

## CCW® Armored Instrumentation, Pairs/Triads, Overall Shield

UL Type ITC-HL/PLTC, XLPE, 300 V, 90°C, 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), rated 90°C per UL Standards 13 and 2250
- Color-coded per ICEA Method 1: pairs – black and white; triads – black, white and red. Each conductor in each pair or triad is printed alphanumerically for easy identification

#### Cable Assembly:

- Individual pairs or triads and communication wire are cabled together with a left hand lay
- Communication wire: 20 AWG solid bare copper, Cross-Linked Polyethylene (XLPE), rated 90°C, orange
- Communication wire is not included on single pair or single triad cables

#### Overall Shield:

- Flexfoil® aluminum/polyester tape shield providing 100% coverage
- Stranded tinned copper drain wire, same size as insulated conductors

#### Inner Jacket:

- Flame-retardant Polyvinyl Chloride (PVC) per UL Standards 13 and 2250, black
- Low temperature performance meets ASTM D746 brittleness temperature at or below -40°C
- Nylon rip cord to facilitate jacket removal

#### CCW Armor:

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

#### Overall Jacket:

- Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC) per UL Standards 13 and 2250, black
- Low temperature performance meets ASTM D746 brittleness temperature at or below -40°C

### Applications:

- CCW armored Instrumentation cables with an overall shield provide superior protection and reliability against physical damage for use in instrumentation and process control applications requiring ITC-HL or PLTC wiring methods where shielding against external EMI is required
- For use as Power Limited Tray Cable on circuits rated 150 V or less and 5 amps or less in Class 2 or Class 3 circuits in accordance with NEC Article 725
- For use as Instrumentation Tray Cable on circuits rated 150 V or less and 5 amps or less in accordance with NEC Article 727
- Recognized for use in Class I and III, Divisions 1 and 2; Class II, Division 2; or Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- Installed indoors or outdoors, in wet or dry locations, in a raceway, as aerial cable on a messenger, in cable trays, or for direct burial

### Applications: (cont'd.)

- Recognized for use on fixed or floating offshore petroleum facilities as recommended by the American Petroleum Institute

### Features:

- CCW armor provides superior mechanical protection and an impervious barrier to moisture, gas and liquids
- CCW armor provides EMI shielding performance
- Meets cold impact at -40°C

### Specifications:

#### Design Adherence:

- UL 13 Power-Limited Circuit Cables
- UL 2250 Instrumentation Tray Cable
- UL 1569 Metal Clad Cables
- UL 1309 / CSA C22.2 No. 245 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 PLTC, SUN RES, DIR BUR, -40°C, UL File # E36118
- UL Type ITC-HL, UL File # E177408
- UL Listed Marine Shipboard, UL File # E85994
- American Bureau of Shipping (ABS) Listed for CWCMC
- RoHS Compliant

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CATALOG NUMBER	COND. SIZE (AWG)	NO. OF PAIRS	INSULATION THICKNESS		COMMUNICATION WIRE			INNER JACKET 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	
			mils	mm	SIZE	INS. THICKNESS	THICKNESS		O.D.		O.D.		THICKNESS		O.D.		LBS/1000 FT		kg/1000 m	
					AWG	mils	mm	mils	mm	INCHES	mm	INCHES	mm	mils	mm	INCHES	mm			

### 16 AWG 7W (1.31 mm<sup>2</sup>) OVERALL SHIELDED PAIRS

9125.16010001*	16	1	30	0.76	—	—	—	62	1.57	0.38	9.7	0.56	14.2	50	1.27	0.67	17.0	0.36	207	308
9125.16021201	16	2	30	0.76	20	15	0.38	78	1.98	0.56	14.2	0.76	19.3	50	1.27	0.87	22.1	0.60	307	457
9125.16041201	16	4	30	0.76	20	15	0.38	78	1.98	0.64	16.3	0.75	19.1	50	1.27	0.96	24.4	0.73	390	580
9125.16081201	16	8	30	0.76	20	15	0.38	93	2.36	0.85	21.6	1.12	28.4	50	1.27	1.23	31.2	1.20	632	941
9125.16121201	16	12	30	0.76	20	15	0.38	109	2.77	1.05	26.7	1.36	34.5	50	1.27	1.47	37.3	1.72	857	1,275
9125.16161201	16	16	30	0.76	20	15	0.38	109	2.77	1.16	29.5	1.51	38.4	60	1.52	1.64	41.7	2.14	1,081	1,609
9125.16241201	16	24	30	0.76	20	15	0.38	124	3.15	1.44	36.6	1.54	41.7	60	1.52	1.77	45.0	2.49	1,431	2,130
9125.16361201	16	36	30	0.76	20	15	0.38	124	3.15	1.64	41.7	1.96	49.8	60	1.52	2.09	53.1	3.48	1,933	2,877
9125.16501201	16	50	30	0.76	20	15	0.38	140	3.56	1.95	49.5	2.28	57.9	60	1.52	2.41	61.2	4.62	2,550	3,795

### 16 AWG 7W (1.31 mm<sup>2</sup>) OVERALL SHIELDED TRIADS

9125.16010002*	16	1	30	0.76	—	—	—	62	1.57	0.40	10.2	0.59	15.0	50	1.27	0.70	17.8	0.39	235	350
9125.16021202	16	2	30	0.76	20	15	0.38	93	2.36	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.86	441	656
9125.16041202	16	4	30	0.76	20	15	0.38	93	2.36	0.79	20.1	1.06	25.9	50	1.27	1.17	29.7	1.09	569	847
9125.16081202	16	8	30	0.76	20	15	0.38	109	2.77	1.04	26.4	1.35	34.3	50	1.27	1.46	37.1	1.70	859	1,278
9125.16121202	16	12	30	0.76	20	15	0.38	109	2.77	1.25	31.8	1.60	40.6	60	1.52	1.73	43.9	2.38	1,207	1,796
9125.16161202	16	16	30	0.76	20	15	0.38	124	3.15	1.42	36.1	1.64	41.7	60	1.52	1.77	45.0	2.49	1,424	2,119
9125.16241202	16	24	30	0.76	20	15	0.38	140	3.56	1.77	45.0	2.15	54.6	60	1.52	2.28	57.9	4.14	2,103	3,130
9125.16361202	16	36	30	0.76	20	15	0.38	140	3.56	2.01	51.1	2.23	56.6	60	1.52	2.36	59.9	4.43	2,659	3,957
9125.16501202	16	50	30	0.76	20	15	0.38	171	4.34	2.42	61.5	2.75	69.9	75	1.91	2.91	73.9	6.74	3,800	5,655

Dimensions and weights are nominal; subject to industry tolerances.

\* Item rated ITC/PLTC.

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

