



Aluminum Uniblend® PVC High Speed

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded
35 kV, UL Type MV-105, 133% Ins. Levels, 420 Mils



Features (cont'd.):

- 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

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
- 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

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
- 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		INSULATION DIAMETER INCHES		NOMINAL JACKET THICKNESS		NOMINAL CABLE				COPPER WEIGHT		AMPACITY						CONDUIT SIZING (4) (INCHES)	
		INCHES	MIN.	MAX.	INCHES	mm	DIAMETER		WEIGHT		ALUMINUM 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	90°C		105°C
35 kV, UL TYPE MV-105, 133% INS. LEVEL, 420 MILS																					
17071.135108*	1/0	0.34	1.060	1.265	0.080	2.03	1.47	37.34	1026	1527	99	147	111	165	150	170	155	165	150	170	5
17071.135208*	2/0	0.38	1.200	1.305	0.080	2.03	1.49	37.85	1092	1625	125	186	114	170	175	200	175	190	175	195	5
17071.135308*	3/0	0.43	1.245	1.355	0.080	2.03	1.53	38.86	1172	1744	158	235	118	175	200	225	200	215	205	225	5
17071.135408*	4/0	0.48	1.300	1.405	0.080	2.03	1.59	40.39	1262	1878	199	296	123	183	230	260	230	245	235	260	6
17071.136008*	250	0.53	1.350	1.460	0.080	2.03	1.64	41.66	1350	2009	234	348	127	189	255	290	250	270	260	285	6
17071.136208*	350	0.62	1.450	1.555	0.110	2.79	1.79	45.47	1644	2447	329	490	136	202	310	350	305	330	325	355	6
17071.136508*	500	0.74	1.570	1.675	0.110	2.79	1.91	48.50	1910	2842	468	696	146	217	385	430	370	400	400	445	6
17071.137008*	750	0.91	1.750	1.860	0.110	2.79	2.09	53.09	2341	3484	703	1046	161	240	485	540	455	490	515	575	8
17071.137508*	1000	1.06	1.900	2.010	0.110	2.79	2.25	57.15	2734	4069	937	1394	175	260	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.

Note: a) All sizes are "FOR CT USE".

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

