



Aluminum Uniblend® PVC High Speed

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded
15 kV, UL Type MV-105, 133% Ins. Level, 220 Mils



Features (cont'd.):

- 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 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
- Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC
- 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

Product Construction:

Conductor:

- 2 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
- Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- Electrical stability under stress
- Low dielectric loss
- Chemical-resistant

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
15 kV¹, UL TYPE MV-105, 133% INS. LEVEL, 220 MILS																					
17031.130208*	2	0.27	0.710	0.800	0.080	2.03	0.99	25.14	515	767	62	92	71	106	115	130	120	130	-	-	3
17031.130108*	1	0.31	0.745	0.830	0.080	2.03	1.02	25.91	553	822	78	116	74	110	130	150	135	145	-	-	3.5
17031.135108	1/0	0.34	0.780	0.865	0.080	2.03	1.06	26.92	598	890	99	147	77	115	150	170	155	165	150	170	3.5
17031.135208*	2/0	0.38	0.820	0.905	0.080	2.03	1.10	27.94	652	970	125	186	81	121	175	200	175	190	175	195	3.5
17031.135308*	3/0	0.43	0.865	0.955	0.080	2.03	1.14	28.95	718	1068	158	235	85	126	200	225	200	215	205	225	3.5
17031.135408	4/0	0.48	0.920	1.005	0.080	2.03	1.21	30.73	807	1201	199	296	90	134	230	260	230	245	235	265	4
17031.136008*	250	0.53	0.970	1.060	0.080	2.03	1.25	31.75	869	1293	234	348	94	140	255	290	250	270	260	290	4
17031.136208	350	0.62	1.070	1.155	0.080	2.03	1.35	34.29	1031	1534	329	490	103	153	310	350	305	330	325	360	5
17031.136508	500	0.74	1.190	1.275	0.080	2.03	1.47	37.34	1255	1868	468	696	113	168	385	430	370	400	400	450	5
17031.137008	750	0.91	1.370	1.460	0.080	2.03	1.65	41.91	1621	2412	703	1046	129	192	485	540	455	490	515	585	6
17031.137508	1000	1.06	1.520	1.610	0.110	2.79	1.86	47.24	2068	3078	937	1394	140	208	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.

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.

