# **MEDIUM VOLTAGE POWER**



- ► 1 Conductor
- ► EPR
- ► PVC
- **►** Type MV-105
- ► 35kV 100%

## PRODUCT CONSTRUCTION

Conductor: 1/0 AWG through 1000 kcmil annealed bare copper compact Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers.

Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.

## **APPLICATIONS**

For use in aerial, conduit, open tray and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Can be used in wet or dry locations when installed in accordance with the NEC. Can be used in direct burial if installed in a system with a ground conductor that is in close proximity and conforms with NEC 250.4(A)(5). Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants and other industrial three-phase applications.

#### **FEATURES**

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C. loss.

### COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test. IEEE 1202 (70,000 BTU/hr)/CSA FT4.

Optional Flame Test: ICEA T-29-520 (210,000 BTU/hr).

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

					Nominal		Copper Conductor				
USAWC	AWG or	No. of	Thickness in Mils		Diameter Over Ins.	Nominal Diameter	Approx. Net Wt.	Copper Weight	Ampacity*		
Part #	kcmil	Strands	Insulation	Jacket	(Inches)	(Inches)	(lbs./1000 ft.)	(lbs./1000 ft.)	Tray	Conduit	Duct
35000 Volts, Shielded, 100% Insulation Level											
USA1/0-0135KVESPG	1/0	19	345	80	1.11	1.31	1160	425	290	215	215
USA2/0-0135KVESPG	2/0	19	345	80	1.15	1.35	1290	514	330	255	245
USA3/0-0135KVESPG	3/0	19	345	80	1.20	1.40	1445	625	380	290	275
USA4/0-0135KVESPG	4/0	19	345	80	1.26	1.45	1635	765	445	330	315
USA250-0135KVESPG	250	37	345	80	1.34	1.51	1805	888	490	365	345
USA350-0135KVESPG	350	37	345	80	1.43	1.60	2205	1206	605	440	415
USA500-0135KVESPG	500	37	345	80	1.56	1.72	2920	1679	755	535	500
USA750-0135KVESPG	750	61	345	110	1.75	1.96	3895	2467	970	655	610
USA1000-0135KVESPG	1000	61	345	110	1.90	2.10	4840	3250	1160	755	690

\*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 10°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.