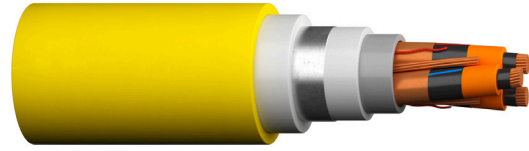


AIRGUARD® Medium Voltage

EPR/Copper Tape Shield/Polymeric Armor/PVC Shielded
UL Type MV-105, 5kV and 8kV, 133%/100% Ins. Level



Product Construction:

Conductor:

- 2 AWG thru 750 kcmil annealed bare copper per ASTM B3
- Compact Class B stranding per ASTM B496

Extruded Strand Shield (ESS):

- Extruded thermoset semi-conducting stress control layer over conductor

Insulation:

- Ethylene Propylene Rubber (EPR) insulation, contrasting in color to the black semiconducting shield layers

Extruded Insulation Shield (EIS):

- Thermoset semi-conducting polymeric layer free stripping from insulation

Metallic Shield:

- Annealed copper tape with a nom. overlap of 25%

Ground Conductor(s):

- Three (3) split annealed bare copper ground conductors

Polymeric Armor:

- High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Overall Jacket:

- Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

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
- 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
- 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 and cold impact test at -40°C
- 105°C rating for continuous operation
- 140°C rating for emergency overload conditions
- 250°C rating for short circuit conditions

Compliances:

Industry Compliances:

- UL 1072 Type MV105, UL File # E518856
- ICEA S-93-639 / NEMA WC74
- ICEA S-97-682
- AEIC CS8-13 (AEIC CS8-20, Optional)
- CSA Standard C68.10 MV68.10 (Optional)
- Mine Power Type MP-GC (Optional)

Flame Test Compliances:

- UL 1685 Vertical Flame Test
- IEEE 1202
- CSA FT4

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable

Packaging:

- Material cut to length and shipped on nonreturnable wood reels

Product Number	Circuit Cond. Size (AWG)	Insulation Thickness (Mils)	Ground Wires		Nom. Cond. O.D. (In)	Nom. Insulation O.D. (In)	Nom. EIS O.D. (In)	Nom. Overall Cable O.D. (In)	Nom. Cable Weight (Lbs/ Kft)	† Ampacity (Amps)					
										Conduit In Air (1)		Underground Duct (2)		Uncovered Tray (3)	
										90°C	105°C	90°C	105°C	90°C	105°C

5kV 133%/8kV 100% Copper Three Conductor

10500.00203310	2 AWG CU	115	3	#10	0.27	0.56	0.60	1.85	2182	145	165	150	160	165	185
10500.11003308	1/0 AWG CU	115	3	#8	0.34	0.63	0.68	2.05	2914	195	215	195	210	215	240
10500.21003308	2/0 AWG CU	115	3	#8	0.38	0.67	0.71	2.13	3281	220	245	220	235	245	275
10500.41003307	4/0 AWG CU	115	3	#7	0.47	0.76	0.76	2.32	4344	290	320	285	305	325	360
10500.25003306	250 AWG CU	115	3	#6	0.53	0.82	0.86	2.46	4974	315	350	310	335	360	400
10500.35003306	350 AWG CU	115	3	#6	0.62	0.91	0.96	2.67	6247	385	430	375	400	435	490
10500.50003305	500 AWG CU	115	3	#5	0.74	1.03	1.08	3.00	8349	470	525	450	485	535	600
10500.75003304	750 AWG CU	115	3	#4	0.92	1.22	1.27	3.44	11635	570	635	545	585	670	745

The above dimensions are approximate and subject to normal manufacturing tolerances.

† Ampacities are based on the following:

(1) Ampacities are in accordance with Table 315.60(C)(9) of the 2023 NEC for three 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)(13) of the 2023 NEC for three 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 three conductor cables installed with at least one OD between cables in an uncovered tray in accordance with Section 392.80(B)(1)(2) of the 2023 NEC at an ambient air temperature of 40°C (104°F); the ampacities are based on 100% of the values per Table 315.60(C)(5), operating temperature denoted in column header.

EPROTENAX™ EPR-insulated cables are capable of operating at 105°C. However, the maximum operating temperature of the cable should be based on the maximum operating temperature of the cable accessories to be used.