

CCW® Armored Composite Power and Control

UL Type MC-HL, XLPE, 600 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
- 10 AWG and smaller are Class B compressed stranding per ASTM B8
- 8 AWG and larger are compact stranding per ASTM B496

Insulation:

- Cross-linked Polyethylene (XLPE) insulation per ICEA S-95-658 and UL 44, Listed XHHW-2
- Power conductors 6 AWG and smaller are color-coded per ICEA Method 1, Table E2
- Power conductors 4 AWG and larger are black with printed numbers per ICEA Method 4
- Control conductors are color-coded black, red, blue and yellow

Grounding Conductor:

- Class B stranded bare annealed copper per ASTM B3 and B8
- 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 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

Applications:

- CCW armored Composite Power and 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 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-95-658/WC70 Standard for Non-Shielded Power Cables, 2 kV or Less
- 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

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 1581 (70,000 BTU/hr)
- IEC 60332-3 Cat. A

Compliances:

- UL Type MC-HL, XHHW-2, SUN RES, CT USE, DIR BUR, -40°C, UL File # E90496
- UL Listed Marine Shipboard, UL File # E85994
- American Bureau of Shipping (ABS) Listed for CWCMC
- RoHS Compliant

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CATALOG NUMBER	POWER COND. SIZE (AWG)	POWER INSULATION THICKNESS		CONTROL COND. SIZE (AWG)	CONTROL INSULATION THICKNESS		BARE GROUNDING (AWG)	NOMINAL CORE O.D.		NOMINAL ARMOR O.D.		JACKET THICKNESS		NOMINAL OVERALL O.D.		CROSS-SECTIONAL AREA ¹ SQ. IN.	APPROXIMATE NET WEIGHT		90°C AMPACITY @ 30°C AMBIENT ²
		mils	mm		mils	mm		INCHES	mm	INCHES	mm	mils	mm	INCHES	mm		LBS/1000 FT	kg/1000 m	
9625.103124110	3x#10 (7/W) (5.26 mm ²)	30	0.76	4 x #12 (7/W) (3.31 mm ²)	30	0.76	10 (7/W) (5.2 mm ²)	0.53	13.5	0.75	19.1	50	1.27	0.86	21.8	0.59	430	640	30
9625.083124110	3x#8 (7/W) (8.36 mm ²)	45	1.14		30	0.76		0.65	16.5	0.89	22.6	50	1.27	0.99	25.1	0.78	535	796	55
9625.063124108	3x#6 (7/W) (13.3 mm ²)	45	1.14		30	0.76	8 (7/W) (8.36 mm ²)	0.69	17.5	0.93	23.6	50	1.27	1.03	26.2	0.84	660	982	75
9625.043124108	3x#4 (7/W) (21.2 mm ²)	45	1.14		30	0.76		0.74	18.8	0.97	24.6	50	1.27	1.08	27.4	0.93	815	1,213	95

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).

