



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 wire 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-105 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 105 °C for normal operation, 140 °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, 25 kV 100% INSULATION LEVEL, 260 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)	
832601048	1	0.30	0.874	0.937	1.229	176	196	1497	150	145	3 ½
832601049	1/0	0.33	0.911	0.974	1.266	223	196	1599	170	165	3 ½
832601050	2/0	0.37	0.950	1.013	1.306	279	229	1742	200	190	4
832601051	3/0	0.42	0.997	1.060	1.352	354	295	1942	225	215	4
832601052	4/0	0.47	1.051	1.114	1.406	445	360	2171	260	245	4
832601053	250	0.52	1.094	1.157	1.449	527	426	2374	290	270	5
832601054	350	0.61	1.189	1.252	1.544	736	589	2867	350	330	5
832601057	500	0.73	1.311	1.374	1.726	1.061	819	3769	430	400	5
832601060	750	0.90	1.476	1.539	1.992	1.592	1.252	5214	540	490	6
832601062	1000	1.06	1.631	1.694	2.147	2.133	1.670	6393	640	565	6

ALUMINUM CONDUCTOR, 25 kV 133% INSULATION LEVEL, 320 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)	
834301048	1	0.30	0.994	1.057	1.349	176	196	1732	150	145	4
834301049	1/0	0.33	1.031	1.094	1.387	223	196	1841	170	165	4
834301050	2/0	0.37	1.071	1.134	1.426	279	229	1990	200	190	4
834301051	3/0	0.42	1.117	1.180	1.472	354	295	2199	225	215	4
834301052	4/0	0.47	1.171	1.234	1.526	445	360	2437	260	245	5
834301053	250	0.52	1.215	1.278	1.570	527	426	2648	290	270	5
834301054	350	0.61	1.309	1.372	1.724	736	589	3351	350	330	5
834301057	500	0.73	1.431	1.494	1.846	1061	819	4093	430	400	6
834301060	750	0.90	1.596	1.659	2.112	1592	1252	5585	540	490	6
834301062	1000	1.06	1.752	1.815	2.268	2133	1670	6790	640	565	7

(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 105°C (221°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 105°C (221°F).

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

Values are nominal and subject to manufacturing tolerances.