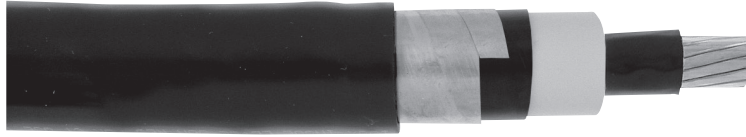


# Aluminum Uniblend® PVC

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



## Product Construction:

### Conductor:

- 2 AWG thru 1000 kcmil 1350 aluminum compressed 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:

- 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
- Meets cold bend test at -35°C

## Features (cont'd):

- 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
- CSA C22.2 No. 230 Type TC-ER (Sizes 1/0 AWG and larger)
- UL listed as Type MV-105 for use in accordance with NEC, UL File # E518856
- 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

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	
15 kV¥, UL TYPE MV-105, 133% INS. LEVEL, 220 MILS																					
17031.130209	2	0.28	0.710	0.800	0.080	2.03	1.02	25.91	534	794	63	94	73	109	115	130	120	130	-	-	3
17031.130109	1	0.32	0.745	0.830	0.080	2.03	1.06	26.90	502	747	80	118	76	113	130	150	135	145	-	-	3
17031.135109	1/0	0.36	0.780	0.865	0.080	2.03	1.10	27.91	618	919	101	150	79	118	150	170	155	165	150	170	3.5
17031.135209	2/0	0.41	0.820	0.905	0.080	2.03	1.14	29.01	669	995	128	190	83	124	175	200	175	190	175	195	3.5
17031.135309	3/0	0.46	0.865	0.955	0.080	2.03	1.19	30.30	617	919	161	240	88	130	200	225	200	215	205	225	3.5
17031.135409	4/0	0.51	0.920	1.005	0.080	2.03	1.25	31.72	821	1222	203	302	93	138	230	260	230	245	235	265	3.5
17031.136009	250	0.56	0.970	1.060	0.080	2.03	1.31	33.15	1217	1811	239	355	97	144	255	290	250	270	260	290	4
17031.136209	350	0.66	1.070	1.155	0.080	2.03	1.41	35.76	1063	1582	336	499	106	158	310	350	305	330	325	360	4
17031.136509	500	0.79	1.190	1.275	0.080	2.03	1.54	39.22	1395	2076	477	710	116	173	385	430	370	400	400	450	5
17031.137009	750	0.97	1.370	1.460	0.080	2.03	1.72	43.76	1668	2483	717	1067	133	198	485	540	455	490	515	585	5
17031.137509	1000	1.12	1.520	1.610	0.110	2.79	1.93	49.07	2185	3252	956	1422	144	215	565	640	525	565	620	705	6
17001.137008	750	0.91	1.170	1.250	0.080	2.03	1.45	36.83	1355	2016	703	1046	108	161	485	540	455	490	525	585	4
17001.137508	1000	1.06	1.320	1.400	0.080	2.03	1.61	40.89	1674	2491	937	1394	121	180	565	640	525	565	630	705	5

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 315.60(C)(8) of the 2023 NEC for triplexed or three single conductor copper 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 315.60(C)(12) of the 2023 NEC for triplexed or three single conductor copper 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 315.60(D)(3) 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 installed with no spacing between cables in an uncovered tray in accordance with Section 392.80(B)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 75% of the values per Table 315.60(C)(4), operating temperature denoted in column header.

(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 not 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.

