

Uniblend® PVC

EPR/Copper Tape Shield with Overall PVC Jacket, Medium-Voltage Power, Shielded, 5 kV and 8 kV



Product Construction:

Conductor:

- 6 AWG thru 1000 kcmil annealed bare copper 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:

- Annealed copper tape with an overlap of 25%

Grounding Conductor:

- 1 bare grounding conductor may be in contact with metallic shielding tape

Overall 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
- 3 bare copper ground wires
- Covered ground wires

Applications:

- Suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical



Applications (cont'd):

- In wet or dry locations when installed in accordance with NEC
- In aerial, direct burial, conduit, open tray and underground duct installations

Features:

- Rated at 105°C
- Easy Glider® low friction technology for easy cable pulling
- Excellent heat, moisture and sunlight 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
- ICEA T-33-655
- AIEC CS8
- CSA C68.10

Compliances (cont'd):

- 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
- UL 1685 Vertical Flame and ST1 Smoke Release 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		GROUND WIRE (AWG)	NOMINAL JACKET THICKNESS	NOMINAL CABLE				COPPER WEIGHT		AMPACITY					
							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	90 °C	105 °C	90 °C	105 °C	90 °C

5 kV AND 8 kV, UL TYPE MV-105, 133%/100% INS. LEVELS, 115 MILS

15493.400605	6	0.17	0.415	0.490	6	0.080	2.03	1.32	33.53	1009	1502	454	676	83	92	88	95	93	105
15493.400405	4	0.21	0.455	0.535	6	0.080	2.03	1.41	35.81	1245	1852	611	909	105	120	115	125	120	135
15493.400205	2	0.27	0.510	0.590	6	0.080	2.03	1.53	38.86	1565	2330	853	1270	145	165	150	160	165	185
15493.405105	1/0	0.34	0.580	0.655	4	0.080	2.03	1.67	42.42	2091	3112	1283	1909	195	215	195	210	215	240
15493.405205	2/0	0.38	0.620	0.695	4	0.080	2.03	1.76	44.70	2392	3559	1549	2305	220	245	220	235	245	275
15493.405405	4/0	0.48	0.720	0.795	3	0.110	2.79	2.06	52.32	3517	5233	2338	3479	290	320	285	305	325	360
15493.406005	250	0.52	0.770	0.850	2	0.110	2.79	2.18	55.37	3990	5938	2751	4094	315	350	310	335	360	400
15493.406205	350	0.62	0.870	0.945	2	0.110	2.79	2.38	60.45	5052	7519	3706	5515	385	430	375	400	435	490
15493.406505	500	0.74	0.990	1.065	1	0.110	2.79	2.63	66.80	6684	9947	5178	7705	470	525	450	485	535	600
15493.407005	750	0.91	1.170	1.250	1/0	0.140	3.56	3.05	77.47	9499	14136	7621	11341	570	635	545	585	670	745
15493.407505	1000	1.06	1.320	1.400	2/0	0.140	3.56	3.48	88.39	12601	18752	10070	14986	650	725	615	660	770	860

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)(75) of the NEC for three conductor copper cable 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)(79) of the NEC for three conductor copper cable 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 three conductor Type MV-105 cables in single layer in an uncovered tray with maintained spacing of not less than one cable diameter between cables, in accordance with Section 392.80(B)(1) of the NEC at an ambient air temperature of 40°C (104°F); the ampacities are per Table 310.60(C)(71), operating temperature denoted in column header. For cable trays with unventilated covers for more than 6 feet, the ampacities shall not exceed 95% of the values in NEC Table 310.60(C)(75).

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

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

