

# Aluminum Uniblend® PVC High Speed

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded  
25 kV and 35 kV, UL Type MV-105, 133%/100% Ins. Levels, 345 MILS



**Product Construction:**

**Conductor:**

- 1/0 AWG thru 1000 kcmil 1350 aluminum compact Class B strand

**Extruded Strand Shield (ESS):**

- Extruded thermoset semi-conducting stress-control layer over conductor

**Insulation:**

- Lead-free Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semi-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:**

- Low-friction, lead-free, flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

**Options:**

- STRANDFILL® - blocked conductor. Tested in accordance with ICEA T-31-610

**Applications:**

- 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



**Applications (cont'd.):**

- For use in wet or dry locations when installed in accordance with NEC
- For use in aerial, conduit, open tray and underground duct installations
- For use 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)

**Features:**

- Rated at 105°C
- High Speed low friction technology for easy cable pulling
- Excellent heat, moisture and sunlight resistance
- Excellent flame resistance
- Outstanding corona resistance
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant
- Meets cold bend test at -35°C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

**Compliances:**

- 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 NEC, UL File # E90501
- UL 1685 UL Flame Exposure Test
- IEEE 1202 (70,000 BTU/hr)/CSA FT4
- EPA 40 CFR, Part 261 for leachable lead content per TCLP method
- OSHA Acceptable
- RoHS Compliant

**Packaging:**

- Material cut to length and shipped on non-returnable wood reels. Lengths in excess of 10,000 lbs. are provided on returnable steel reels that require a deposit
- Extra charges apply for cuts less than 1000 ft., lagging, pulling eyes, paralleling and triplexing

CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NOMINAL CONDUCTOR DIAMETER INCHES	INSULATION DIAMETER INCHES		NOMINAL JACKET THICKNESS		NOMINAL CABLE				COPPER WEIGHT		AMPACITY						CONDUIT SIZING (4) (INCHES)		
			MIN.	MAX.	INCHES	mm	DIAMETER		WEIGHT		ALUMINUM WEIGHT	COPPER WEIGHT	CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)				
							INCHES	mm	LBS/1000 FT	kg/km			LBS/1000 FT	kg/km	LBS/1000 FT	kg/km	90°C	105°C		90°C	105°C
<b>25 kV* &amp; 35 kV**, UL TYPE MV-105, 133%/100% INS. LEVEL, 345 MILS</b>																					
17061.135108*	1/0	0.34	1.020	1.120	0.080	2.03	1.31	33.27	863	1285	99	147	99	147	150	170	155	165	150	170	5
17061.135208*	2/0	0.38	1.060	1.160	0.080	2.03	1.35	34.29	925	1377	125	186	103	153	175	200	175	190	175	195	5
17061.135308*	3/0	0.43	1.105	1.205	0.080	2.03	1.40	35.56	1000	1488	158	235	107	159	200	225	200	215	205	225	5
17061.135408	4/0	0.48	1.160	1.260	0.080	2.03	1.45	36.83	1093	1626	199	296	112	167	230	260	230	245	235	260	5
17061.136008*	250	0.53	1.210	1.315	0.080	2.03	1.51	38.35	1174	1747	234	348	116	173	255	290	250	270	260	285	5
17061.136208	350	0.62	1.310	1.410	0.080	2.03	1.60	40.64	1356	2018	329	490	125	186	310	350	305	330	325	355	5
17061.136508	500	0.74	1.430	1.530	0.080	2.03	1.72	45.21	1707	2540	468	696	135	201	385	430	370	400	400	445	6
17061.137008	750	0.91	1.610	1.710	0.110	2.79	1.96	49.78	2120	3155	703	1046	151	225	485	540	455	490	515	575	6
17061.137508	1000	1.06	1.760	1.865	0.110	2.79	2.10	53.59	2500	3720	937	1394	162	241	565	640	525	565	620	690	8

Dimensions and weights are nominal. Subject to industry tolerances.

\* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

(1) Ampacities are in accordance with Table 310.60(C)(74) of the NEC for triplexed or three single conductor aluminum cables in isolated conduit in air based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient air temperature of 40°C (104°F).

(2) Ampacities are in accordance with Table 310.60(C)(78) of the NEC for triplexed or three single conductor aluminum cables in underground ducts (three conductors per duct), based on a conductor temperature of 90°C (194°F) or 105°C (221°F), temperature denoted in column header, and an ambient earth temperature of 20°C (68°F), electrical duct arrangement per Figure 310.60 Detail 1, 100% load factor, and earth thermal resistance (rho) of 90.

(3) Ampacities are based on single conductor Type MV-105 sizes #1/0 AWG and larger in an uncovered tray in accordance with Section 392.80(B)(2) of the NEC at an ambient air temperature of 40°C (104°F) the ampacities are based on 75% of the values per Table 310.60(C)(70), operating temperature denoted in column header. For cable trays with unventilated covers for more than 6 feet, the ampacities shall not exceed 70% of the values per Table 310.60(C)(70).

(4) Based on nominal cable diameters, three single cables in the duct (PVC Schedule 40) with no ground wire and a maximum of 40% fill. Jam ratio has been considered but should be checked for individual installations.

¥ 100% insulation level is available upon request.

¥¥ 133% insulation level is available upon request.

Note: a) Sizes smaller than 1/0 AWG do not include "FOR CT USE".

b) The NESC Lightning bolt symbol is on all Uniblend® constructions.