0.522	0.585	0.878	140	196	903	100	115	3
841101048	1	0.30	0.554	0.617	0.909	176	196	971	120	130	3
841101049	1/0	0.33	0.591	0.654	0.946	223	196	1056	140	150	3
841101050	2/0	0.37	0.631	0.694	0.986	279	229	1181	160	170	3
841101051	3/0	0.42	0.677	0.740	1.032	354	295	1361	190	195	3
841101052	4/0	0.47	0.731	0.794	1.086	445	360	1564	215	225	3 ½
841101053	250	0.52	0.774	0.837	1.130	527	426	1748	250	250	3 ½
841101054	350	0.61	0.869	0.932	1.224	736	589	2198	305	305	3 ½
841101057	500	0.73	0.991	1.054	1.346	1061	819	2849	380	370	4
841101060	750	0.90	1.156	1.219	1.612	1592	1252	4143	490	470	5
841101062	1000	1.06	1.312	1.375	1.828	2133	1670	5439	580	545	6

ALUMINUM CONDUCTOR, 5 kV 133% 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)	
842801045	4	0.21	0.489	0.552	0.844	88	196	823	76	86	3
842801047	2	0.27	0.543	0.606	0.898	140	196	931	100	115	3
842801048	1	0.30	0.574	0.637	0.930	176	196	1001	120	130	3
842801049	1/0	0.33	0.612	0.675	0.967	223	196	1087	140	150	3
842801050	2/0	0.37	0.651	0.714	1.006	279	229	1213	160	170	3
842801051	3/0	0.42	0.698	0.761	1.053	354	295	1394	190	195	3
842801052	4/0	0.47	0.752	0.815	1.107	445	360	1599	215	225	3 ½
842801053	250	0.52	0.795	0.858	1.150	527	426	1784	250	250	3 ½
842801054	350	0.61	0.889	0.952	1.244	736	589	2237	305	305	4
842801057	500	0.73	1.011	1.074	1.367	1061	819	2891	380	370	4
842801060	750	0.90	1.177	1.240	1.633	1592	1252	4193	490	470	5
842801062	1000	1.06	1.332	1.395	1.848	2133	1670	5496	580	545	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.