CCW® Armored Control Without Grounding Conductor

UL Type MC, 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
- · 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, fullcolored insulation with stripes
- · Color-coded per CSA C22.2 No. 123 where applicable

Cable Assembly:

- Insulated conductors are cabled together with non-hydroscopic 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
 COM arrows and leaf in the product the grounding.
- CCW armor conductivity meets the grounding requirements of NEC Article 250

Jacket

- · Flame-retardant, moisture- and sunlightresistant 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 and II, Division 2; Class III, Divisions I and 2; and Class I, Zone 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 -40C

Features (cont'd):

- 90°C continuous operating temperature, wet or dry
- · 130°C emergency rating
- · 250°C short circuit rating

Specifications:

Design Adherence:

- · ICEA S-73-532/WC-57 Standard for Control, Thermocouple Extension and Instrumentation Cables
- · UL 44 Rubber Insulated Wires and Cables
- · UL 1569 Metal Clad Cables
- · UL 1309 Marine Shipboard Cable
- · CSA C22.2 No. 123 Metal Sheathed Cables

Flame Tests:

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

Compliances:

- · UL Type MC, 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^{1,2} 600V Type RA90, XLPE, HL, SR, FT4, and -40°C, CSA File # 7319
- $\cdot \, \mathsf{RoHS} \, \mathsf{Compliant}$
- ¹ Standard cables are also marked CSA Type RA90, except four (4) conductor cables which require a different color code, which may be special-ordered.
- ² CSA Type RA90 listed at 600V only











CCW® Armored Control Without Grounding Conductor

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

	COND.	NO.	INSULATION THICKNESS		NOMINAL CORE O.D.		NOMINAL ARMOR O.D.		JACKET THICKNESS		NOMINAL OVERALL O.D.				XIMATE /EIGHT	90°C
CATALOG NUMBER	SIZE (AWG)	OF COND.	mils	mm	IN	mm	IN	mm	mils	mm	IN	mm	(SQ. IN.)	LBS/ 1000 FT	kg/ 1000 m	30°C AMBIENT ²
14 AWG 7	<u> </u>			1			1									
9525.01402000	14	2	30	0.76	0.29	7.1	0.45	12.4	50	1.27	0.56	15.2	0.24	157	234	15
9525.01403000	14	3	30	0.76	0.29	7.3	0.45	11.5	50	1.27	0.56	14.1	0.24	172	256	15
9525.01404000	14	4	30	0.76	0.33	8.4	0.53	13.5	50	1.27	0.64	16.3	0.32	183	272	15
9525.01405000	14	5	30	0.76	0.39	10.0	0.61	15.4	50	1.27	0.71	18.1	0.40	241	358	15
9525.01407000	14	7	30	0.76	0.41	10.4	0.63	15.7	50	1.27	0.73	18.5	0.42	276	411	15
9525.01409000	14	9	30	0.76	0.49	12.4	0.70	17.9	50	1.27	0.81	20.5	0.51	336	500	15
9525.01412000	14	12	30	0.76	0.57	14.5	0.80	20.3	50	1.27	0.91	23.1	0.65	386	574	12
9525.01419000	14	19	30	0.76	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.85	544	809	12
9525.01437000	14	37	30	0.76	0.96	24.4	1.24	31.5	50	1.27	1.35	34.3	1.43	959	1427	10
12 AWG 7W (3.31 mm²) MULTI-CONDUCTOR CONTROL CABLE WITHOUT GROUNDING CONDUCTOR																
9525.01202000	12	2	30	0.76	0.31	7.9	0.53	13.5	50	1.27	0.64	16.3	0.32	166	247	20
9525.01203000	12	3	30	0.76	0.34	8.6	0.54	13.6	50	1.27	0.64	16.2	0.32	216	321	20
9525.01204000	12	4	30	0.76	0.38	9.6	0.60	15.1	50	1.27	0.70	17.8	0.38	259	385	20
9525.01205000	12	5	30	0.76	0.41	10.7	0.63	15.7	50	1.27	0.73	18.5	0.42	285	424	20
9525.01207000	12	7	30	0.76	0.45	11.4	0.66	16.6	50	1.27	0.76	19.3	0.45	339	504	20
9525.01209000	12	9	30	0.76	0.56	14.2	0.80	20.3	50	1.27	0.91	23.1	0.65	410	610	20
9525.01212000	12	12	30	0.76	0.64	16.5	0.88	22.6	50	1.27	0.99	25.1	0.76	515	766	15
9525.01219000	12	19	30	0.76	0.78	19.8	1.02	25.9	50	1.27	1.13	28.7	1.00	731	1088	15
9525.01237000	12	37	30	0.76	1.08	27.4	1.37	34.8	50	1.27	1.48	37.6	1.72	1318	1961	12
10 AWG 7W (5.26 mm²) MULTI-CONDUCTOR CONTROL CABLE WITHOUT GROUNDING CONDUCTOR																
9525.01002000	10	2	30	0.76	0.36	9.1	0.58	14.7	50	1.27	0.69	17.5	0.37	205	305	30
9525.01003000	10	3	30	0.76	0.39	10.0	0.61	15.4	50	1.27	0.71	18.1	0.40	274	408	30
9525.01004000	10	4	30	0.76	0.44	11.1	0.61	15.4	50	1.27	0.71	18.1	0.40	314	467	30
9525.01005000	10	5	30	0.76	0.49	12.4	0.70	17.9	50	1.27	0.81	20.5	0.51	370	551	30
9525.01007000	10	7	30	0.76	0.53	13.4	0.76	19.3	50	1.27	0.86	21.9	0.58	452	672	28
9525.01009000	10	9	30	0.76	0.65	16.5	0.89	22.6	50	1.27	1.00	25.4	0.79	551	820	28
9525.01012000	10	12	30	0.76	0.74	18.8	0.97	24.6	50	1.27	1.08	27.4	0.92	693	1031	20











Dimensions and weights are nominal; subject to industry tolerances.

¹ Cross-sectional area for cable tray fill is in accordance with NEC® Section 392.22.

² 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.