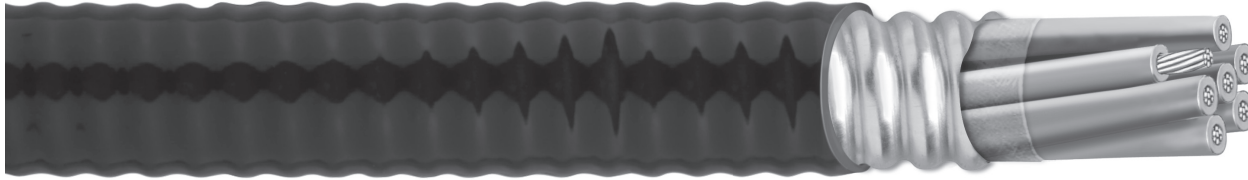


# CCW® Armored Control With Grounding Conductor

UL Type MC-HL, CSA Type HL, XLPE, 600 V or 1000 V, 90°C, Cable Tray Use, Sunlight-Resistant Direct Burial, UL Marine Shipboard Cable, ABS CWCMC



## Product Construction:

### Conductor:

- Bare annealed copper per ASTM B3
- Compressed Class B stranding per ASTM B8

### Insulation:

- Cross-linked Polyethylene (XLPE) insulation per ICEA S-73-532 and UL 44, Listed XHHW-2
- Color-coded per ICEA Method 1, Table E2, full-colored insulation with stripes
- Color-coded per CSA C22.2 No. 123 where applicable

### Grounding Conductor:

- Class B stranded bare annealed copper per ASTM B3 and B8
- Cross-linked Polyethylene (XLPE) insulation, green
- Sized in accordance with NEC Table 250.122

### Cable Assembly:

- Insulated conductors and grounding wire are cabled together with non-hygroscopic fillers when required
- A binder tape, when required, is applied over the cabled core

### CCW Armor:

- Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1569 and UL 2225
- CCW armor conductivity meets the grounding requirements of NEC Article 250

### Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), black
- Low temperature performance meets ASTM D746 brittleness temperature at or below -40°C
- Meets CSA Low Acid Gas requirements

## Applications:

- CCW armored control cables offer an economical, rugged and reliable alternative to labor-intensive cable in conduit wiring methods
- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations, directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330
- Recognized for use on fixed or floating offshore petroleum facilities as recommended by the American Petroleum Institute

## Features:

- CCW armor provides an impervious barrier to moisture, gas and liquids
- CCW armor provides EMI shielding performance
- Factory assembled and tested cable for use as an alternative to cable in conduit wiring systems
- Meets cold bend and cold impact at -40°C
- 90°C continuous operating temperature, wet or dry
- 130°C emergency rating
- 250°C short circuit rating

## Specifications:

### Design Adherence:

- ICEA S-73-532/WC57 Standard for Control, Thermocouple Extension and Instrumentation Cables
- UL 44 Rubber Insulated Wires and Cables
- UL 1569 Metal Clad Cables
- UL 2225 Cables and Cable Fittings for Use in Hazardous Locations
- UL 1309 Marine Shipboard Cable
- CSA C22.2 No. 123 Metal Sheathed Cables
- CSA C22.2 No. 174 Cables and Cable Glands for Use in Hazardous Locations

### Flame Tests:

- IEEE 383 (70,000 BTU/hr)
- CSA FT4
- IEEE 1202 (70,000 BTU/hr)

### Compliances:

- UL Type MC-HL, XHHW-2, SUN RES, CT USE, DIR BUR, -40°C, 600V or 1000V, UL File # E90496
- UL Listed Marine Shipboard, UL File # E85994
- American Bureau of Shipping (ABS) Listed for CWCMC
- CSA certified<sup>1,2</sup> 600V Type RA90, XLPE, HL, SR, FT4, and -40°C, CSA File # 7319
- RoHS Compliant

<sup>1</sup> Standard cables are also marked CSA Type RA90, except four (4) conductor cables which require a different color code, which may be special-ordered.

<sup>2</sup> CSA Type RA90 listed at 600V only

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CATALOG NUMBER	COND. SIZE (AWG)	NO. OF COND.	GREEN INSULATED GROUND (AWG)	INSULATION THICKNESS		NOMINAL CORE O.D.		NOMINAL ARMOR O.D.		JACKET THICKNESS		NOMINAL OVERALL O.D.		CROSS- SECTIONAL AREA <sup>1</sup> SQ. IN.	APPROXIMATE NET WEIGHT		90°C AMPACITY @ 30°C AMBIENT <sup>2</sup>
				mils	mm	IN	mm	IN	mm	mils	mm	IN	mm		LBS/ 1000 FT	kg/ 1000 m	
14 AWG 7W (2.08 mm²) MULTI-CONDUCTOR CONTROL CABLE WITH GREEN INSULATED GROUNDING CONDUCTOR																	
9500.01402114	14	2	14	30	0.76	0.29	7.3	0.45	11.5	50	1.27	0.56	14.1	0.24	173	257	15
9500.01403114	14	3	14	30	0.76	0.33	8.4	0.53	13.5	50	1.27	0.64	16.3	0.32	207	309	15
9500.01404114	14	4	14	30	0.76	0.35	8.9	0.56	14.1	50	1.27	0.66	16.7	0.34	226	337	15
9500.01405114	14	5	14	30	0.76	0.43	10.9	0.64	16.2	50	1.27	0.74	18.8	0.43	264	393	15
9500.01406114	14	6	14	30	0.76	0.43	10.9	0.64	16.2	50	1.27	0.74	18.8	0.43	280	416	15
9500.01408114	14	8	14	30	0.76	0.49	12.4	0.70	17.9	50	1.27	0.81	20.5	0.51	337	501	15
9500.01411114	14	11	14	30	0.76	0.57	14.6	0.81	20.6	50	1.27	0.92	23.3	0.66	410	611	12
9500.01418114	14	18	14	30	0.76	0.69	17.6	0.94	23.9	50	1.27	1.05	26.6	0.86	587	873	12
9500.01436114	14	36	14	30	0.76	0.94	23.9	1.18	30.0	50	1.27	1.29	32.7	1.30	948	1411	10
12 AWG 7W (3.31 mm²) MULTI-CONDUCTOR CONTROL CABLE WITH GREEN INSULATED GROUNDING CONDUCTOR																	
9500.01202112	12	2	12	30	0.76	0.34	8.6	0.54	13.6	50	1.27	0.64	16.2	0.32	215	320	20
9500.01203112	12	3	12	30	0.76	0.38	9.6	0.60	15.1	50	1.27	0.70	17.8	0.38	255	380	20
9500.01204112	12	4	12	30	0.76	0.41	10.5	0.63	15.9	50	1.27	0.73	18.5	0.42	286	426	20
9500.01205112	12	5	12	30	0.76	0.45	11.4	0.66	16.6	50	1.27	0.76	19.3	0.45	316	471	20
9500.01206112	12	6	12	30	0.76	0.45	11.4	0.66	16.6	50	1.27	0.76	19.3	0.45	339	505	20
9500.01208112	12	8	12	30	0.76	0.56	14.2	0.80	20.2	50	1.27	0.90	22.9	0.64	437	650	20
9500.01211112	12	11	12	30	0.76	0.64	16.2	0.88	22.4	50	1.27	0.99	25.0	0.76	520	774	15
9500.01218112	12	18	12	30	0.76	0.76	19.2	1.00	25.4	50	1.27	1.11	28.1	0.96	753	1121	15
9500.01236112	12	36	12	30	0.76	1.10	27.9	1.37	34.8	50	1.27	1.48	37.6	1.72	1302	1938	12
10 AWG 7W (5.26 mm²) MULTI-CONDUCTOR CONTROL CABLE WITH GREEN INSULATED GROUNDING CONDUCTOR																	
9500.01002110	10	2	10	30	0.76	0.39	10.0	0.61	15.4	50	1.27	0.71	18.1	0.40	275	409	30
9500.01003110	10	3	10	30	0.76	0.44	11.1	0.65	16.4	50	1.27	0.75	19.0	0.44	317	472	30
9500.01004110	10	4	10	30	0.76	0.49	12.4	0.70	17.9	50	1.27	0.81	20.5	0.51	371	552	30
9500.01006110	10	6	10	30	0.76	0.53	13.4	0.76	19.3	50	1.27	0.86	21.9	0.58	452	672	28
9500.01008110	10	8	10	30	0.76	0.64	16.2	0.88	22.4	50	1.27	0.99	25.0	0.76	565	841	28
9500.01011110	10	11	10	30	0.76	0.76	19.2	1.00	25.4	50	1.27	1.11	28.1	0.96	759	1129	20

Dimensions and weights are nominal; subject to industry tolerances.

<sup>1</sup> Cross-sectional area for cable tray fill is in accordance with NEC Section 392.22.

<sup>2</sup> Ampacities in accordance with NEC Article 310 and Table 310.15(B)(16).

Note: Standard cables with up to and including six (6) conductors are also marked CSA Type RA90. All others are special order.

