

MC-HL ARMORED



- ▶ **3 Conductors**
- ▶ **EPR**
- ▶ **PVC**
- ▶ **MC-HL/MV-105**
- ▶ **15kV – 133%**

PRODUCT CONSTRUCTION

Conductor: 2 AWG through 750 kcmil bare annealed copper per ASTM B3. Compact stranding per ASTM B496.

Extruded Strand Shield (ESS): Extruded thermoset semi-conductor stress control layer over the conductor per ICEA S-93-639 and UL 1072.

Insulation: 220 mil Ethylene Propylene Rubber (EPR) insulation per ICEA S-93-639 and UL 1072.

Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer, free stripping from the insulation per ICEA S-93-639 and UL 1072.

Shield: 5 mil annealed bare copper tape with 25% overlap.

Grounding Conductor(s): Class B stranded bare annealed copper ground conductor sized in accordance with UL 1072 and NEC Article 250.

Armor: Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1072 and 1569. Meets grounding requirements of NEC Article 250.

Jacket: Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), red. Low-temperature performance meets ASTM D746 brittleness temperature at or below -40°C.

APPLICATIONS

For use in Class I, II and III, Divisions 1 and 2; or Class 1, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505. For installation on metal racks, troughs, in raceways and cable trays, or secured to supports not more than six feet apart. For exposed and concealed work in wet or dry locations and in directly buried or embedded in concrete. For use on feeders and branch circuits in industrial power distribution systems per NEC Articles 328 and 330.

FEATURES

Armor provides impervious barrier to moisture, gas and liquids. The strand shield, EPR insulation and insulation shield are extruded in one operation. The EPR insulation system has outstanding corona resistance and high dielectric strength, and it provides electrical stability under stress. Meets cold impact test at -40°C.

COMPLIANCES

Industry: UL Type MV-105. UL Type MC-HL, XHHW-2, CT USE, SUN RES, DIR BUR -40°C, FT4. UL Listed Marine Shipboard, American Bureau of Shipping (ABS) Listed for CWCMC.

Design Adherence: ICEA S-93-639/WC74, 5-46 kV Shielded Power Cable. AEIC CS8 Specification for Shielded Power Cable, 5-46 kV.

UL 1072 Medium-Voltage Power Cables. UL 1569 Metal Clad Cables. UL 2225 Cables and Cable Fittings for Use in Hazardous Locations.

UL 1309 Marine Shipboard Cable. CSA C68.3

Flame Tests: ICEA T-29-520 (210,000 BTU/hr). IEEE 383 (70,000 BTU/hr). CSA FT4. IEEE 1202 (70,000 BTU/hr). UL 1072.

IEC 60332-3 Category A.

USAWC Part #	Size (AWG or kcmil)	No. of Strands	Insul. Thick. (Mils)	Nom. Diam. Over Armor (Inches)	PVC Jkt. Thick (Mils)	Nom. Diam. Over PVC Jkt. (Inches)	Copper Phase Conductors				
							Copper Grounding Conductor (AWG)	Weight (lbs./1000 ft.)		Ampacity	
								Net	Copper	In Air	Direct Burial
15000 VOLTS – 133% INSULATION LEVEL											
USA2-0315KVMCHL	2	7	220	2.15	60	2.28	6	2473	913	185	200
USA1-0315KVMCHL	1	19	220	2.23	60	2.36	4	2811	1125	210	225
USA1/0-0315KVMCHL	1/0	19	220	2.32	75	2.48	4	3190	1343	240	255
USA2/0-0315KVMCHL	2/0	19	220	2.40	75	2.56	4	3630	1609	275	290
USA4/0-0315KVMCHL	4/0	19	220	2.62	75	2.79	3	4435	2398	360	345
USA250-0315KVMCHL	250	37	220	2.75	75	2.92	3	5086	2812	400	410
USA350-0315KVMCHL	350	37	220	3.03	85	3.21	2	6445	3766	490	495
USA500-0315KVMCHL	500	37	220	3.32	85	3.50	1	8376	5244	600	590
USA750-0315KVMCHL	750	61	220	3.80	85	3.98	1/0	11431	7682	745	720