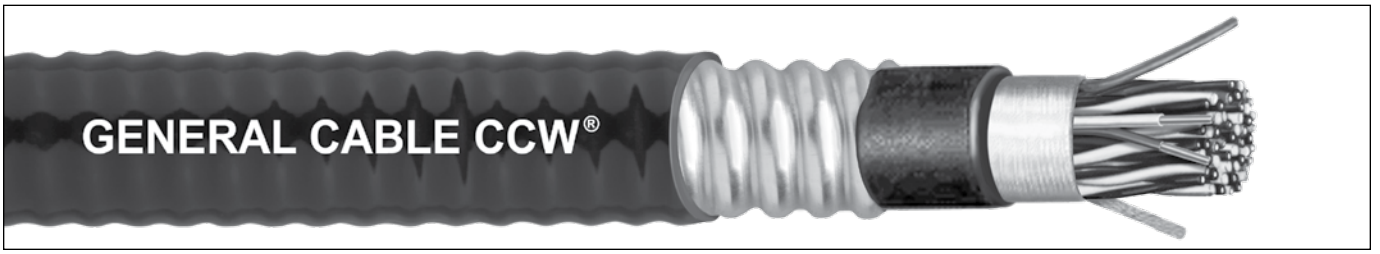
CCW® Armored Thermocouple, Pairs, Overall Shield

UL Type ITC-HL/PLTC, PVC, 105°C, Sunlight-Resistant, Direct Burial
UL Marine Shipboard Cable, ABS CWCMC



Product Construction:

Conductor:
- 20 AWG solid alloy wire per ANSI MC 96.1

Insulation:
- Flame-retardant Polyvinyl Chloride (PVC), rated 105°C per UL Standards 13 and 2250
- Color-coded per ANSI with one conductor in each pair printed alphanumerically for easy identification

Cable Assembly:
- Individual pairs and communication wire are cabled together with a left-hand lay
- Communication wire: 22 AWG solid bare copper, flame-retardant Polyvinyl Chloride (PVC), rated 105°C, orange

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
- ANSI color-coded
- 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 requierments of NEC Article 250

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

Applications:

- CCW armored Thermocouple Extension cables provide superior protection and reliability against physical damage for use in instrumentation and process control applications requiring ITC-HL or PLTC wiring methods
- 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
- 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

General Cable

ABS

RoHS Compliant Directive 2011/65/EU

UL® LISTED

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CATALOG NUMBER	WIRE TYPE/ 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[1]	APPROXIMATE NET WEIGHT	
					SIZE	INS. THICKNESS														
			mils	mm	AWG	mils	mm	mils	mm	INCHES	mm	INCHES	mm	mils	mm	INCHES	mm	SQ. IN.	LBS/1000 FT	kg/1000 m
20 AWG TYPE EX MULTIPLE PAIRS OVERALL SHIELDED THERMOCOUPLE EXTENSION CABLE																				
9050.20041221	EX / 20	4	20	0.51	22	12	0.30	78	1.98	0.46	11.7	0.65	16.5	50	1.27	0.76	19.3	0.46	255	379
9050.20081221	EX / 20	8	20	0.51	22	12	0.30	78	1.98	0.57	14.5	0.78	19.8	50	1.27	0.89	22.6	0.63	351	522
9050.20101221	EX / 20	10	20	0.51	22	12	0.30	93	2.36	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.86	463	689
9050.20121221	EX / 20	12	20	0.51	22	12	0.30	93	2.36	0.71	18.0	0.95	24.1	50	1.27	1.06	26.9	0.89	490	729
9050.20161221	EX / 20	16	20	0.51	22	12	0.30	93	2.36	0.78	19.8	1.02	25.9	50	1.27	1.13	28.7	1.02	550	818
9050.20201221	EX / 20	20	20	0.51	22	12	0.30	93	2.36	0.85	21.6	1.12	26.4	50	1.27	1.23	31.2	1.20	638	949
9050.20241221	EX / 20	24	20	0.51	22	12	0.30	109	2.77	0.96	24.4	1.27	32.3	50	1.27	1.38	35.1	1.52	783	1,165
9050.20361221	EX / 20	36	20	0.51	22	12	0.30	109	2.77	1.09	27.7	1.44	36.6	50	1.27	1.55	39.4	1.91	1,010	1,503
9050.20501221	EX / 20	50	20	0.51	22	12	0.30	109	2.77	1.26	32.0	1.60	40.6	60	1.52	1.73	43.9	2.38	1,290	1,920
20 AWG TYPE JX MULTIPLE PAIRS OVERALL SHIELDED THERMOCOUPLE EXTENSION CABLE																				
9050.20041222	JX / 20	4	20	0.51	22	12	0.30	78	1.98	0.46	11.7	0.65	16.5	50	1.27	0.76	19.3	0.46	253	377
9050.20081222	JX / 20	8	20	0.51	22	12	0.30	78	1.98	0.57	14.5	0.78	19.8	50	1.27	0.89	22.6	0.63	348	518
9050.20101222	JX / 20	10	20	0.51	22	12	0.30	93	2.36	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.86	459	683
9050.20121222	JX / 20	12	20	0.51	22	12	0.30	93	2.36	0.71	18.0	0.95	24.1	50	1.27	1.06	26.9	0.89	485	722
9050.20161222	JX / 20	16	20	0.51	22	12	0.30	93	2.36	0.78	19.8	1.02	25.9	50	1.27	1.13	28.7	1.02	549	817
9050.20201222	JX / 20	20	20	0.51	22	12	0.30	93	2.36	0.85	21.6	1.12	26.4	50	1.27	1.23	31.2	1.20	630	938
9050.20241222	JX / 20	24	20	0.51	22	12	0.30	109	2.77	0.96	24.4	1.27	32.3	50	1.27	1.38	35.1	1.52	774	1,152
9050.20361222	JX / 20	36	20	0.51	22	12	0.30	109	2.77	1.09	27.7	1.44	36.6	50	1.27	1.55	39.4	1.91	997	1,484
9050.20501222	JX / 20	50	20	0.51	22	12	0.30	109	2.77	1.26	32.0	1.60	40.6	60	1.52	1.73	43.9	2.38	1,271	1,891
20 AWG TYPE KX MULTIPLE PAIRS OVERALL SHIELDED THERMOCOUPLE EXTENSION CABLE																				
9050.20041223	KX / 20	4	20	0.51	22	12	0.30	78	1.98	0.46	11.7	0.65	16.5	50	1.27	0.76	19.3	0.46	255	379
9050.20081223	KX / 20	8	20	0.51	22	12	0.30	78	1.98	0.57	14.5	0.78	19.8	50	1.27	0.89	22.6	0.63	351	522
9050.20101223	KX / 20	10	20	0.51	22	12	0.30	93	2.36	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.86	463	689
9050.20121223	KX / 20	12	20	0.51	22	12	0.30	93	2.36	0.71	18.0	0.95	24.1	50	1.27	1.06	26.9	0.89	490	729
9050.20161223	KX / 20	16	20	0.51	22	12	0.30	93	2.36	0.78	19.8	1.02	25.9	50	1.27	1.13	28.7	1.02	549	817
9050.20201223	KX / 20	20	20	0.51	22	12	0.30	93	2.36	0.85	21.6	1.12	26.4	50	1.27	1.23	31.2	1.20	637	948
9050.20241223	KX / 20	24	20	0.51	22	12	0.30	109	2.77	0.96	24.4	1.27	32.3	50	1.27	1.38	35.1	1.52	782	1,164
9050.20361223	KX / 20	36	20	0.51	22	12	0.30	109	2.77	1.09	27.7	1.44	36.6	50	1.27	1.55	39.4	1.91	1,008	1,500
9050.20501223	KX / 20	50	20	0.51	22	12	0.30	109	2.77	1.26	32.0	1.60	40.6	60	1.52	1.73	43.9	2.38	1,287	1,915
20 AWG TYPE TX MULTIPLE PAIRS OVERALL SHIELDED THERMOCOUPLE EXTENSION CABLE																				
9050.20041224	TX / 20	4	20	0.51	22	12	0.30	78	1.98	0.46	11.7	0.65	16.5	50	1.27	0.76	19.3	0.46	257	382
9050.20081224	TX / 20	8	20	0.51	22	12	0.30	78	1.98	0.57	14.5	0.78	19.8	50	1.27	0.89	22.6	0.63	354	527
9050.20101224	TX / 20	10	20	0.51	22	12	0.30	93	2.36	0.69	17.5	0.93	23.6	50	1.27	1.04	26.4	0.86	467	695
9050.20121224	TX / 20	12	20	0.51	22	12	0.30	93	2.36	0.71	18.0	0.95	24.1	50	1.27	1.06	26.9	0.89	495	737
9050.20161224	TX / 20	16	20	0.51	22	12	0.30	93	2.36	0.78	19.8	1.02	25.9	50	1.27	1.13	28.7	1.02	556	827
9050.20201224	TX / 20	20	20	0.51	22	12	0.30	93	2.36	0.85	21.6	1.12	26.4	50	1.27	1.23	31.2	1.20	646	961
9050.20241224	TX / 20	24	20	0.51	22	12	0.30	109	2.77	0.96	24.4	1.27	32.3	50	1.27	1.38	35.1	1.52	792	1,179
9050.20361224	TX / 20	36	20	0.51	22	12	0.30	109	2.77	1.09	27.7	1.44	36.6	50	1.27	1.55	39.4	1.91	1,023	1,522
9050.20501224	TX / 20	50	20	0.51	22	12	0.30	109	2.77	1.26	32.0	1.60	40.6	60	1.52	1.73	43.9	2.38	1,309	1,948

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.

COND. TYPE	ANSI MC 96.1 CONDUCTOR ALLOY AND COLOR CODE					TEMP. RANGE	LIMITS OF ERROR	NOM. LOOP RESISTANCE PER 100 FT @ 20°C
	POSITIVE WIRE		NEGATIVE WIRE		OVERALL JACKET COLOR			
	ALLOY	COLOR	ALLOY	COLOR				
EX	Chromel	Purple	Constantan	Red	Purple	0°C To +200°C	+/- 1.7°C	70.7 Ohms
JX	Iron	White	Constantan	Red	Black	0°C To +200°C	+/- 2.2°C	35.7 Ohms
KX	Chromel	Yellow	Alumel	Red	Yellow	0°C To +200°C	+/- 2.2°C	59.0 Ohms
TX	Copper	Blue	Constantan	Red	Blue	-60°C To +100°C	+/- 1.0°C	29.8 Ohms

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RoHS Compliant Directive 2011/65/EU

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