GenFree® Uniblend®

EPR/Copper Tape Shield/LSZH, Medium-Voltage Power, Shielded 5 kV and 8 kV UL Type MV-105/ST1, 133%/100% Ins. Levels, 115 Mils



Product Construction:

Conductor:

6 AWG thru 1000 kcmil annealed bare copper compact Class B strand

Extruded Strand Shield (ESS):

Extruded thermoset semi-conducting stresscontrol 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%

Overall Jacket:

· Lead-free, moisture- and sunlight-resistant Low-Smoke, Zero-Halogen Polyolefin (LSZH)

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:

\cdot Rated at 105 $^\circ\text{C}$

- · Excellent heat, moisture and sunlight resistance
- Excellent flame resistance Outstanding corona resistance
- Easy Glider[®] low friction technology for easy cable pulling
- · Flexibility for easy handling
- High dielectric strength
- Low moisture absorption
- · Electrical stability under stress
- · Low dielectric loss



- · 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
- · AEIC CS8-13 (AEIC CS8-20, Optional)
- · 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 nonreturnable 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

	COND.	ΝΟΜΙΝΔΙ	INSULATION DIAMETER INCHES		NOMINAL JACKET THICKNESS		NOMINAL CABLE						AMPACITY						
		CONDUCTOR DIAMETER					DIAMETER		WEIGHT		COPPER WEIGHT		CONDUIT IN AIR (1)		UNDERGROUND DUCT (2)		TRAY (3)		CONDUIT
CATALOG NUMBER	(AWG/ kcmil)	INCHES	MIN.	MAX.	IN	mm	IN	mm	LBS/ 1000 FT	kg/ km	LBS/ 1000 FT	kg/ km	90°C 10	5°C	90°C	105°C	90°C	105°C	SIZING (4) (INCHES)

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

17201.120605	6	0.17	0.415	0.490	0.060	1.52	0.66	16.76	306	455	124	185	83	93	90	97	-	-	2
17201.120405	4	0.21	0.455	0.535	0.060	1.52	0.71	18.03	377	561	176	262	110	120	115	125	-	-	2
17201.120205	2	0.27	0.510	0.590	0.060	1.52	0.76	19.30	483	718	257	382	150	165	155	165	-	-	2.5
17201.120105	1	0.30	0.545	0.620	0.060	1.52	0.79	20.07	539	802	313	465	170	190	175	185	-	-	2.5
17201.125105	1/0	0.34	0.580	0.655	0.060	1.52	0.83	21.08	633	941	383	570	195	215	200	215	195	220	2.5
17201.125205	2/0	0.38	0.620	0.695	0.060	1.52	0.87	22.10	733	1091	472	702	225	255	230	245	225	250	2.5
17201.125305	3/0	0.42	0.665	0.745	0.080	2.03	0.94	23.88	886	1319	583	868	260	290	260	275	260	290	3
17201.135405	4/0	0.48	0.720	0.795	0.080	2.03	1.00	25.40	1060	1577	723	1075	295	330	295	315	300	335	3
17201.136005	250	0.52	0.770	0.850	0.080	2.03	1.06	26.92	1199	1784	846	1259	330	365	325	345	335	370	3
17201.136205	350	0.62	0.870	0.945	0.080	2.03	1.15	29.21	1531	2279	1163	1731	395	440	390	415	415	460	3.5
17201.136505	500	0.74	0.990	1.065	0.080	2.03	1.26	32.00	2047	3046	1635	2433	480	535	465	500	515	575	3.5
17201.137005	750	0.91	1.170	1.250	0.080	2.03	1.43	36.32	2874	4277	2424	3607	585	655	565	610	665	745	4
17201.637505	1000	1.06	1.320	1.400	0.080	2.03	1.61	40.89	3790	5640	3209	4776	675	755	640	690	795	890	5

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery. (I) Ampacities are in accordance with Table 315.60(C)(7) 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)(11) 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.

. I3 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)(3), operating temperature denoted in column heade

(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. 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.





