

(3C) HL TECK

Three Conductor, XLP Insulated, PVC Inner Jacket, Aluminum or Steel Armor, PVC Outer Jacket, 600 Volts

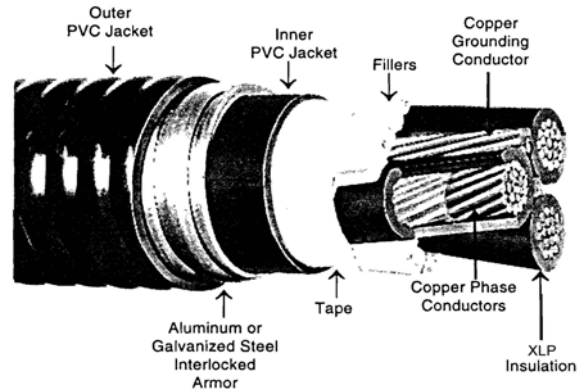
APPLICATION:

As 600 volt Type MC cable rated 90°C in wet or dry locations; for installation aerially, in metal rack, trough, cable tray, or direct buried; for power and control circuits not exceeding 600 volts in manufacturing and processing plants, substations and generating stations. May be used in NEC Class I and II, Div. 2 and Class III, Div. 1 and 2 hazardous locations.

STANDARDS:

1. Listed by UL as Type MC cable per Standard 1569.
2. Individual conductors UL listed as Type XHHW-2 per UL Standard 44.
3. Jackets UL listed as Sunlight Resistant.
4. Cables UL listed for Direct Burial.
5. Cables pass UL and IEEE-383 ribbon burner flame tests and are UL listed For CT Use.
6. Cables pass ICEA 210,000 BTU/hr. ribbon burner flame test.
7. Cables conform to ICEA S-95-658, NEMA WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.

CONSTRUCTION: Three conductors of stranded uncoated copper, XLP (crosslinked polyethylene) insulation, surface print phase identification, twisted with one uncoated copper grounding conductor, suitable fillers, binder tape, PVC inner jacket, aluminum or galvanized steel interlocked armor, PVC jacket overall.



USAWC Part #	Size AWG or kcmil	No. of Strands	Insul. Thick. Mils	Inner PVC Jkt. Mils	Nom. Diam. Inner Jkt. Inches	Nom. Diam. Over Armor Inches	Outer PVC Jkt. Mils	Nom. Cable Diam. Inches	Copper Grounding Conductor AWG	Weight lbs/ 1000 ft		Ampacity* 90°C
										Alum. Armor	Copper	
8-03WGTECK90	8	7	45	50	.62	.79	50	.89	10	495	189	55
6-03WGTECK90	6	7	45	50	.70	.87	50	.97	8	650	300	75
4-03WGTECK90	4	7	45	50	.80	.98	50	1.08	8	840	447	95
3-03WGTECK90	3	7	45	50	.89	1.07	50	1.17	6	979	570	110
2-03WGTECK90	2	7	45	50	.93	1.10	50	1.21	6	1265	710	130
1-03WGTECK90	1	19	55	50	1.06	1.23	50	1.34	6	1510	873	150
1/0-03WGTECK90	1/0	19	55	50	1.15	1.32	50	1.43	6	1780	1081	170
2/0-03WGTECK90	2/0	19	55	50	1.27	1.45	50	1.56	6	2110	1341	195
3/0-03WGTECK90	3/0	19	55	50	1.35	1.53	60	1.66	4	2565	1717	225
4/0-03WGTECK90	4/0	19	55	50	1.48	1.65	60	1.78	4	3085	2130	260
250-03WGTECK90	250	37	65	50	1.62	1.83	60	1.96	4	3690	2469	290
350-03WGTECK90	350	37	65	60	1.87	2.08	60	2.21	3	4875	3433	350
500-03WGTECK90	500	37	65	60	2.15	2.36	75	2.52	2	6670	4855	430
750-03WGTECK90	750	61	80	75	2.70	2.91	75	3.07	1	9895	7208	535

*AMPACITY in accordance with the NEC for cables installed in uncovered cable tray without maintained spacing at the conductor temperature indicated in wet or dry locations, 30 C ambient temperature

Specification

HL TECK INTERLOCKED ARMOR POWER CABLE, TYPE MC

Three Conductor, XLP Insulated, PVC Inner Jacket,
Aluminum or Steel Armor, PVC Outer Jacket, 600 Volts

1. SCOPE
 - 1.1 This specification describes three conductor XLP (thermosetting crosslinked polyethylene) insulated, aluminum or galvanized steel interlocked armor Type MC power cable having PVC jackets under and over the armor for use in circuits not exceeding 600 volts phase-to-phase at conductor temperatures of 90°C in wet or dry locations for normal operation, 130°C for emergency overload conditions and 250°C for short circuit conditions. Cables are intended for installation indoors or outdoors, aerially, in metal rack, trough or cable trays, or for direct burial.
2. STANDARDS
 - 2.1 The following standards shall form a part of this specification to the extent specified herein:
 - 2.1.1 UL Standard 1569 for Type MC cable.
 - 2.1.2 UL Standard 44 for Type XHHW-2 conductors.
 - 2.1.3 ICEA Pub. No. S-95-658, NEMA Pub. No. WC7D for Nonshielded Power Cables Rated 2000 Volts or Less.
3. CONDUCTORS
 - 3.1 Class B stranded annealed uncoated copper per Part 2 of ICEA.
4. SEPARATOR
 - 4.1 A suitable separator over the conductor may be used at the option of the manufacturer.
5. INSULATION
 - 5.1 Shall be XLP crosslinked polyethylene meeting the requirements of ICEA Table 3-7, Type X-2 and Type XHHW-2 requirements of UL 44. Average thickness of insulation shall be as specified in UL 44 for Type XHHW-2 conductors and in Table 3-4, Column B of ICEA. Minimum thickness at any point shall be not less than 90% of the specified average thickness.
6. PHASE IDENTIFICATION
 - 6.1 Insulated phase conductors shall be printed with the numerals "1", "2" and "3" on the surface of the insulation.
7. ASSEMBLY
 - 7.1 Three phase conductors shall be cabled together with a Class B stranded, uncoated copper grounding conductor and suitable nonhygroscopic fillers to make round. Length of lay shall not exceed 35 times the phase conductor diameter. The grounding conductor shall comply with the requirements of UL Standard 1569. A suitable non-hygroscopic cable tape shall be applied over the assembly.
8. INNER PVC JACKET
 - 8.1 Shall be PVC meeting the requirements of ICEA Table 4-1 and the Sunlight Resistant requirements of UL 1569. Average jacket thickness shall be in accordance with UL 1569. Minimum thickness at any point shall be not less than 70% of the specified average thickness.
9. ARMOR
 - 9.1 Aluminum or galvanized steel interlocked armor shall be applied over the inner PVC jacket. Armor shall be in accordance with UL requirements for Type MC cable and Paragraph 4.3.3 of ICEA.
10. OUTER PVC JACKET
 - 10.1 Shall be PVC meeting the requirements of ICEA Table 4-1 and the Sunlight Resistant requirements of UL 1569. Average jacket thickness shall be in accordance with UL 1569. Minimum thickness at any point shall be not less than 70% of the specified average thickness.
11. IDENTIFICATION
 - 11.1 An ink print legend shall be applied to the surface of the PVC outer jacket providing cable and manufacturer identification.
12. TESTS
 - 12.1 Conductors and completed cables shall be tested in accordance with UL requirements for Type MC cables having XHHW-2 conductors.
 - 12.2 Cables shall be capable of passing the ribbon burner cable tray flame test requirements of UL and shall be UL listed "For CT Use".