

# Aluminum Uniblend® PVC

TRXLPE/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 compressed Class B strand

### Extruded Strand Shield (ESS):

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

### Insulation:

- High dielectric strength Tree Retardant Crosslinked Polyethylene (TRXLPE) insulation, exhibiting an optimum balance of mechanical and electrical properties, insuring resistance to treeing

### Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

### Metallic Shield:

- Annealed copper tape with an overlap of 25%

### Jacket:

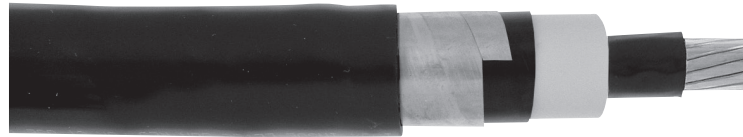
- Low-friction, lead-free, flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC)

### 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
- Excellent heat, moisture and sunlight resistance
- Excellent flame resistance
- Outstanding corona resistance
- Flexibility for easy handling
- Easy Glider® low friction technology for easy cable pulling
- 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 -13 (AEIC CS8-20, Optional)
- CSA C68.10
- UL listed as Type MV-105 for use in accordance with NEC, UL File # E518856
- 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	INSULATION DIAMETER INCHES		NOMINAL JACKET THICKNESS		NOMINAL CABLE				ALUMINUM WEIGHT		COPPER WEIGHT		AMPACITY						CONDUIT SIZING (4) (INCHES)
							DIAMETER		WEIGHT						CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)		
		INCHES	MIN.	MAX.	IN	mm	IN	mm	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	90°C	105°C	90°C	105°C	90°C	105°C	
25 kV¥ & 35 kV¥¥, UL TYPE MV-105, 133%/100% INS. LEVEL, 345 MILS																					
17061.135107	1/0	0.36	1.020	1.120	0.080	2.03	1.35	34.37	813	1210	101	150	100	149	150	170	155	165	150	170	4
17061.135207	2/0	0.41	1.060	1.160	0.080	2.03	1.40	35.46	874	1300	128	190	104	154	175	200	175	190	175	195	4
17061.135307	3/0	0.46	1.105	1.205	0.080	2.03	1.45	36.75	820	1220	161	240	108	160	200	225	200	215	205	225	4
17061.135407	4/0	0.51	1.160	1.260	0.080	2.03	1.50	38.18	1038	1545	203	302	112	167	230	260	230	245	235	265	5
17061.136007	250	0.56	1.210	1.315	0.080	2.03	1.56	39.60	1119	1666	239	356	117	174	255	290	250	270	260	290	5
17061.136207	350	0.66	1.310	1.410	0.080	2.03	1.66	42.21	1296	1929	336	499	125	187	310	350	305	330	325	360	5
17061.136507	500	0.79	1.430	1.530	0.080	2.03	1.80	45.67	1542	2295	478	711	136	203	385	430	370	400	400	450	5
17061.137007	750	0.97	1.610	1.710	0.110	2.79	2.04	51.74	2094	3117	717	1067	152	226	485	540	455	490	515	585	6
17061.137507	1000	1.12	1.760	1.865	0.110	2.79	2.19	55.52	2474	3682	956	1422	165	246	565	640	525	565	620	705	6

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.