

MEDIUM VOLTAGE POWER



- ▶ **1 Conductor**
- ▶ **EPR**
- ▶ **PVC**
- ▶ **Type MV-105**
- ▶ **5kV and 8kV**

PRODUCT CONSTRUCTION

Conductor: 4 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 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.

USAWC Part #	AWG or kcmil	No. of Strands	Thickness in Mils		Nominal Diameter Over Ins. (Inches)	Nominal Diameter (Inches)	Copper Conductor				
			Insulation	Jacket			Approx. Net Wt. (lbs./1000 ft.)	Copper Weight (lbs./1000 ft.)	Ampacity*		
									Tray	Conduit	Duct
5000 Volts – 133% Insulation Level or 8000 Volts – 100% Insulation Level											
USA4-015KVESP	4	7	115	60	.50	.71	350	178	-	110	120
USA2-015KVESP	2	7	115	60	.56	.77	460	259	-	145	155
USA1-015KVESP	1	19	115	60	.60	.81	565	315	-	175	180
USA1/0-015KVESP	1/0	19	115	60	.64	.84	620	386	290	200	210
USA2/0-015KVESP	2/0	19	115	80	.68	.93	755	474	330	225	235
USA3/0-015KVESP	3/0	19	115	80	.73	.99	890	585	385	270	270
USA4/0-015KVESP	4/0	19	115	80	.79	1.04	1055	725	445	305	310
USA250-015KVESP	250	37	115	80	.85	1.09	1205	849	495	355	345
USA350-015KVESP	350	37	115	80	.95	1.20	1570	1165	615	430	415
USA500-015KVESP	500	37	115	80	1.08	1.34	2115	1639	775	530	505
USA750-015KVESP	750	61	115	80	1.27	1.53	2995	2427	1000	665	630
USA1000-015KVESP	1000	61	115	80	1.42	1.68	3870	3210	1200	770	720

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°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.