

MEDIUM VOLTAGE POWER



- ▶ **3 Conductors**
- ▶ **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, direct burial and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Suitable for commercial, industrial and utility applications where space is limited, ease of installation is critical and reliability is the major concern.

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.

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 (70,000 BTU/hr)

Optional Flame Test: IEEE 1202 (70,000 BTU/hr)/CSA FT4. ICEA T-29-520 (210,000 BTU/hr.)

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

USAWC Part #	Size (AWG or kcmil)	No. of Strands	Thickness in Mils		Nominal Diameter Over Ins. (Inches)	Nom. Diam. (Inches)	Grounding Conductor Size (AWG)	Approx. Net Wt. (lbs./1000 ft.)	Copper Weight (lbs./1000 ft.)	Ampacity*	
			Insulation	Jacket						Conduit	Duct
5000 Volts – 133% Insulation Level or 8000 Volts – 100% Insulation Level											
USA4-035KVESP	4	7	115	80	.50	1.44	6	1245	616	100	115
USA2-035KVESP	2	7	115	80	.56	1.57	6	1575	860	135	154
USA1-035KVESP	1	19	115	80	.60	1.70	4	1950	1074	155	180
USA1/0-035KVESP	1/0	19	115	110	.64	1.80	4	2250	1290	185	205
USA2/0-035KVESP	2/0	19	115	110	.68	1.89	4	2585	1556	210	240
USA3/0-035KVESP	3/0	19	115	110	.73	2.00	3	3040	1918	245	280
USA4/0-035KVESP	4/0	19	115	110	.79	2.13	3	3685	2344	285	320
USA250-035KVESP	250	37	115	110	.85	2.25	3	4160	2759	315	355
USA350-035KVESP	350	37	115	110	.95	2.47	2	5340	3713	390	440
USA500-035KVESP	500	37	115	110	1.08	2.79	1	6610	5191	475	545
USA750-035KVESP	750	61	115	140	1.27	3.26	1/0	10275	7629	585	685
USA1000-035KVESP	1000	61	115	140	1.42	3.59	1/0	12990	10070	660	790

*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.