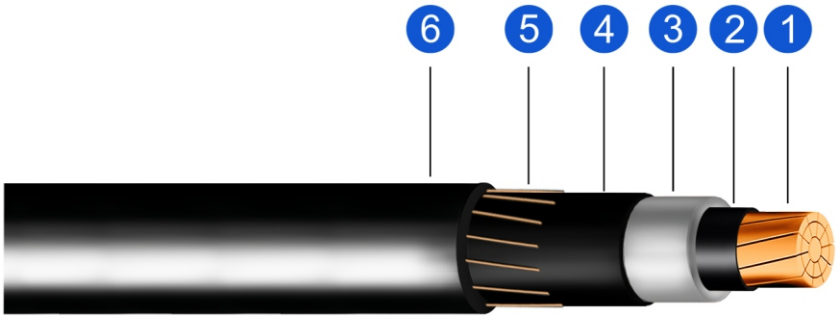
INDULINK TYPE MV-90 5 kV 100% and 133% I.L.

XLPE/WIRESCREEN/PVC JACKET POWER CABLE



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.

INDULINK TYPE MV-90 5 kV 100% and 133% I.L.

XLPE/WIRE SCREEN/PVC JACKET POWER CABLE

COPPER 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
837501045	4	0.21	0.469	0.531	0.794	488	953	97	110	3
837501047	2	0.27	0.522	0.585	0.878	662	1229	130	145	3
837501048	1	0.30	0.554	0.617	0.909	815	1410	155	170	3
837501049	1/0	0.33	0.591	0.654	0.946	1032	1658	180	195	3
837501050	2/0	0.37	0.631	0.694	0.986	1291	1948	205	220	3
837501051	3/0	0.42	0.677	0.740	1.032	1630	2324	240	250	3
837501052	4/0	0.47	0.731	0.794	1.086	2066	2799	280	290	3 ½
837501053	250	0.52	0.774	0.837	1.130	2433	3199	315	320	3 ½
837501054	350	0.61	0.869	0.932	1.224	3390	4221	385	385	3 ½
837501057	500	0.73	0.991	1.054	1.447	4868	5962	475	470	4
837501060	750	0.90	1.156	1.219	1.612	7359	8561	600	585	5
837501062	1000	1.06	1.312	1.375	1.828	9752	11268	690	670	6

COPPER 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
839201045	4	0.21	0.489	0.552	0.844	488	1027	97	110	3
839201047	2	0.27	0.543	0.606	0.898	662	1258	130	145	3
839201048	1	0.30	0.574	0.637	0.930	815	1439	155	170	3
839201049	1/0	0.33	0.612	0.675	0.967	1032	1688	180	195	3
839201050	2/0	0.37	0.651	0.714	1.006	1291	1980	205	220	3
839201051	3/0	0.42	0.698	0.761	1.053	1630	2356	240	250	3
839201052	4/0	0.47	0.752	0.815	1.107	2066	2834	280	290	3 ½
839201053	250	0.52	0.795	0.858	1.150	2433	3234	315	320	3 ½
839201054	350	0.61	0.889	0.952	1.244	3390	4260	385	385	4
839201057	500	0.73	1.011	1.074	1.467	4868	6007	475	470	4
839201060	750	0.90	1.177	1.240	1.693	7359	8802	600	585	5
839201062	1000	1.06	1.332	1.395	1.848	9752	11325	690	670	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.