



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:** Ethylene propylene rubber (EPR).
- 4- Insulation shield:** Extruded thermoset strippable semi-conducting insulation shield.
- 5- Copper tape 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

- EPRONAX type 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 flexibility.
- 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-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, 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
824401048	1	0.30	0.874	0.937	1.229	815	2052	190	185	3 ½
824401049	1/0	0.33	0.911	0.974	1.266	1032	2324	215	215	3 ½
824401050	2/0	0.37	0.950	1.013	1.306	1291	2640	255	245	4
824401051	3/0	0.42	0.997	1.060	1.352	1630	3045	290	275	4
824401052	4/0	0.47	1.051	1.114	1.406	2066	3556	330	315	4
824401053	250	0.52	1.094	1.157	1.449	2433	3983	365	345	5
824401054	350	0.61	1.189	1.252	1.544	3390	5067	440	415	5
824401057	500	0.73	1.311	1.374	1.826	4868	7139	535	500	5
824401060	750	0.90	1.476	1.539	1.992	7359	9863	655	610	6
824401062	1000	1.06	1.631	1.694	2.147	9752	12483	755	690	6

COPPER 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)
						COPPER	TOTAL	CONDUIT IN AIR (1)	UNDERGROUND DUCT (2)	
826301048	1	0.30	0.994	1.057	1.349	815	2328	190	185	4
826301049	1/0	0.33	1.031	1.094	1.387	1032	2608	215	215	4
826301050	2/0	0.37	1.071	1.134	1.426	1291	2932	255	245	4
826301051	3/0	0.42	1.117	1.180	1.472	1630	3348	290	275	5
826301052	4/0	0.47	1.171	1.234	1.526	2066	3870	330	315	5
826301053	250	0.52	1.215	1.278	1.570	2433	4306	365	345	5
826301054	350	0.61	1.309	1.372	1.724	3390	5605	440	415	5
826301057	500	0.73	1.431	1.494	1.947	4868	7540	535	500	6
826301060	750	0.90	1.596	1.659	2.112	7359	10300	655	610	6
826301062	1000	1.06	1.752	1.815	2.268	9752	12953	755	690	7

(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 105°C (221°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 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.