

Copper Wire & Cable Inc. 2024

Product Catalog



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ALL PRODUCTS
MADE IN THE USA



A MESSAGE FROM OUR PRESIDENT

Dear Customer,

We are pleased to provide you with our latest product catalog featuring numerous cables stocked and available in our Texas warehouse, as well as a backup inventory of products available from more than 50 top manufacturers. Copper Wire & Cable is a master distributor of specialty industrial copper cables. We source only American-made wire and cable from the finest manufacturers.

For several years, Copper Wire and Cable has collaborated with an industry-leading distributor of wire and cable. We take pride in being their preferred source and building long-lasting relationships with our customers. Our mission is to sell the highest quality cables while providing exceptional customer service throughout the entire life of each sale. We are experts at constructing special-make cables, hunting down elusive cables, and facilitating fast cable deliveries. With our expertise, we're adept at providing cable solutions that cater to your unique requirements. Copper Wire & Cable will go above and beyond to perform any task requested to make your project's wire and cable requirements flow smoothly. Our Cable Management Services assure that everything is taken care of in advance for your industrial project needs. At Copper Wire & Cable, we build powerful connections while empowering excellence. Please review our latest catalog and call us for your industrial wire and cable needs at 866-993-0270. We appreciate the opportunity to serve you!

Sincerely,

JAMES "JIMMY" DAWLEY

PRESIDENT

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CABLE MANAGEMENT SERVICES

At Copper Wire & Cable, we prioritize providing comprehensive project support, which often involves a significant focus on Cable Management. Our Cable Management Program is flexible and can range from a straightforward logistics package to a sophisticated, fully integrated bundle of services. Our Program is designed to accommodate a variety of needs and can include any or all of the following services:

- **Lock-in copper prices** – Uncertainty of copper price fluctuations can be firmed on the day of order.
- **Specification clarification and interpretation** – We have many years of experience in the technical evaluation and formation of wire and cable specifications. Since we represent a wide range of manufacturers we offer assistance ensuring your specifications are up-to-date and that the materials furnished meet or exceed you and your customers' expectations. In addition, we can assist with value-added engineering with a selection of alternative constructions to decrease overall project costs.
- **Prepurchase of bulk wire and cable for the project** – Under contract we can acquire all cable items needed for a particular project, ensuring there is no guesswork. Furthermore, we can seamlessly accommodate any changes to the cable requirements throughout the duration of the project. In most cable management scenarios, we do not invoice you for the cable until it is released to the job site.
- **Storage** – Cable is stored indoors at the facility, at the job site, or near the job site as project requirements dictate.
- **Packaging** – Cable can be released in bulk reels to the job site when specific lengths are unavailable. If individual pull requirements are known, the cable can be cut to a specified length, wrapped, and tagged with all applicable identifying information. Our packaging reduces waste, labor costs, and makes installation faster and easier. Your cable arrives at the job site consistently damage-free and ready to use, minimizing freight claims and costly reissuing of releases and scheduling of field resources.
- **Shipping** – Your releases are packaged and shipped via 53-ft. enclosed trucks on LTL or FTL carriers. Upon special request, large cable reels can be sent in an upright rolling position on a flatbed trailer for easy unloading at the job site. Your cable will arrive free of damage and is ready for use. Releases ship within 24-48 hours anywhere in the continental United States.
- **Documentation and reporting** – Throughout the project term, we provide comprehensive, up-to-the-minute analysis of the cable package that has been implemented for your job. By closely monitoring the cable down to each specific reel, we are able to minimize waste and identify usage trends, thus ensuring a continuous flow of product throughout the entirety of your project.
- **End-of-project disposal** – Upon completion of the project, any unused material in appropriate lengths can be stored in our inventory with pre-determined stocking terms. This valuable service helps to prevent the common occurrences of selling excess cable at the end of a job or disposing of it as scrap.

In addition to the above menu of services, Copper Wire and Cable can perform any task requested to make your project's wire and cable requirements flow smoothly.

EXPERTS AT

Special-Make Cables

Are you facing challenges in finding a cable that fits your unique needs?

A stock cable may not suffice if you have a specialized or demanding application.

But worry not, **as experts in providing special-make cables, we can help design and manufacture a cable that caters to your specific requirements.**

INDUSTRIES AND APPLICATIONS SERVED

SOLAR
EV CHARGING
COAL-FIRED
NATURAL GAS-FIRED
PETROCHEMICAL
DATA CENTERS
TRANSMISSION & DISTRIBUTION
CHEMICAL MANUFACTURING
OIL & GAS REFINING
AIR QUALITY CONTROL
MANUFACTURING
CONSTRUCTION
DEFENSE
MINING
EDUCATION



Bare Copper

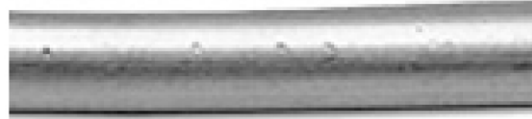
Solid Conductor, Bare or Tinned, Soft (Annealed)

APPLICATIONS

For use in electrical grounding systems and on insulators for overhead transmission and distribution applications.

COMPLIANCES

ASTM B3 (soft or annealed), ASTM B33 (tinned soft or annealed)
 REA/RUS approved
 Federal Standard QQ-W-343
 RoHS compliant



COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	NOMINAL DIAMETER (INCHES)	SOFT (ANNEALED) DC RESISTANCE (OHMS./1000 FT.) @ 20°C		APPROX. NET WT. (LBS./1000 FT.)
			BARE	BARE	
CWC 8-01SOLSDBC	8	.1285	.6281	.6426	50.0
CWC 6-01SOLSDBC	6	.1620	.3952	.4109	79.4
CWC 4-01SOLSDBC	4	.2043	.2485	.2528	126.4
CWC 2-01SOLSDBC	2	.2576	.1563	.1580	200.9

Bare Copper

Standed Conductor, Bare or Tinned, Soft (Annealed)

APPLICATIONS

For use in electrical grounding systems and on insulators for overhead transmission and distribution applications. Stranded conductors offer greater flexibility than solid.

COMPLIANCES

ASTM B3 (soft or annealed), ASTM B8 (concentric lay stranded), ASTM B33 (tinned soft or annealed), ASTM B787 (combination strand)

REA/RUS approved

Federal Standard QQ-W-343

RoHS compliant



COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	NOMINAL DIAMETER (INCHES)	SOFT (ANNEALED) DC RESISTANCE (OHMS./1000 FT.) @ 20°C		APPROX. NET WT. (LBS./1000 FT.)
				BARE	TINNED	
CWC 14-01STRSDBC	14	7	.0726	2.5800	2.6800	12.7
CWC 12-01STRSDBC	12	7	.0915	1.6200	1.6900	20.2
CWC 10-01STRSDBC	10	7	.1160	1.0200	1.0600	32.0
CWC 8-01STRSDBC	8	7	.1460	.6408	.6654	50.9
CWC 6-01STRSDBC	6	7	.1840	.4030	.4196	81.0
CWC 4-01STRSDBC	4	7	.2320	.2540	.2637	128.9
CWC 2-01STRSDBC	2	7	.2920	.1594	.1657	204.9
CWC 1-01STRSDBC	1	19	.3320	.1265	.1313	258.4
CWC 1/0-01STRSDBC	1/0	19	.3730	.1003	.1043	325.8
CWC 2/0-01STRSDBC	2/0	19	.4190	.0795	.0826	410.9
CWC 3/0-01STRSDBC	3/0	19	.4700	.0631	.0655	518.1
CWC 4/0-01STRSDBC	4/0	19	.5280	.0500	.0515	653.3
CWC 250-01STRSDBC	250	37	.575	.0423	.0440	771.9
CWC 350-01STRSDBC	350	37	.681	.0302	.0314	1081.0
CWC 500-01STRSDBC	500	37	.813	.0212	.0218	1544.0
CWC 750-01STRSDBC	750	61	.998	.0141	.0145	2316.0
CWC 1000-01STRSDBC	1000	61	1.152	.0106	.0109	3088.0

Single Conductor

Type THW-2 VW-1 600V

PRODUCT CONSTRUCTION

Conductor: Single copper conductor, stranded

Insulation: Resistant to sunlight, moisture, heat and flame

Jacket: Polyvinyl chloride compound. Temperature rating 90°C in wet and dry locations. All sizes pass the vertical flame test (VW-1). Colors available.

APPLICATIONS

Suitable for use in conduit or other recognized raceways for services, feeders and branch circuit wiring. Also suitable for general purpose grounding for power and distribution circuits in residential, industrial and commercial buildings.



COMPLIANCES

ASTM B3 (soft or annealed), ASTM B8 (concentric lay stranded), ASTM B33

UL 83

Federal spec A-A-59544, 90°C wet/dry

CT use 1/0 and larger

Oil resistant I

Sunlight resistant (black only)

NEMA WC70/ICEA S-95-658

RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS (MILS)	NOMINAL DIAMETER (INCHES)	APPROX. NET WT. (LBS./1000 FT.)	AMPACITY 90°C WET/DRY
CWC 14-01THW-2	14	7	30	.133	19	35*
CWC 12-01THW-2	12	7	30	.152	28	40*
CWC 10-01THW-2	10	7	30	.176	41	55*
CWC 8-01THW-2	8	7	45	.236	68	80
CWC 6-01THW-2	6	7	60	.304	109	105
CWC 4-01THW-2	4	7	60	.352	163	140
CWC 3-01THW-2	3	7	60	.380	199	165
CWC 2-01THW-2	2	7	60	.412	245	190
CWC 1-01THW-2	1	19	80	.481	320	220
CWC 1/0-01THW-2	1/0	19	80	.520	393	260
CWC 2/0-01THW-2	2/0	19	80	.564	485	300
CWC 3/0-01THW-2	3/0	19	80	.614	599	350
CWC 4/0-01THW-2	4/0	19	80	.670	743	405
CWC 250-01THW-2	250	37	95	.765	893	455
CWC 300-01THW-2	300	37	95	.819	1057	505
CWC 350-01THW-2	350	37	95	.871	1221	570
CWC 400-01THW-2	400	37	95	.918	1384	615
CWC 500-01THW-2	500	37	95	1.003	1708	700
CWC 600-01THW-2	600	61	110	1.113	2062	780
CWC 750-01THW-2	750	61	110	1.218	2547	885
CWC 1000-01THW-2	1000	61	110	1.372	3351	1055

*Based on ambient temperature of 30°C Per NEC Table 310-17.

†Overcurrent protection shall not exceed 15 amps for 14 AWG, 20 amps for 12 AWG and 30 amps for 10 AWG per NEC 310-17

footnote. NOTE: The data shown is approximate and subject to standard industry tolerances.

Single Conductor XHHW-2 XLPEE 600V

PRODUCT CONSTRUCTION

Conductor: Single copper conductor, stranded

Insulation: Resistant to moisture, heat and flame.

Jacket: Chemically cross-linked polyethylene. Temperature rating 90°C in wet and dry locations. Colors available.

APPLICATIONS

Suitable for general purpose wiring, power distribution and branch circuit wiring where a cable with superior flame retardance is required. Also suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less (hospital grade).



COMPLIANCES

ASTM B3, ASTM B8

UL 44, ICEA S-95-658/NEMA WC70

Federal spec A-A-59544, 90°C wet/dry

CT use 1/0 and larger Gasoline

and oil resistant II C(UL)US

RW90: CSA/UL listed Sunlight-resistant

-40°C rated, suitable for use in 105°C dry system

RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS (MILS)	NOMINAL DIAMETER (INCHES)	APPROX. NET WT. (LBS./1000 FT.)	AMPACITY 90°C WET/DRY
CWC 14-01XHHW-2	14	7	30	.133	17	35†
CWC 12-01XHHW-2	12	7	30	.152	26	40†
CWC 10-01XHHW-2	10	7	30	.176	39	55†
CWC 8-01XHHW-2	8	7	45	.236	63	80
CWC 6-01XHHW-2	6	7	45	.274	96	105
CWC 4-01XHHW-2	4	7	45	.322	147	140
CWC 3-01XHHW-2	3	7	45	.350	182	165
CWC 2-01XHHW-2	2	7	45	.382	226	190
CWC 1-01XHHW-2	1	19	55	.431	287	220
CWC 1/0-01XHHW-2	1/0	19	55	.470	358	260
CWC 2/0-01XHHW-2	2/0	19	55	.514	446	300
CWC 3/0-01XHHW-2	3/0	19	55	.564	557	350
CWC 4/0-01XHHW-2	4/0	19	55	.620	697	405
CWC 250-01XHHW-2	250	37	65	.705	830	455
CWC 300-01XHHW-2	300	37	65	.759	989	505
CWC 350-01XHHW-2	350	37	65	.811	1148	570
CWC 400-01XHHW-2	400	37	65	.858	1306	615
CWC 500-01XHHW-2	500	37	65	.943	1623	700
CWC 600-01XHHW-2	600	61	80	1.053	1961	780
CWC 750-01XHHW-2	750	61	80	1.158	2435	885

*Per NEC Table 310-17.

†Overcurrent protection shall not exceed 15 amps for 14 AWG, 20 amps for 12 AWG and 30 amps for 10 AWG per NEC 310-17

footnote. NOTE: The data shown is approximate and subject to standard industry tolerances.

Single Conductor

XHHW-2 XLPE VW-1 600V

PRODUCT CONSTRUCTION

Conductor: Single copper conductor, stranded

Insulation: Resistant to moisture, heat and flame.

Jacket: Chemically cross-linked polyethylene. Temperature rating 90°C in wet and dry locations. II sizes pass the vertical flame test (VW-1). Colors available.

APPLICATIONS

Suitable for general purpose wiring, power distribution and branch circuit wiring where a cable with superior flame retardance is required. Also suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less (hospital grade).



COMPLIANCES

ASTM B3, ASTM B8 (concentric lay stranded), ASTM B787

UL 44, ICEA S-95-658/NEMA WC70

Federal spec A-A-59544, 90°C wet/dry

CT use 1/0 and larger

IEEE 1202/FT4

Gasoline and oil resistant II C(UL)US

RW90:CSA/UL listed Sunlight

resistant (#14-#8: black only)

-40°C rated, suitable for use in 105°C dry system

RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS (MILS)	NOMINAL DIAMETER (INCHES)	APPROX. NET WT. (LBS./1000 FT.)	AMPACITY 90°C WET/DRY
CWC 14-01XLPEVW1	14	7	30	.133	18	35'
CWC 12-01XLPEVW1	12	7	30	.152	27	40'
CWC 10-01XLPEVW1	10	7	30	.176	40	55'
CWC 8-01XLPEVW1	8	7	45	.236	66	80
CWC 6-01XLPEVW1	6	7	45	.274	99	105
CWC 4-01XLPEVW1	4	7	45	.322	152	140
CWC 3-01XLPEVW1	3	7	45	.350	187	165
CWC 2-01XLPEVW1	2	7	45	.382	233	190
CWC 1-01XLPEVW1	1	19	55	.431	293	220
CWC 1/0-01XLPEVW1	1/0	19	55	.470	364	260
CWC 2/0-01XLPEVW1	2/0	19	55	.514	457	300
CWC 3/0-01XLPEVW1	3/0	19	55	.564	570	350
CWC 4/0-01XLPEVW1	4/0	19	55	.620	710	405
CWC 250-01XLPEVW1	250	37	65	.705	848	455
CWC 300-01XLPEVW1	300	37	65	.759	1007	500
CWC 350-01XLPEVW1	350	37	65	.811	1170	570
CWC 400-01XLPEVW1	400	37	65	.858	1327	615
CWC 500-01XLPEVW1	500	37	65	.943	1648	700
CWC 600-01XLPEVW1	600	61	80	1.053	1991	780
CWC 750-01XLPEVW1	750	61	80	1.158	2469	885

Single Conductor

USE-2 RHH or RHW-2 600V

PRODUCT CONSTRUCTION

Conductor: Single, stranded copper

Insulation: Moisture-, heat- and flame-resistant, chemically cross-linked polyethylene insulation. All sizes pass the vertical flame test (VW-1). Temperature rating 90°C in wet and dry locations. Available in colors.

APPLICATIONS

For use in general purpose wiring applications. May be installed in conduit, raceway, aerial and direct burial installation where a cable with superior flame retardance is required. Also suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less (hospital grade).



COMPLIANCES

ASTM B3, B8, B787. Listed by UL as Type XHHW-2 per Standard 44. Listed by UL as Gasoline and Oil Resistant II. UL Direct Burial | Cables are UL listed as Sunlight Resistant (14-8AWG, black only). For CT use/IEEE 1202/FT4 size 1/0 AWG and larger. C(UL) RPV90 600V.

C(UL) US RW90 1kV:CSA/UL Listed. UL 44 and UL 854, ICEA S-95-658/NEMA WC70, Federal spec. A-A-59544. -40°C rated. suitable for use in 105°C dry system

RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	NOMINAL DIAMETER (INCHES)	BARE	TINNED	APPROX. NET WT. (LBS./1000 FT.)
CWC 14-01USE2	14	7	.45	.163	22	35'
CWC 12-01USE2	12	7	.45	.182	31	40'
CWC 10-01USE2	10	7	.45	.206	45	55'
CWC 8-01USE2	8	7	.60	.266	73	80
CWC 6-01USE2	6	7	.60	.304	107	105
CWC 4-01USE2	4	7	.60	.52	160	140
CWC 3-01USE2	3	7	.60	.380	197	165
CWC 2-01USE2	2	7	.60	.412	243	190
CWC 1-01USE2	1	19	.80	.481	316	220
CWC 1/0-01USE2	1/0	19	.80	.520	390	260
CWC 2/0-01USE2	2/0	19	.80	.564	481	300
CWC 3/0-01USE2	3/0	19	.80	.614	596	350
CWC 4/0-01USE2	4/0	19	.80	.670	739	405
CWC 250-01USE2	250	37	.95	.765	885	455
CWC 300-01USE2	300	37	.95	.819	1049	500
CWC 350-01USE2	350	37	.95	.871	1212	570
CWC 400-01USE2	400	37	.95	.918	1374	615
CWC 500-01USE2	500	37	.95	1.003	1697	700
CWC 600-01USE2	600	61	1.10	1.113	2049	780
CWC 750-01USE2	750	61	1.10	1.218	2532	885

*Per NEC Table 310-17.

†Overcurrent protection shall not exceed 15 amps for 14AWG, 20 amps for 12AWG and 30 amps for 10AWG per NEC 310-17

footnote. NOTE: Data shown is approximate and subject to standard industry tolerances.

Single Conductor

RHH or RHW-2 USE-2 EPR/XL-CPE

PRODUCT CONSTRUCTION

Conductor: 14 AWG through 1000 kcmil tin-coated, copper, compressed, Class B stranding per ASTM B33 and B8

Insulation: Lead-free, ethylene propylene rubber (EPR) colored to contrast with black, lead-free cross-linked chlorinated polyethylene (XL-CPE) jacket.

Options: Colored jackets available; 2kV-rated cables.

APPLICATIONS

Ideally suited for use in a broad range of commercial, industrial and utility applications where reliability is a concern and maximum performance is demanded. For use in free air, raceways and direct burial. For use in aerial, conduit, open tray and underground installations.

FEATURES

Resistant to water and sunlight. Designed to withstand severe environmental conditions. Withstands exposure to oil, acids, alkalies, heat, flame, moisture and chemicals. Meets or exceeds flame test requirements of MSHA and UL.

COMPLIANCES

Industry: ICEA S-95-658, NEMA WC70. For CT use on 1/0 and larger in accordance with the NEC®. UL 44 Type RHH/RHW-2, UL File #E90494, UL 854, Type USE-2, UL File #E90499.

Flame Test: UL 1581 VW-1, IEEE 1202/CSA FT4.

Other: EPA 40 CFR, Part 261 for leachable lead content per TCLP; OSHA acceptable; RoHS compliant



COPPER WIRE AND CABLE PART #	Size (AWG or kcmil)	Cond. Strand	Nominal Cond. Diameter		Min. Avg. Insulation				Min. Avg. Jacket				Copper Weight		Net Weight	
					Thickness		Diameter		Thickness		Diameter					
			(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(lbs./100)	kg/km	(lbs./100)	kg/km

14 AWG – 1000 kcmil Conductors

CWC 14-01EPR-CPE	14	7/.0242	0.07	1.78	0.030	0.76	0.14	3.56	0.015	0.38	0.17	4.32	13	19	24	36
CWC 12-01EPR-CPE	12	7/.0305	0.09	2.29	0.030	0.76	0.16	4.06	0.015	0.38	0.19	4.83	20	30	33	49
CWC 10-01EPR-CPE	10	7/.0385	0.12	3.05	0.030	0.76	0.18	4.57	0.015	0.38	0.21	5.33	32	48	48	71
CWC 8-01EPR-CPE	8	7/.0486	0.15	3.81	0.045	1.14	0.24	6.10	0.015	0.38	0.28	7.11	50	75	77	115
CWC 6-01EPR-CPE	6	7/.0612	0.18	4.57	0.045	1.14	0.28	7.11	0.030	0.76	0.35	8.89	81	121	122	182
CWC 4-01EPR-CPE	4	7/.0772	0.23	5.84	0.045	1.14	0.33	8.38	0.030	0.76	0.39	9.91	129	192	178	265
CWC 2-01EPR-CPE	2	7/.0974	0.29	7.37	0.045	1.14	0.39	9.91	0.030	0.76	0.46	11.68	205	305	265	394
CWC 1/0-01EPR-CPE	1/0	19/.0740	0.37	9.40	0.055	1.40	0.48	12.19	0.045	1.14	0.58	14.73	326	485	422	628
CWC 2/0-01EPR-CPE	2/0	19/.0837	0.41	10.41	0.055	1.40	0.53	13.46	0.045	1.14	0.63	16.00	411	612	518	771
CWC 4/0-01EPR-CPE	4/0	19/.1055	0.52	13.21	0.055	1.40	0.64	16.26	0.045	1.14	0.74	18.80	653	972	785	1168
CWC 250-01EPR-CPE	250	37/.0822	0.56	14.22	0.065	1.65	0.70	17.78	0.065	1.65	0.85	21.59	772	1149	960	1429
CWC 350-01EPR-CPE	350	37/.0973	0.67	17.02	0.065	1.65	0.81	20.57	0.065	1.65	0.96	24.38	1081	1609	1299	1933
CWC 500-01EPR-CPE	500	37/.1162	0.80	20.32	0.065	1.65	0.94	23.88	0.065	1.65	1.09	27.69	1542	2295	1803	2683
CWC 750-01EPR-CPE	750	61/.1109	0.98	24.89	0.080	2.03	1.15	29.21	0.065	1.65	1.31	33.27	2316	3447	2664	3965
CWC 1000-01EPR-CPE	1000	61/.1280	1.13	28.70	0.080	2.03	1.31	33.27	0.065	1.65	1.46	37.08	3086	4593	3989	5936

NOTE: Dimensions and weights are nominal and are subject to industry tolerances.

Single Conductor Cathodic Protection, HMW-PE 600V

PRODUCT CONSTRUCTION

Conductor: Soft, annealed, stranded copper per ASTM B8.
Insulation: Black, high molecular weight polyethylene (HMW-PE) per ASTM D1248.
Temperature: 75°C
Voltage: 600V



APPLICATIONS

Suitable for direct burial for use in cathodic protection systems for pipelines, storage tanks, pilings, well casings, cables and other buried or water-submerged metallic structures.

COMPLIANCES

ICEA S-61-402
 Suitable for direct burial
 Resistant to chemicals, oil, moisture and sunlight
 Crush and abrasion resistant
 RoHS compliant

Copper Wire and Cable Part #	Conductor		Nominals (inches)			Standard Put-up (reels)	Nominal DC Resistance Ohms/1000 ft. @ 25°C	Product Weight (lbs./1000 ft.)
	AWG	Strand	Cond. O.D.	Insulation	O.D.			
CWC 8-01HMW-PE	8	7	.143	.110	.37	2,500', 5,000'	.652	87
CWC 6-01HMW-PE	6	7	.182	.110	.40	5,000'	.411	122
CWC 4-01HMW-PE	4	7	.229	.110	.45	5,000'	.258	175
CWC 2-01HMW-PE	2	7	.290	.110	.51	1,000', 5,000'	.162	260
CWC 1-01HMW-PE	1	19	.326	.125	.58	2,500'	.129	330
CWC 1/0-01HMW-PE	1/0	19	.367	.125	.62	2,000'	.102	400
CWC 2/0-01HMW-PE	2/0	19	.410	.125	.66	2,000'	.081	495
CWC 4/0-01HMW-PE	4/0	19	.526	.125	.77	2,000'	.051	750
CWC 250-01HMW-PE	250	37	.575	.140	.86	1,000'	.043	900
CWC 350-01HMW-PE	350	37	.681	.140	.96	1,000'	.031	1229

PV Wire

Daylight Solar PV Wire, RHW-2, 600 Volt Copper
No Pulling Lubricant Required

PRODUCT CONSTRUCTION

Single copper conductor, stranded and insulated with moisture and heat resistant, chemically crosslinked polyethylene. No Pulling Lubricant Required (#6 AWG and larger). Rated 600V to meet requirements for inverters on photovoltaic (solar) panel installations



APPLICATIONS

For interconnection wiring on solar panel systems as defined in applicable parts of the National Electrical Code (NEC) NFPA 70, such as article 690.31(A). Suitable for use in 105°C dry systems. Also suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded) B787 (combination strand) UL 44 RHW-2, UL 854 USE-2, and UL 4703 PV Wire C(UL) RPVU90 1kV/2kV: CSA C22.2 #271 | ICEA S-95-658/NEMA WC-70 Federal Spec. A-A-59544 | Flame Rated: Vertical Wire, CT Use (1/0 AWG and larger), Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C, Sunlight Resistant, Gasoline and Oil Resistant II | Direct Burial RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS (MILS)	NOMINAL DIAMETER (INCHES)	APPROX. NET WT. (LBS./1000 FT.)	AMPACITY 90°C WET/DRY
CWC PV14BK6V-C	14	7	75	.22	29	35
CWC PV14BK-C6V-C	14	19	75	.22	29	35
CWC PV12BK6V-C	12	7	75	.24	39	40
CWC PV12BK-C6V-C	12	19	75	.24	39	40
CWC PV10BK6V-C	10	7	75	.27	53	55
CWC PV10BK-C6V-C	10	19	75	.27	53	55
CWC PV8BK6V-C	8	7	85	.31	79	80
CWC PV8BK-C6V-C	8	19	85	.31	79	80
CWC PV6BK6V-C	6	7	85	.35	114	105
CWC PV4BK6V-C	4	7	85	.40	167	140
CWC PV3BK6V-C	3	7	85	.42	204	165
CWC PV2BK6V-C	2	7	85	.45	249	190
CWC PV1BK6V-C	1	19	105	.53	324	220
CWC PV1/0BK6V-C	1/0	19	105	.57	398	260
CWC PV2/0BK6V-C	2/0	19	105	.61	490	300
CWC PV3/0BK6V-C	3/0	19	105	.66	604	350
CWC PV4/0BK6V-C	4/0	19	105	.72	749	405
CWC PV250BK6V-C	250	37	120	.81	887	455
CWC PV300BK6V-C	300	37	120	.87	1,050	500
CWC PV350BK6V-C	350	37	120	.92	1,211	570
CWC PV400BK6V-C	400	37	120	.96	1,372	615
CWC PV500BK6V-C	500	37	120	1.04	1,691	700
CWC PV600BK6V-C	750	61	135	1.16	2,038	780
CWC PV750BK6V-C	1000	61	135	1.26	2,516	885

PV Wire

Daylight Solar PV Wire, RHW-2, 2KV
No Pulling Lubricant Required

PRODUCT CONSTRUCTION

Single copper conductor, stranded and insulated with moisture and heat resistant, chemically cross-linked polyethylene. No Pulling Lubricant Required (#6 AWG and larger). Rated 1kV/2kV to meet the challenging requirements of transformer-less inverters on photovoltaic (solar) panel installations. Available in colors.



APPLICATIONS

This cable is suitable for use as interconnection wiring on solar panels in grounded or ungrounded systems as defined in applicable parts of the National Electrical Code (NEC) NFPA 70, such as article 690.31(A). Suitable for use in 105°C dry systems. Also suitable for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded) B787 (combination strand) UL 44 RHW-2, UL 854 USE-2, and UL 4703 PV Wire C(UL) RPVU90 1kV/2kV: CSA C22.2 #271 | ICEA S-95-658/NEMA WC-70 Federal Spec. A-A-59544 | Flame Rated: Vertical Wire, CT Use (1/0 AWG and larger), Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C, Sunlight Resistant, Gasoline and Oil Resistant II | Direct Burial RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS (MILS)	NOMINAL DIAMETER (INCHES)	APPROX. NET WT. (LBS./1000 FT.)	AMPACITY 90°C WET/DRY
CWC PV2K14BK	14	7	75	.22	29	35
CWC PV2K14BK-C	14	19	75	.22	29	35
CWC PV2K12BK	12	7	75	.24	39	40
CWC PV2K12BK-C	12	19	75	.24	39	40
CWC PV2K10BK	10	7	75	.27	53	55
CWC PV2K10BK-C	10	19	75	.27	53	55
CWC PV2K8BK	8	7	85	.31	79	80
CWC PV2K8BK-C	8	19	85	.31	79	80
CWC PV2K6BK	6	7	85	.35	114	105
CWC PV2K4BK	4	7	85	.40	167	140
CWC PV2K3BK	3	7	85	.42	204	165
CWC PV2K2BK	2	7	85	.45	249	190
CWC PV2K1BK	1	19	105	.53	324	220
CWC PV2K1/0BK	1/0	19	105	.57	398	260
CWC PV2K2/0BK	2/0	19	105	.61	490	300
CWC PV2K3/0BK	3/0	19	105	.66	604	350
CWC PV2K4/0BK	4/0	19	105	.72	749	405
CWC PV2K250BK	250	37	120	.81	887	455
CWC PV2K300BK	300	37	120	.87	1,050	500
CWC PV2K350BK	350	37	120	.92	1,211	570
CWC PV2K400BK	400	37	120	.96	1,372	615
CWC PV2K500BK	500	37	120	1.04	1,691	700
CWC PV2K600BK	750	61	135	1.16	2,038	780
CWC PV2K750BK	1000	61	135	1.26	2,516	885

PV Wire

Aluminum 600V Daylight Solar PV Wire

APPLICATIONS

This aluminum PV Solar Cable is suitable for use as interconnection wiring of grounded and ungrounded photovoltaic power systems. The cable is for applications up to 600 volts and temperatures from -40°C to +90°C wet or dry.

CONDUCTOR

Compact or compressed round stranded 8000 series aluminum alloy conductor.



INSULATION

Cross-linked polyethylene (XLPE), oil and sunlight resistant, direct burial rated.

COMPLIANCES

ASTM B800, B801, B836, B901
 UL listed PV Wire per UL 4703
 Type RHH/RHW-2 or USE-2 per UL 44 and UL 854
 VW-1, UL listed
 Sunlight Resistant, UL listed
 Direct Burial 6AWG and larger, UL listed

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS INCHES	OVERALL DIAMETER INCHES	NET WEIGHT LBS/KFT	DC RESISTANCE AT 20°C Ω/KFT	AMPACITY* AT 90°C AMPS
CWC 8-01XLPALUSEPV	8**	7	0.075	0.29	42	1.0504	45
CWC 6-01XLPALUSEPV	6	7	0.075	0.32	51	0.6609	55
CWC 4-01XLPALUSEPV	4	7	0.075	0.36	71	0.4155	75
CWC 2-01XLPALUSEPV	2	7	0.075	0.42	101	0.2613	100
CWC 1-01XLPALUSEPV	1	19	0.095	0.49	136	0.2072	115
CWC 1/0-01XLPALUSEPV	1/0	19	0.095	0.53	163	0.1642	135
CWC 2/0-01XLPALUSEPV	2/0	19	0.095	0.57	195	0.1303	150
CWC 3/0-01XLPALUSEPV	3/0	19	0.095	0.61	236	0.1033	175
CWC 4/0-01XLPALUSEPV	4/0	19	0.095	0.67	286	0.0820	205
CWC 250-01XLPALUSEPV	250	37	0.110	0.74	343	0.0694	230
CWC 300-01XLPALUSEPV	300	37	0.110	0.79	400	0.0578	260
CWC 350-01XLPALUSEPV	350	37	0.110	0.84	455	0.0495	280
CWC 400-01XLPALUSEPV	400	37	0.110	0.88	501	0.0434	305
CWC 500-01XLPALUSEPV	500	37	0.110	0.96	608	0.0347	350
CWC 600-01XLPALUSEPV	600	61	0.125	1.06	737	0.0289	385
CWC 750-01XLPALUSEPV	750	61	0.125	1.16	896	0.0231	435
CWC 1000-01XLPALUSEPV	1000	61	0.125	1.31	1161	0.0173	500

PV Wire

Aluminum 2KV Daylight Solar PV Wire

APPLICATIONS

This aluminum PV Solar Cable is primarily used for interconnection wiring of grounded and ungrounded photovoltaic power systems. When installed in accordance with NEC article 690.31 (C)(2), PV source and PV output circuits, single-conductor cable of all sizes can be installed in outdoor cable trays. The PV cable is for applications up to 2000 volts and temperatures from -40°C to +90°C wet or dry.

CONDUCTOR

Compact stranded 8000 Series Aluminum conductor per ASTM B800, B801, B836, B901.

INSULATION

Cross-linked polyethylene (XLPEE), gas/oil and sunlight resistant, direct burial rated.

Standard colors are black, red 8AWG-1000KCM and green in size 4AWG-1/0AWG. Other colors or stripes are available upon request.

COMPLIANCES

ASTM B800, B801, B836, B901
 UL 44 RHH RHW, UL 854 USE-2, UL 4703 PV Wire, UL 2556
 CSA listed RPVU90 per CSA C22.2 No. 271
 ANSI/ICEA S-95-658/NEMA WC 70
 VW-1 flame test, Sunlight Resistant, Direct Burial



OPTIONS

600V UL PV Wire, CSA RPV90 available upon request
 Paralleled conductors on one reel and circuit cuts available by request.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	STRAND (NO.)	INSULATION THICKNESS INCHES	OVERALL DIAMETER INCHES	NET WEIGHT LBS/KFT	DC RESISTANCE AT 20°C Ω/KFT	AMPACITY* AT 90°C AMPS
CWC 6-01ALPV-2KVXLP	6	7	0.085	0.34	56	0.6610	55
CWC 4-01ALPV-2KVXLP	4	7	0.085	0.38	76	0.4160	75
CWC 2-01ALPV-2KVXLP	2	7	0.085	0.44	107	0.2620	100
CWC 1-01ALPV-2KVXLP	1	18	0.105	0.51	143	0.2060	115
CWC 1/0-01ALPV-2KVXLP	1/0	18	0.105	0.55	171	0.1650	135
CWC 2/0-01ALPV-2KVXLP	2/0	18	0.105	0.59	203	0.1310	150
CWC 3/0-01ALPV-2KVXLP	3/0	18	0.105	0.63	245	0.1030	175
CWC 4/0-01ALPV-2KVXLP	4/0	18	0.105	0.69	295	0.0821	205
CWC 250-01ALPV-2KVXLP	250	35	0.120	0.76	353	0.0695	230
CWC 300-01ALPV-2KVXLP	300	35	0.120	0.81	411	0.0579	260
CWC 350-01ALPV-2KVXLP	350	35	0.120	0.86	467	0.0496	280
CWC 400-01ALPV-2KVXLP	400	35	0.120	0.90	525	0.0434	305
CWC 500-01ALPV-2KVXLP	500	35	0.120	0.98	622	0.0348	350
CWC 600-01ALPV-2KVXLP	600	58	0.135	1.08	756	0.0290	385
CWC 700-01ALPV-2KVXLP	700	58	0.135	1.15	836	0.0248	425
CWC 750-01ALPV-2KVXLP	750	58	0.135	1.18	913	0.0232	435
CWC 900-01ALPV-2KVXLP	900	58	0.135	1.27	1062	0.0193	480
CWC 1000-01ALPV-2KVXLP	1000	58	0.135	1.33	1180	0.0174	500
CWC 1250-01ALPV-2KVXLP	1250	58	0.155	1.51	1458	0.0142	545

Twisted Cable

USE-2 or RHW-2 1,000 Volt Copper

PRODUCT CONSTRUCTION

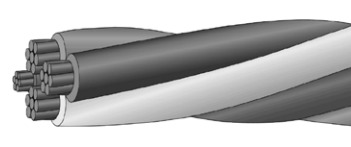
This cable is made with multiple single copper conductors, stranded and insulated with moisture and heat resistant, chemically crosslinked polyethylene (type RHW-2), twisted together to effectively function as a single cable. XLPEE nsulation-No Pulling Lubricant Required (#6 AWG and larger). Available in colors and with built-in ground.

APPLICATIONS

This cable is suitable for general purpose wiring applications and may be installed in raceway, conduit, direct burial, and aerial installations where a cable having superior flame retardance is required. Suitable for use in 105°C dry systems. Also satisfactory for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded), B-787 (combination strand)
 UL 44 and UL 854
 ICEA S-95-658/NEMA WC-70



Federal Spec. A-A-59544
 Flame Rated: CT Use (1/0 AWG and larger)
 Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C
 Sunlight Resistant, Gasoline and Oil Resistant II
 Direct Burial
 RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	SIZE (AWG OR MCM)	NOMINAL DIAMETER (INCHES)	APPROX. DIAMETER OVERALL (IN.)	APPROX. NET WT. (LBS./1000 FT.)
CWC SPLEX 14/3U	14	7	45	.35	64
CWC SPLEX 12/3U	12	7	45	.39	92
CWC SPLEX 10/3U	10	7	45	.44	131
CWC SPLEX 8/3U	8	7	60	.57	211
CWC SPLEX 6/3U	6	7	60	.65	315
CWC SPLEX 4/3U	4	7	60	.75	477
CWC SPLEX 3/3U	3	7	60	.81	587
CWC SPLEX 2/3U	2	7	60	.87	728
CWC SPLEX 1/3U	1	19	80	1.03	938
CWC SPLEX 1/03U	1/0	19	80	1.11	1,173
CWC SPLEX 2/03U	2/0	19	80	1.21	1,454
CWC SPLEX 3/03U	3/0	19	80	1.31	1,806
CWC SPLEX 4/03U	4/0	19	80	1.44	2,248
CWC SPLEX 250/3U	250	37	95	1.58	2,640
CWC SPLEX 300/3U	300	37	95	1.77	3,153
CWC SPLEX 350/3U	350	37	95	1.79	3,630
CWC SPLEX 400/3U	400	37	95	1.96	4,139
CWC SPLEX 500/3U	500	37	95	2.06	5,103
CWC SPLEX 600/3U	600	61	110	2.28	6,137

Twisted Cable

USE-2 or RHW-2 1,000 Volt Copper

PRODUCT CONSTRUCTION

This cable is made with multiple single copper conductors, stranded and insulated with moisture and heat resistant, chemically crosslinked polyethylene (type RHW-2), twisted together to effectively function as a single cable. XLPEE nsulation-No Pulling Lubricant Required (#6 AWG and larger). Available in colors and with built-in ground.

APPLICATIONS

This cable is suitable for general purpose wiring applications and may be installed in raceway, conduit, direct burial, and aerial installations where a cable having superior flame retardance is required. Suitable for use in 105°C dry systems. Also satisfactory for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded), B-787 (combination strand)
 UL 44 and UL 854
 ICEA S-95-658/NEMA WC-70



Federal Spec. A-A-59544
 Flame Rated: CT Use (1/0 AWG and larger)
 Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C
 Sunlight Resistant, Gasoline and Oil Resistant II
 Direct Burial
 RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	SIZE (AWG OR MCM)	NOMINAL DIAMETER (INCHES)	APPROX. DIAMETER OVERALL (IN.)	APPROX. NET WT. (LBS./1000 FT.)
CWC SPLEX 14/4U	14	7	45	.39	85
CWC SPLEX 12/4U	12	7	45	.44	122
CWC SPLEX 10/4U	10	7	45	.49	175
CWC SPLEX 8/4U	8	7	60	.64	281
CWC SPLEX 6/4U	6	7	60	.73	419
CWC SPLEX 4/4U	4	7	60	.85	636
CWC SPLEX 3/4U	3	7	60	.90	783
CWC SPLEX 2/4U	2	7	60	.98	970
CWC SPLEX 1/4U	1	19	80	1.15	1,250
CWC SPLEX 1/04U	1/0	19	80	1.25	1,564
CWC SPLEX 2/04U	2/0	19	80	1.36	1,939
CWC SPLEX 3/04U	3/0	19	80	1.47	2,407
CWC SPLEX 4/04U	4/0	19	80	1.62	2,997
CWC SPLEX 250/4U	250	37	95	1.77	3,520
CWC SPLEX 300/4U	300	37	95	1.97	4,204
CWC SPLEX 350/4U	350	37	95	2.01	4,840
CWC SPLEX 400/4U	400	37	95	2.20	5,518
CWC SPLEX 500/4U	500	37	95	2.31	6,804
CWC SPLEX 600/4U	600	61	110	2.56	8,182

Twisted Cable

XHHW-2 600/1,000 Volt Copper

No Pulling Lubricant Required

PRODUCT CONSTRUCTION

This cable is made with multiple single copper conductors, stranded and insulated with moisture, heat, and flame resistant, chemically crosslinked polyethylene (type XHHW-2), twisted together to effectively function as a single cable. XLPEE insulation—No Pulling Lubricant Required (#6 AWG and larger). Available in colors and with built-in ground.

APPLICATIONS

This cable is suitable for general purpose wiring, power distribution, and branch circuit wiring where a cable having superior flame retardance is required. Suitable for use in 105°C dry systems. It is also satisfactory for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded), B-787 (combination strand)
UL 44



ICEA S-95-658/NEMA WC-70
Federal Spec. A-A-59544
Flame Rated: CT Use (1/0 AWG and larger)
Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C
Sunlight Resistant, Gasoline and Oil Resistant II
RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	SIZE (AWG OR MCM)	NOMINAL DIAMETER (INCHES)	APPROX. DIAMETER OVERALL (IN.)	APPROX. NET WT. (LBS./1000 FT.)
CWC SPLEX 14/3	14	7	30	.29	54
CWC SPLEX 12/3	12	7	30	.33	81
CWC SPLEX 10/3	10	7	30	.38	119
CWC SPLEX 8/3	8	7	45	.50	195
CWC SPLEX 6/3	6	7	45	.58	297
CWC SPLEX 4/3	4	7	45	.69	456
CWC SPLEX 3/3	3	7	45	.74	565
CWC SPLEX 2/3	2	7	45	.81	703
CWC SPLEX 1/3	1	19	55	.92	890
CWC SPLEX 1/03	1/0	19	55	1.01	1,117
CWC SPLEX 2/03	2/0	19	55	1.10	1,394
CWC SPLEX 3/03	3/0	19	55	1.21	1,740
CWC SPLEX 4/03	4/0	19	55	1.33	2,176
CWC SPLEX 250/3	250	37	65	1.45	2,545
CWC SPLEX 300/3	300	37	65	1.64	3,046
CWC SPLEX 350/3	350	37	65	1.66	3,522
CWC SPLEX 400/3	400	37	65	1.84	4,020
CWC SPLEX 500/3	500	37	65	1.93	4,978
CWC SPLEX 600/3	600	61	80	2.16	5,998
CWC SPLEX 750/3	750	61	80	2.37	7,449

Twisted Cable

XHHW-2 600/1,000 Volt Copper
No Pulling Lubricant Required

PRODUCT CONSTRUCTION

This cable is made with multiple single copper conductors, stranded and insulated with moisture, heat, and flame resistant, chemically crosslinked polyethylene (type XHHW-2), twisted together to effectively function as a single cable. XLPEE insulation—No Pulling Lubricant Required (#6 AWG and larger). Available in colors and with built-in ground.



APPLICATIONS

This cable is suitable for general purpose wiring, power distribution, and branch circuit wiring where a cable having superior flame retardance is required. Suitable for use in 105°C dry systems. It is also satisfactory for use in low leakage circuits requiring a dielectric constant of 3.5 or less (Hospital Grade).

COMPLIANCES

ASTM Standards: B-3 (soft or annealed), B-8 (concentric lay stranded), B-787 (combination strand)
UL 44

ICEA S-95-658/NEMA WC-70
Federal Spec. A-A-59544
Flame Rated: CT Use (1/0 AWG and larger)
Temperature Rated at 90°C Wet/Dry, Cold Temperature Rated at -40°C
Sunlight Resistant, Gasoline and Oil Resistant II
RoHS Compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR MCM)	SIZE (AWG OR MCM)	NOMINAL DIAMETER (INCHES)	APPROX. DIAMETER OVERALL (IN.)	APPROX. NET WT. (LBS./1000 FT.)
CWC SPLEX 14/4	14	7	30	.32	72
CWC SPLEX 12/4	12	7	30	.37	107
CWC SPLEX 10/4	10	7	30	.42	153
CWC SPLEX 8/4	8	7	45	.56	260
CWC SPLEX 6/4	6	7	45	.65	395
CWC SPLEX 4/4	4	7	45	.77	607
CWC SPLEX 3/4	3	7	45	.83	753
CWC SPLEX 2/4	2	7	45	.90	937
CWC SPLEX 1/4	1	19	55	1.03	1,187
CWC SPLEX 1/04	1/0	19	55	1.13	1,490
CWC SPLEX 2/04	2/0	19	55	1.24	1,858
CWC SPLEX 3/04	3/0	19	55	1.35	2,319
CWC SPLEX 4/04	4/0	19	55	1.49	2,901
CWC SPLEX 250/4	250	37	65	1.62	3,393
CWC SPLEX 300/4	300	37	65	1.83	4,061
CWC SPLEX 350/4	350	37	65	1.86	4,696
CWC SPLEX 400/4	400	37	65	2.06	5,360
CWC SPLEX 500/4	500	37	65	2.16	6,638
CWC SPLEX 600/4	600	61	80	2.41	7,997

Control Cable

14AWG, Multi-Conductor, 20/10 Control, PE/PVC, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG. Bare, annealed copper per ASTM B3 and B8, concentric 7 strand. Concentric 19 strand available.

Insulation: 20 mils transparent, linear, low-density polyethylene. Color-coded per ICEA Method 1, Table E1

Jacket: (Conductor) 10 mils color-coded PVC; (Overall) black direct burial PVC with thickness per ICEA S-73-532,



APPLICATIONS

For use as a general control cable for conveying signals between devices interfaced daily with the electrical power system. Suitable for open air ducts or conduit, tray and direct burial installation with a maximum voltage of 600V and operating temperature of 75°.

FEATURES

Polyethylene insulated, PVC jacketed conductors cabled together with an overall PVC jacket. Lead-free, flame-retardant and sunlight-resistant jacket.

COMPLIANCES

ICEA S-73-532

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	WEIGHT LBS./1000 FT	
				NET	COPPER
CWC 14-02 20/10	2 Flat	45	.23 x .37	65	25
CWC 14-03 20/10	3	45	.39	90	38
CWC 14-04 20/10	4	45	.43	110	51
CWC 14-05 20/10	5	45	.47	135	64
CWC 14-06 20/10	6	45	.51	155	78
CWC 14-07 20/10	7	45	.51	170	90
CWC 14-08 20/10	8	60	.59	215	104
CWC 14-09 20/10	9	60	.62	245	116
CWC 14-10 20/10	10	60	.68	260	130
CWC 14-11 20/10	11	60	.68	280	143
CWC 14-12 20/10	12	60	.70	295	154
CWC 14-13 20/10	13	60	.71	320	169
CWC 14-14 20/10	14	60	.73	335	182
CWC 14-15 20/10	15	60	.77	370	195
CWC 14-16 20/10	16	60	.77	380	208
CWC 14-17 20/10	17	60	.81	405	221
CWC 14-18 20/10	18	60	.81	420	234
CWC 14-19 20/10	19	60	.81	435	244
CWC 14-20 20/10	20	80	.90	490	260
CWC 14-23 20/10	23	80	.94	575	299
CWC 14-25 20/10	25	80	.99	605	325
CWC 14-27 20/10	27	80	1.01	665	351
CWC 14-29 20/10	29	80	1.02	705	377
CWC 14-31 20/10	31	80	1.07	750	403
CWC 14-32 20/10	32	80	1.09	775	416
CWC 14-37 20/10	37	80	1.13	840	481

Control Cable

12AWG, Multi-Conductor, 20/10 Control, PE/PVC, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 12 AWG. Bare, annealed copper per ASTM B3 and B8, concentric 7 strand. Concentric 19 strand available.

Insulation: 20 mils transparent, linear, low-density polyethylene. Color-coded per ICEA Method 1, Table E1

Jacket: (Conductor) 10 mils color-coded PVC; (Overall) black direct burial PVC with thickness per ICEA S-73-532,



APPLICATIONS

For use as a general control cable for conveying signals between devices interfaced daily with the electrical power system. Suitable for open air ducts or conduit, tray and direct burial installation with a maximum voltage of 600V and operating temperature of 75°.

FEATURES

Polyethylene insulated, PVC jacketed conductors cabled together with an overall PVC jacket. Lead-free, flame-retardant and sunlight-resistant jacket.

COMPLIANCES

ICEA S-73-532

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	WEIGHT LBS./1000 FT	
				NET	COPPER
CWC 12-02 20/10	2 Flat	45	.25 x .41	80	40
CWC 12-03 20/10	3	45	.43	120	61
CWC 12-04 20/10	4	45	.48	150	81
CWC 12-05 20/10	5	45	.52	180	102
CWC 12-06 20/10	6	60	.60	220	126
CWC 12-07 20/10	7	60	.60	250	143
CWC 12-08 20/10	8	60	.65	290	168
CWC 12-09 20/10	9	60	.69	330	184
CWC 12-10 20/10	10	60	.75	360	210
CWC 12-11 20/10	11	60	.75	385	231
CWC 12-12 20/10	12	60	.78	405	245
CWC 12-13 20/10	13	60	.79	445	273
CWC 12-14 20/10	14	60	.82	470	294
CWC 12-15 20/10	15	80	.90	550	315
CWC 12-16 20/10	16	80	.90	560	336
CWC 12-17 20/10	17	80	.95	610	357
CWC 12-18 20/10	18	80	.95	625	378
CWC 12-19 20/10	19	80	.95	640	388
CWC 12-20 20/10	20	80	1.00	685	420
CWC 12-23 20/10	23	80	1.04	775	483
CWC 12-25 20/10	25	80	1.11	840	525
CWC 12-27 20/10	27	80	1.13	900	567
CWC 12-29 20/10	29	80	1.14	950	609
CWC 12-31 20/10	31	80	1.19	1015	651
CWC 12-32 20/10	32	80	1.21	1055	672
CWC 12-37 20/10	37	80	1.26	1210	777

Control Cable

10AWG, Multi-Conductor, 20/10 Control, PE/PVC, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 10 AWG. Bare, annealed copper per ASTM B3 and B8, concentric 7 strand. Concentric 19 strand available.

Insulation: 20 mils transparent, linear, low-density polyethylene. Color-coded per ICEA Method 1, Table E1

Jacket: (Conductor) 10 mils color-coded PVC; (Overall) black direct burial PVC with thickness per ICEA S-73-532,



APPLICATIONS

For use as a general control cable for conveying signals between devices interfaced daily with the electrical power system. Suitable for open air ducts or conduit, tray and direct burial installation with a maximum voltage of 600V and operating temperature of 75°.

FEATURES

Polyethylene insulated, PVC jacketed conductors cabled together with an overall PVC jacket. Lead-free, flame-retardant and sunlight-resistant jacket.

COMPLIANCES

ICEA S-73-532

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	WEIGHT LBS./1000 FT	
				NET	COPPER
CWC 10-02 20/10	2 Flat	45	.28 x .46	115	64
CWC 10-03 20/10	3	45	.49	165	97
CWC 10-04 20/10	4	60	.57	230	129
CWC 10-05 20/10	5	60	.62	280	162
CWC 10-06 20/10	6	60	.67	320	192
CWC 10-07 20/10	7	60	.67	355	227
CWC 10-08 20/10	8	60	.73	415	256
CWC 10-09 20/10	9	60	.79	475	292
CWC 10-10 20/10	10	80	.89	535	320
CWC 10-11 20/10	11	80	.89	580	352
CWC 10-12 20/10	12	80	.92	615	389
CWC 10-13 20/10	13	80	.94	670	416
CWC 10-14 20/10	14	80	.97	710	448
CWC 10-15 20/10	15	80	1.02	760	480
CWC 10-16 20/10	16	80	1.02	800	512
CWC 10-17 20/10	17	80	1.07	870	544
CWC 10-18 20/10	18	80	1.07	895	576
CWC 10-19 20/10	19	80	1.07	920	616
CWC 10-20 20/10	20	80	1.13	980	640
CWC 10-23 20/10	23	80	1.18	1125	736
CWC 10-25 20/10	25	80	1.26	1250	800
CWC 10-27 20/10	27	80	1.28	1330	864
CWC 10-29 20/10	29	80	1.30	1370	928
CWC 10-31 20/10	31	80	1.36	1510	992
CWC 10-32 20/10	32	80	1.38	1565	1024
CWC 10-37 20/10	37	80	1.44	1755	1184

Tray Cable

16AWG, Multi-Conductor, TYPE TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 16 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance. Meets cold bend text at -25°C.

COMPLIANCES

Industry: UL 1277 Type TC-ER for three or more conductors. ICEA S-73-532/NEMA WC57. UL 1581.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 16-02VNTC	2	45	.20 x .30	40	20
CWC 16-03VNTC	3	45	.32	60	24
CWC 16-04VNTC	4	45	.34	75	32
CWC 16-05VNTC	5	45	.37	85	40
CWC 16-06VNTC	6	45	.40	100	48
CWC 16-07VNTC	7	45	.40	110	56
CWC 16-09VNTC	9	45	.47	140	72
CWC 16-10VNTC	10	45	.51	155	80
CWC 16-12VNTC	12	60	.55	200	97
CWC 16-15VNTC	15	60	.61	240	121
CWC 16-16VNTC	16	60	.61	250	128
CWC 16-19VNTC	19	60	.64	285	153
CWC 16-20VNTC	20	60	.67	305	160
CWC 16-25VNTC	25	60	.74	370	201
CWC 16-37VNTC	37	80	.89	550	306

Tray Cable

14AWG, Multi-Conductor, TYPE TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance. Meets cold bend text at -25°C.

COMPLIANCES

Industry: UL 1277 Type TC-ER for three or more conductors. ICEA S-73-532/ NEMA WC57. UL 1581.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 14-02VNTC	2	45	.21 x .33	55	26
CWC 14-03VNTC	3	45	.34	75	39
CWC 14-03VNGTC	3w/g	45	.35	92	52
CWC 14-04VNTC	4	45	.37	100	52
CWC 14-05VNTC	5	45	.41	115	65
CWC 14-06VNTC	6	45	.44	140	78
CWC 14-07VNTC	7	45	.44	150	90
CWC 14-09VNTC	9	45	.51	195	116
CWC 14-10VNTC	10	60	.58	220	130
CWC 14-12VNTC	12	60	.60	265	155
CWC 14-15VNTC	15	60	.66	310	195
CWC 14-16VNTC	16	60	.66	340	208
CWC 14-19VNTC	19	60	.70	390	245
CWC 14-20VNTC	20	60	.73	415	260
CWC 14-25VNTC	25	80	.85	540	323
CWC 14-37VNTC	37	80	.96	755	478

Tray Cable

12AWG, Multi-Conductor, TYPE TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 12 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance. Meets cold bend text at -25°C.

COMPLIANCES

Industry: UL 1277 Type TC-ER for three or more conductors. ICEA S-73-532/ NEMA WC57. UL 1581.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 12-02VNTC	2	45	.23 x .37	75	41
CWC 12-03VNTC	3	45	.36	105	63
CWC 12-03VNGTC	3w/g	45	.40	130	86
CWC 12-04VNTC	4	45	.40	135	86
CWC 12-05VNTC	5	45	.45	165	108
CWC 12-06VNTC	6	45	.50	195	126
CWC 12-07VNTC	7	45	.50	215	144
CWC 12-09VNTC	9	60	.62	300	185
CWC 12-10VNTC	10	60	.66	325	210
CWC 12-12VNTC	12	60	.68	375	247
CWC 12-15VNTC	15	60	.76	455	315
CWC 12-16VNTC	16	60	.76	485	336
CWC 12-19VNTC	19	60	.79	565	391
CWC 12-20VNTC	20	80	.89	590	420
CWC 12-25VNTC	25	80	.96	770	515
CWC 12-37VNTC	37	80	1.10	1090	762

Tray Cable

10AWG, Multi-Conductor, TYPE TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 10 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance. Meets cold bend text at -25°C.

COMPLIANCES

Industry: UL 1277 Type TC-ER for three or more conductors. ICEA S-73-532/NEMA WC57. UL 1581.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 10-02 VNTC	2	45	.26 x.43	110	65
CWC 10-03 VNTC	3	45	.46	155	98
CWC 10-03VNGTC	3w/g	45	.47	194	131
CWC 10-04VNTC	4	45	.50	200	135
CWC 10-05VNTC	5	60	.58	265	169
CWC 10-06VNTC	6	60	.63	315	192
CWC 10-07VNTC	7	60	.63	345	236
CWC 10-09VNTC	9	60	.73	450	295
CWC 10-10VNTC	10	60	.81	500	320
CWC 10-12VNTC	12	60	.82	580	404
CWC 10-15VNTC	15	80	.95	745	480
CWC 10-16VNTC	16	80	.95	810	512
CWC 10-19VNTC	19	80	1.02	940	608
CWC 10-20VNTC	20	80	1.07	990	640
CWC 10-25VNTC	25	80	1.19	1210	800
CWC 10-37VNTC	37	80	1.36	1710	1184

Tray Cable

3C w/Ground, Type TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 1000 kcmil bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance.

Meets cold bend text at -25°C.

COMPLIANCES

Industry: NEC Type THHN/THWN conductors. UL 1277 Type TC-ER, UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	THICKNESS IN MILS			NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE* (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			PVC INSULATION	NYLON JACKET	OVERALL PVC JACKET					90°C DRY	75°C WET
CWC 8-03VNGTC	8	7	30	5	60	.62	10	315	189	55	50
CWC 6-03VNGTC	6	7	30	5	60	.70	8	445	300	75	65
CWC 4-03VNGTC	4	7	40	6	80	.88	8	675	446	95	85
CWC 2-03VNGTC	2	7	40	6	80	1.01	6	995	710	130	115
CWC 1-03VNGTC	1	19	50	7	80	1.14	6	1200	855	150	130
CWC 1/0-03VNGTC	1/0	19	50	7	80	1.23	6	1480	1080	170	150
CWC 2/0-03VNGTC	2/0	19	50	7	80	1.32	6	1770	1340	195	175
CWC 3/0-03VNGTC	3/0	19	50	7	80	1.43	4	2180	1683	225	200
CWC 4/0-03VNGTC	4/0	19	50	7	80	1.56	4	2690	2130	260	230
CWC 250-03VNGTC	250	37	60	8	110	1.76	4	3225	2494	290	255
CWC 350-03VNGTC	350	37	60	8	110	1.98	3	4370	3474	350	310
CWC 500-03VNGTC	500	37	60	8	110	2.26	2	5960	4934	430	380
CWC 750-03VNGTC	750	61	70	9	110	2.71	1	9050	7206	535	475
CWC 1000-03VNGTC	1000	61	70	9	140	3.10	1/0	11720	9584	615	545

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; 90 °C conductor temperature for dry locations, 75 °C conductor temperature for wet locations, 30 °C ambient temperature.

Tray Cable

4C w/Ground, Type TC-ER, PVC/Nylon, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 500 kcmil bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Provides outstanding sunlight, cold bend and cold impact resistance. Provides good oil and chemical resistance. Meets cold bend text at -25°C.

COMPLIANCES

Industry: NEC Type THHN/THWN conductors. UL 1277 Type TC-ER, UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	THICKNESS IN MILS			NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE' (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			PVC INSULATION	NYLON JACKET	OVERALL PVC JACKET					90°C DRY	75°C WET
CWC 8-04VNGTC	8	7	30	5	60	.66	10	373	241	55	50
CWC 6-04VNGTC	6	7	30	5	60	.76	8	533	383	75	65
CWC 4-04VNGTC	4	7	40	6	80	.97	8	824	578	95	85
CWC 2-04VNGTC	2	7	40	6	80	1.10	6	1227	919	130	115
CWC 1/0-04VNGTC	1/0	19	50	7	80	1.36	6	1830	1413	170	150
CWC 2/0-04VNGTC	2/0	19	50	7	80	1.46	6	2252	1760	195	175
CWC 4/0-04VNGTC	4/0	19	50	7	80	1.77	4	3502	2796	260	230
CWC 250-04VNGTC	250	37	60	8	110	1.95	4	4107	3281	290	255
CWC 350-04VNGTC	350	37	60	8	110	2.19	3	5585	4586	350	310
CWC 500-04VNGTC	500	37	60	8	110	2.51	2	7694	6509	430	380

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; 90 °C conductor temperature for dry locations, 75 °C conductor temperature for wet locations, 30 °C ambient temperature.

1NOTE: Grounding conductor per UL Standard 1277 for Type TC Tray Cable.

Tray Cable

16AWG, Multi-Conductor, Type TC-ER, XLPE, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 16 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E-2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Divis industrial hazardous locations per NEC.

Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520 (210,000 BTU/hr). CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 16-02XPTC	2	45	.23 x .35	65	16
CWC 16-03XPTC	3	45	.37	70	22
CWC 16-04XPTC	4	45	.39	87	29
CWC 16-05XPTC	5	45	.44	105	37
CWC 16-06XPTC	6	45	.48	120	44
CWC 16-07XPTC	7	45	.48	140	51
CWC 16-08XPTC	8	45	.51	155	59
CWC 16-09XPTC	9	45	.58	200	66
CWC 16-10XPTC	10	60	.63	230	74
CWC 16-11XPTC	11	60	.63	240	81
CWC 16-12XPTC	12	60	.67	255	88
CWC 16-13XPTC	13	60	.67	270	96
CWC 16-14XPTC	14	60	.68	290	103
CWC 16-15XPTC	15	60	.71	315	110
CWC 16-16XPTC	16	60	.71	325	118
CWC 16-17XPTC	17	60	.75	350	125
CWC 16-18XPTC	18	60	.75	360	132
CWC 16-19XPTC	19	60	.75	370	140
CWC 16-20XPTC	20	60	.79	400	147
CWC 16-23XPTC	23	60	.82	450	169
CWC 16-25XPTC	25	80	.91	530	184
CWC 16-27XPTC	27	80	.93	560	199
CWC 16-29XPTC	29	80	.94	585	213
CWC 16-31XPTC	31	80	.98	625	228
CWC 16-32XPTC	32	80	.99	650	235
CWC 16-37XPTC	37	80	1.03	720	272

Tray Cable

14AWG, Multi-Conductor, Type TC-ER, XLPE, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E-2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Divis industrial hazardous locations per NEC.

Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520 (210,000 BTU/hr). CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 14-02XPTC	2	45	.23 x .37	65	25
CWC 14-03XPTC	3	45	.39	90	40
CWC 14-03WGXPCTC	3+ Grnd	45	.42	110	53
CWC 14-04XPTC	4	45	.43	113	53
CWC 14-05XPTC	5	45	.47	137	66
CWC 14-06XPTC	6	45	.51	160	78
CWC 14-07XPTC	7	45	.51	180	93
CWC 14-09XPTC	9	60	.63	250	119
CWC 14-10XPTC	10	60	.69	270	130
CWC 14-12XPTC	12	60	.70	310	159
CWC 14-15XPTC	15	60	.78	380	195
CWC 14-16XPTC	16	60	.78	400	208
CWC 14-19XPTC	19	60	.82	460	252
CWC 14-20XPTC	20	80	.90	525	260
CWC 14-25XPTC	25	80	1.00	640	323
CWC 14-37XPTC	37	80	1.14	890	490

Tray Cable

12AWG, Multi-Conductor, Type TC-ER, XLPE, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 12 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E-2

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520 (210,000 BTU/hr). CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 12-02XPTC	2	45	.25 x.41	85	41
CWC 12-03XPTC	3	45	.44	120	65
CWC 12-03XPPTC	3 w/g	45	.44	143	86
CWC 12-04XPTC	4	45	.48	154	86
CWC 12-05XPTC	5	45	.53	190	108
CWC 12-06XPTC	6	60	.60	235	126
CWC 12-07XPTC	7	60	.60	265	150
CWC 12-09XPTC	9	60	.70	340	193
CWC 12-10XPTC	10	60	.77	370	210
CWC 12-12XPTC	12	60	.79	430	258
CWC 12-15XPTC	15	80	.92	535	315
CWC 12-16XPTC	16	80	.92	570	336
CWC 12-19XPTC	19	80	.96	675	403
CWC 12-20XPTC	20	80	1.01	710	420
CWC 12-25XPTC	25	80	1.12	890	515
CWC 12-37XPTC	37	80	1.28	1310	741

Note: Cables designated (w/g) contain an additional bare copper grounding conductor, same size as circuit conductors, and are UL listed

Tray Cable

10AWG, Multi-Conductor, Type TC-ER, XLPE, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 10 AWG fully annealed, stranded, bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E-2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C dry, 75° wet. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 10-02XPTC	2	45	.28 x.46	117	67
CWC 10-03XPTC	3	45	.49	167	101
CWC 10-03XPGTC	3 w/g	45	.49	205	135
CWC 10-04XPTC	4	60	.57	230	135
CWC 10-05XPTC	5	60	.62	280	167
CWC 10-06XPTC	6	60	.67	325	192
CWC 10-07XPTC	7	60	.67	370	234
CWC 10-09XPTC	9	60	.79	455	295
CWC 10-10XPTC	10	80	.90	550	320
CWC 10-12XPTC	12	80	.93	640	402
CWC 10-15XPTC	15	80	1.03	775	480
CWC 10-16XPTC	16	80	1.03	820	512
CWC 10-19XPTC	19	80	1.08	965	608
CWC 10-20XPTC	20	80	1.14	1010	640
CWC 10-25XPTC	25	80	1.26	1235	800
CWC 10-37XPTC	37	80	1.44	1775	1184

Note: Cables designated (w/g) contain an additional bare copper grounding conductor, same size as circuit conductors, and are UL listed

Tray Cable

3C w/Ground, Type TC-ER, XLPE, PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 1000 kcmil bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER. UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			INSULATION	JACKET					90°C	75°C
CWC 8-03XPGTC	8	7	45	60	.66	10	325	190	55	50
CWC 6-03XPGTC	6	7	45	60	.74	8	450	301	75	65
CWC 4-03XPGTC	4	7	45	80	.88	8	655	448	95	85
CWC 2-03XPGTC	2	7	45	80	1.00	6	960	716	130	115
CWC 1-03XPGTC	1	19	55	80	1.13	6	1170	872	150	130
CWC 1/0-03XPGTC	1/0	19	55	80	1.22	6	1435	1081	170	150
CWC 2/0-03XPGTC	2/0	19	55	80	1.31	6	1730	1341	195	175
CWC 3/0-03XPGTC	3/0	19	55	80	1.42	4	2150	1717	225	200
CWC 4/0-03XPGTC	4/0	19	55	80	1.55	4	2620	2132	260	230
CWC 250-03XPGTC	250	37	65	110	1.76	4	3180	2494	290	255
CWC 350-03XPGTC	350	37	65	110	1.98	3	4290	3474	350	310
CWC 500-03XPGTC	500	37	65	110	2.26	2	5940	4938	430	380
CWC 750-03XPGTC	750	61	80	110	2.71	1	8660	7278	535	475
CWC 1000-03XPGTC	1000	61	80	140	3.10	1/0	11700	9590	615	545

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; at the conductor temperature indicated, in wet or dry locations, 30°C ambient temperature.

Tray Cable

4C w/Ground XLPE PVC Type TC-ER 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 750 kcmil bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent electrical properties. Abrasion- and chemical-resistant. Sunlight- and weather-resistant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER. UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. ICEA T-29-520. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			INSULATION	JACKET					90°C	75°C
CWC 8-04XPBTC	8	7	45	60	.72	12	415	242	44	40
CWC 6-04XPBTC	6	7	45	60	.81	10	575	384	60	52
CWC 4-04XPBTC	4	7	45	80	.96	10	840	578	76	68
CWC 2-04XPBTC	2	7	45	80	1.10	9	1200	919	104	92
CWC 1-04XPBTC	1	19	55	80	1.25	9	1545	1136	120	104
CWC 1/0-04XPBTC	1/0	19	55	80	1.35	9	1835	1413	136	120
CWC 2/0-04XPBTC	2/0	19	55	80	1.45	9	2195	1760	156	140
CWC 3/0-04XPBTC	3/0	19	55	80	1.58	7	2800	2245	180	160
CWC 4/0-04XPBTC	4/0	19	55	80	1.77	7	3460	2796	208	184
CWC 250-04XPBTC	250	37	65	110	1.93	7	4040	3282	232	204
CWC 350-04XPBTC	350	37	65	110	2.18	6	5475	4577	280	248
CWC 500-04XPBTC	500	37	65	110	2.50	5	7635	6509	344	304
CWC 750-04XPBTC	750	61	80	140	3.12	4	11400	9712	428	380

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; at the conductor temperature indicated, in wet or dry locations, 30°C ambient temperature.

NOTES: (1) Grounding conductor per UL Standard 1277 for Type TC Tray Cable. (2) Cables with Open Wiring listing available upon request.

Tray Cable

14AWG, Multi-Conductor, Type TC-ER, XLPE, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations For use in Class 1, Division 2 industrial hazardous locations per NEC Article 501 and Class 1 circuits per NEC.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -35°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 14-02XLPCPETC	2	45	.23 x.37	65	25
CWC 14-03XLPCPETC	3	45	.39	90	40
CWC 14-03W0XLPCPETC	3+ Grnd	45	.39	109	53
CWC 14-04XLPCPETC	4	45	.43	113	53
CWC 14-05XLPCPETC	5	45	.47	137	66
CWC 14-07XLPCPETC	7	45	.51	180	93
CWC 14-09XLPCPETC	9	60	.63	250	119
CWC 14-10XLPCPETC	10	60	.69	270	130
CWC 14-12XLPCPETC	12	60	.70	310	159
CWC 14-16XLPCPETC	16	60	.78	400	208
CWC 14-19XLPCPETC	19	60	.82	460	252
CWC 14-20XLPCPETC	20	80	.90	525	260
CWC 14-25XLPCPETC	25	80	1.00	640	323
CWC 14-37XLPCPETC	37	80	1.14	890	490

Tray Cable

12AWG, Multi-Conductor, Type TC-ER, XLPE, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 12 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free Chlorinated Polyethylene (CPE).

APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations For use in Class 1, Division 2 industrial hazardous locations per NEC Article 501 and Class 1 circuits per NEC.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -35°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable



COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 12-02XLPCPETC	2	45	.25x.41	85	41
CWC 12-03XLPCPETC	3	45	.44	120	65
CWC 12-04XLPCPETC	4	45	.48	154	86
CWC 12-05XLPCPETC	5	45	.53	190	108
CWC 12-07XLPCPETC	7	60	.60	265	150
CWC 12-09XLPCPETC	9	60	.70	340	193
CWC 12-10XLPCPETC	10	60	.77	370	210
CWC 12-12XLPCPETC	12	60	.79	430	258
CWC 12-16XLPCPETC	16	80	.92	570	336
CWC 12-19XLPCPETC	19	80	.96	675	403
CWC 12-20XLPCPETC	20	80	1.01	710	420
CWC 12-25XLPCPETC	25	80	1.12	890	515
CWC 12-37XLPCPETC	37	80	1.28	1310	741

- Notes:
1. All cables available with bare or covered grounding indicator.
 2. Standard color coding is ICEA Method E-2 for NEC applications per ICEA S-73-532. This color coding method omits white and green from the color sequence. A white or green conductor can be supplied on request, Method E-1.

Tray Cable

10AWG, Multi-Conductor, Type TC-ER, XLPE, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 10 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations For use in Class 1, Division 2 industrial hazardous locations in accordance with the NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -35°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 10-02XLPCPETC	2	45	.28 x.46	117	67
CWC 10-03XLPCPETC	3	45	.49	167	101
CWC 10-04XLPCPETC	4	60	.57	230	135
CWC 10-05XLPCPETC	5	60	.62	280	167
CWC 10-07XLPCPETC	7	60	.67	370	234
CWC 10-09XLPCPETC	9	60	.79	455	295
CWC 10-10XLPCPETC	10	80	.90	550	320
CWC 10-12XLPCPETC	12	80	.93	640	402
CWC 10-16XLPCPETC	16	80	1.03	820	512
CWC 10-19XLPCPETC	19	80	1.08	965	608
CWC 10-20XLPCPETC	20	80	1.14	1010	640
CWC 10-25XLPCPETC	25	80	1.26	1235	800
CWC 10-37XLPCPETC	37	80	1.44	1775	1184

- Notes:
1. All cables available with bare or covered grounding indicator.
 2. Standard color coding is ICEA Method E-2 for NEC applications per ICEA S-73-532. This color coding method omits white and green from the color sequence. A white or green conductor can be supplied on request, Method E-1.

Tray Cable

3C w/Ground, Type TC-ER, XLPE, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 1000 kcmil tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC Article 501 and Class 1 circuits per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for 2 AWG and larger.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -35°C. Meets crush and impact requirements of Type MC Cable for 2AWG and larger.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for 2 AWG and larger. UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			INSULATION	JACKET					90°C	75°C
CWC 8-03XLPGPCPETC	8	7	45	60	.66	10	335	190	55	50
CWC 6-03XLPGPCPETC	6	7	45	60	.74	8	475	301	75	65
CWC 4-03XLPGPCPETC	4	7	45	80	.88	8	700	448	95	85
CWC 2-03XLPGPCPETC	2	7	45	80	1.00	6	1020	716	130	115
CWC 1-03XLPGPCPETC	1	19	55	80	1.13	6	1260	872	150	130
CWC 1/0-03XLPGPCPETC	1/0	19	55	80	1.22	6	1520	1081	170	150
CWC 2/0-03XLPGPCPETC	2/0	19	55	80	1.31	6	1825	1341	195	175
CWC 3/0-03XLPGPCPETC	3/0	19	55	80	1.42	4	2210	1717	225	200
CWC 4/0-03XLPGPCPETC	4/0	19	55	80	1.55	4	2690	2132	260	230
CWC 250-03XLPGPCPETC	250	37	65	110	1.76	4	3265	2494	290	255
CWC 350-03XLPGPCPETC	350	37	65	110	1.98	3	4465	3474	350	310
CWC 500-03XLPGPCPETC	500	37	65	110	2.26	2	6100	4938	430	380
CWC 750-03XLPGPCPETC	750	61	80	110	2.71	1	9060	7206	535	475
CWC 1000-03XLPGPCPETC	1000	61	80	140	3.10	1/0	11770	9590	615	545

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; 90°C conductor temperature for dry locations, 75°C conductor temperature for wet locations, 30°C ambient temperature.

NOTE: Grounding conductor per UL Standard 1277 for Type TC Tray Cable.

Tray Cable

4C w/Ground, Type TC-ER, XLPE, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 750 kcmil tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC Article 501 and Class 1 circuits per NEC. Permitted for Exposed Run (ER).

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -35°C. Meets crush and impact requirements of Type MC Cable for 2AWG and larger.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for 2 AWG and larger. UL 1581. ICEA S-95-658/NEMA WC70.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			INSULATION	JACKET					90°C	75°C
CWC 8-04XLPGCPETC	8	7	45	60	.71	10	385	242	55	50
CWC 6-04XLPGCPETC	6	7	45	60	.79	8	558	384	75	65
CWC 4-04XLPGCPETC	4	7	45	80	.95	8	820	578	95	85
CWC 2-04XLPGCPETC	2	7	45	80	1.10	6	1214	919	130	115
CWC 1-04XLPGCPETC	1	19	55	80	1.24	6	1704	1136	150	130
CWC 1/0-04XLPGCPETC	1/0	19	55	80	1.34	6	1825	1413	170	150
CWC 2/0-04XLPGCPETC	2/0	19	55	80	1.45	6	2223	1760	195	175
CWC 3/0-04XLPGCPETC	3/0	19	55	80	1.57	4	3123	2245	225	200
CWC 4/0-04XLPGCPETC	4/0	19	55	80	1.77	4	3444	2796	260	230
CWC 250-04XLPGCPETC	250	37	65	110	1.93	4	4048	3282	290	255
CWC 350-04XLPGCPETC	350	37	65	110	2.18	3	5470	4577	350	310
CWC 500-04XLPGCPETC	500	37	65	110	2.48	2	7579	6509	430	380
CWC 750-04XLPGCPETC	750	61	80	110	3.12	1	11746	9522	535	475

*AMPACITY in accordance with the NEC for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried; 90°C conductor temperature for dry locations, 75°C conductor temperature for wet locations, 30°C ambient temperature.

NOTE: Grounding conductor per UL Standard 1277 for Type TC Tray Cable.

Tray Cable

14AWG, Multi-Conductor, Type TC-ER, FR-EPR, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weatherresistant. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 14-02FREPCPETC	2	45	.25 x.37	65	26
CWC 14-03FREPCPETC	3	45	.39	90	39
CWC 14-04FREPCPETC	4	45	.43	113	53
CWC 14-05FREPCPETC	5	45	.47	137	66
CWC 14-07FREPCPETC	7	45	.51	180	92
CWC 14-09FREPCPETC	9	60	.63	250	118
CWC 14-10FREPCPETC	10	60	.69	270	130
CWC 14-12FREPCPETC	12	60	.70	310	158
CWC 14-16FREPCPETC	16	60	.78	400	208
CWC 14-19FREPCPETC	19	60	.82	460	250
CWC 14-20FREPCPETC	20	80	.90	525	260
CWC 14-25FREPCPETC	25	80	1.00	640	323
CWC 14-37FREPCPETC	37	80	1.14	890	466

Notes: 1. All cables available with bare or covered grounding indicator.

2. Standard color coding is ICEA Method E-2 for NEC applications per ICEA S-73-532. This color coding method omits white and green from the color sequence. A white or green conductor can be supplied on request, Method E-1.

Tray Cable

12AWG, Multi-Conductor, Type TC-ER, FR-EPR, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 12 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 12-02FREPCPETC	2	45	.25 x.41	85	41
CWC 12-03FREPCPETC	3	45	.44	120	64
CWC 12-03WGFREPCPETC	3+ Grnd	45	.44	148	85
CWC 12-04FREPCPETC	4	45	.48	154	85
CWC 12-05FREPCPETC	5	45	.53	190	106
CWC 12-07FREPCPETC	7	60	.60	265	149
CWC 12-09FREPCPETC	9	60	.70	340	191
CWC 12-10FREPCPETC	10	60	.77	370	210
CWC 12-12FREPCPETC	12	60	.79	430	247
CWC 12-16FREPCPETC	16	80	.92	570	336
CWC 12-19FREPCPETC	19	80	.96	675	391
CWC 12-20FREPCPETC	20	80	1.01	710	420
CWC 12-25FREPCPETC	25	80	1.12	890	515
CWC 12-37FREPCPETC	37	80	1.28	1310	762

Notes: 1. All cables available with bare or covered grounding indicator.

2. Standard color coding is ICEA Method E-2 for NEC applications per ICEA S-73-532. This color coding method omits white and green from the color sequence. A white or green conductor can be supplied on request, Method E-1.

Tray Cable

10AWG, Multi-Conductor, Type TC-ER, FR-EPR, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 10 AWG fully annealed, stranded, tinned copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 1, Table E2 (does not include white or green).

Jacket: Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with NEC for three or more conductors.

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weatherresistant. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER for three or more conductors. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NUMBER OF CONDUCTORS	OVERALL PVC JACKET MILS	NOM. DIAM. INCHES	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)
CWC 10-02FREPCPETC	2	45	.28 x.46	117	65
CWC 10-03FREPCPETC	3	45	.49	167	100
CWC 10-04FREPCPETC	4	60	.57	230	134
CWC 10-05FREPCPETC	5	60	.62	280	167
CWC 10-07FREPCPETC	7	60	.67	370	234
CWC 10-09FREPCPETC	9	60	.79	455	295
CWC 10-10FREPCPETC	10	80	.90	550	320
CWC 10-12FREPCPETC	12	80	.93	640	402
CWC 10-16FREPCPETC	16	80	1.03	820	512
CWC 10-19FREPCPETC	19	80	1.08	965	608
CWC 10-20FREPCPETC	20	80	1.14	1010	640
CWC 10-25FREPCPETC	25	80	1.26	1235	800
CWC 10-37FREPCPETC	37	80	1.44	1775	1184

Tray Cable

3C w/Ground, Type TC-ER, FR-EPR, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 1000 kcmil tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER)

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY* 90°C
			INSULATION	JACKET					
CWC 14-03EPGCPETC	14	7	30	45	.39	14	118	55	25
CWC 12-03EPGCPETC	12	7	30	45	.44	12	160	87	30
CWC 10-03EPGCPETC	10	7	30	60	.49	10	237	136	40
CWC 8-03EPGCPETC	8	7	45	60	.66	10	330	190	55
CWC 6-03EPGCPETC	6	7	45	60	.74	8	460	297	75
CWC 4-03EPGCPETC	4	7	45	80	.88	8	685	442	95
CWC 2-03EPGCPETC	2	7	45	80	1.00	6	1015	703	130
CWC 1-03EPGCPETC	1	19	55	80	1.13	6	1270	872	150
CWC 1/0-03EPGCPETC	1/0	19	55	80	1.22	6	1500	1069	170
CWC 2/0-03EPGCPETC	2/0	19	55	80	1.31	6	1810	1340	195
CWC 3/0-03EPGCPETC	3/0	19	55	80	1.42	4	2250	1717	225
CWC 4/0-03EPGCPETC	4/0	19	55	80	1.55	4	2685	2130	260
CWC 250-03EPGCPETC	250	37	65	110	1.76	4	3170	2494	290
CWC 350-03EPGCPETC	350	37	65	110	1.98	3	4320	3474	350
CWC 500-03EPGCPETC	500	37	65	110	2.26	2	6020	4934	430
CWC 750-03EPGCPETC	750	61	80	110	2.71	1	8980	7278	535
CWC 1000-03EPGCPETC	1000	61	80	140	3.10	1/0	11700	9584	615

Tray Cable

4C w/Ground, Type TC-ER, FR-EPR, CPE, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 750 kcmil tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. For use in Class 1, Division 2 industrial hazardous locations per NEC. Permitted for Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER)

FEATURES

Rated at 90°C wet or dry. Excellent physical, thermal and electrical properties. Excellent resistance to moisture and flame. Sunlight- and weather-resistant. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-ER. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	AMPACITY*	
			INSULATION	JACKET					90°C	75°C
CWC 8-04EPGCPETC	8	7	45	60	.72	10	393	242	55	50
CWC 6-04EPGCPETC	6	7	45	60	.79	8	561	384	75	65
CWC 4-04EPGCPETC	4	7	45	80	.95	8	822	578	95	85
CWC 2-04EPGCPETC	2	7	45	80	1.09	6	1235	919	130	115
CWC 1-04EPGCPETC	1	19	55	80	1.24	6	1521	1136	150	130
CWC 1/0-04EPGCPETC	1/0	19	55	80	1.33	6	1820	1413	170	150
CWC 2/0-04EPGCPETC	2/0	19	55	80	1.44	6	2208	1760	195	175
CWC 3/0-04EPGCPETC	3/0	19	55	80	1.57	4	2788	2245	225	200
CWC 4/0-04EPGCPETC	4/0	19	55	80	1.79	4	3495	2796	260	230
CWC 250-04EPGCPETC	250	37	65	110	1.92	4	4019	3282	290	255
CWC 350-04EPGCPETC	350	37	65	110	2.17	3	5436	4577	350	310
CWC 500-04EPGCPETC	500	37	65	110	2.48	2	7607	6509	430	380
CWC 750-04EPGCPETC	750	61	80	110	3.12	1	11805	9712	535	475

Tray Cable

Multi-Conductor, Type TC-ER, LS-XLP, LSZH, 600V

PRODUCT CONSTRUCTION

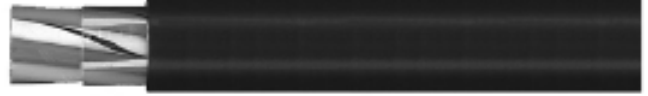
Conductor: 14 AWG, 12 AWG or 10AWG stranded bare copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-linked Polyethylene (XLP). Color-coded per ICEA Method 1, Table E-2 (does not include white or green).

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

APPLICATIONS

In free air, raceways, aerial or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with the NEC for three or more conductors.



FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-LS-ER. UL 1581. ICEA S-73-532/NEMA WC57. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 1202/CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO. OF CONDUCTORS	COND. SIZE (AWG)	COND. STRAND	INSULATION THICKNESS (INCHES)	JACKET THICKNESS (INCHES)	NOMINAL CABLE DIAMETER (INCHES)	COPPER WEIGHT (LBS./1000 FT.)	NET WEIGHT (LBS./1000 FT.)
14 AWG Multi-Conductors								
CWC 14-02LSZHTCFL	2 flat	14	7	.030	.045	.365x.230	26	61
CWC 14-02LSZHTC	2	14	7	.030	.045	.370	26	71
CWC 14-03LSZHTC	3	14	7	.030	.045	.390	39	92
CWC 14-03WGLSZHTC	3+ Grnd	14	7	.030	.045	.410	53	105
CWC 14-04LSZHTC	4	14	7	.030	.045	.425	53	115
CWC 14-05LSZHTC	5	14	7	.030	.045	.465	66	139
CWC 14-07LSZHTC	7	14	7	.030	.045	.505	92	173
CWC 14-09LSZHTC	9	14	7	.030	.060	.620	118	240
CWC 14-12LSZHTC	12	14	7	.030	.060	.700	158	301
CWC 14-19LSZHTC	19	14	7	.030	.060	.815	250	468
CWC 14-25LSZHTC	25	14	7	.030	.080	.935	323	624
CWC 14-30LSZHTC	30	14	7	.030	.080	1.030	387	747
CWC 14-37LSZHTC	37	14	7	.030	.080	1.110	466	875
12 AWG Multi-Conductors								
CWC 12-02LSZHTCFL	2 FLAT	12	7	.030	.045	.400x.245	40	82
CWC 12-02LSZHTC	2	12	7	.030	.045	.410	41	94
CWC 12-03LSZHTC	3	12	7	.030	.045	.435	64	124
CWC 12-03WGLSZHTC	3+ Grnd	12	7	.030	.045	.410	85	148
CWC 12-04LSZHTC	4	12	7	.030	.045	.475	85	157
CWC 12-05LSZHTC	5	12	7	.030	.045	.520	106	191
CWC 12-07LSZHTC	7	12	7	.030	.060	.595	149	268
CWC 12-09LSZHTC	9	12	7	.030	.060	.695	191	337
CWC 12-12LSZHTC	12	12	7	.030	.060	.765	247	428
CWC 12-19LSZHTC	19	12	7	.030	.080	.940	391	688
CWC 12-25LSZHTC	25	12	7	.030	.080	1.095	515	854
CWC 12-30LSZHTC	30	12	7	.030	.080	1.150	618	1002
CWC 12-37LSZHTC	37	12	7	.030	.080	1.240	762	1240
10 AWG Multi-Conductors								
CWC 10-02LSZHTCFL	2 flat	10	7	.030	.045	.445x.270	64	113
CWC 10-02LSZHTC	2	10	7	.030	.045	.455	65	128
CWC 10-03LSZHTC	3	10	7	.030	.045	.485	100	172
CWC 10-03WGLSZHTC	3+ Grnd	10	7	.030	.045	.485	134	225
CWC 10-04LSZHTC	4	10	7	.030	.060	.560	134	234
CWC 10-05LSZHTC	5	10	7	.030	.060	.615	167	284
CWC 10-07LSZHTC	7	10	7	.030	.060	.670	234	381
CWC 10-09LSZHTC	9	10	7	.030	.060	.760	295	464
CWC 10-12LSZHTC	12	10	7	.030	.080	.905	402	651

Tray Cable

3C w/Ground, Type TC-ER, LS-XLP, LZSH, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 750 kcmil bare annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).



APPLICATIONS

In free air, raceways, aerial or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with the NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-LS-ER. UL 1581/UL 2556 VW-1. ICEA S-95-658/NEMA WC70. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 1202/CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

FOUR CONDUCTORS WITH GROUNDING CONDUCTOR

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	THICKNESS IN INCHES		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	COPPER WEIGHT (LBS./1000 FT.)	NET WEIGHT (LBS./1000 FT.)
			INSULATION	OVERALL JACKET				
CWC 14-03WGLSZHTC	14	7	.030	.045	.430	14	55	118
CWC 12-03WGLSZHTC	12	7	.030	.045	.480	12	87	160
CWC 10-03WGLSZHTC	10	7	.030	.060	.565	10	136	237
CWC 8-03WGLSZHTC	8	7	.045	.060	.655	10	190	314
CWC 6-03WGLSZHTC	6	7	.045	.060	.740	8	297	456
CWC 4-03WGLSZHTC	4	7	.045	.080	.880	8	442	642
CWC 2-03WGLSZHTC	2	7	.045	.080	1.010	6	703	979
CWC 1-03WGLSZHTC	1	19	.055	.080	1.120	6	872	1021
CWC 1/0-03WGLSZHTC	1/0	19	.055	.080	1.225	6	1069	1439
CWC 2/0-03WGLSZHTC	2/0	19	.055	.080	1.300	6	1340	1720
CWC 3/0-03WGLSZHTC	3/0	19	.055	.080	1.420	4	1717	2176
CWC 4/0-03WGLSZHTC	4/0	19	.055	.080	1.540	4	2130	2614
CWC 250-03WGLSZHTC	250	37	.065	.110	1.760	4	2494	3184
CWC 350-03WGLSZHTC	350	37	.065	.110	1.960	3	3474	4187
CWC 500-03WGLSZHTC	500	37	.065	.110	2.245	2	4934	5847
CWC 750-03WGLSZHTC	750	61	.080	.140	2.810	1	7278	9145

Tray Cable

4C w/Ground, Type TC-ER, LS-XLP, LZSH, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 750 kcmil bare annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 4; individual conductors colored black with conductor number surface printed in contrasting ink.

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).



APPLICATIONS

In free air, raceways, aerial or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed in Class I, Division 2 industrial hazardous locations per NEC. Permitted for Exposed Run (ER) use in accordance with the NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 44 Type XHHW-2. UL 1277 Type TC-LS-ER. UL 1581/UL 2556 VW-1. ICEA S-95-658/NEMA WC70. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 1202/CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

FOUR CONDUCTORS WITH GROUNDING CONDUCTOR

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	THICKNESS IN INCHES		NOMINAL DIAMETER (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	COPPER WEIGHT (LBS./1000 FT.)	NET WEIGHT (LBS./1000 FT.)
			INSULATION	OVERALL JACKET				
CWC 8-04WGLSZHTC	8	7	.045	.060	.720	10	242	393
CWC 6-04WGLSZHTC	6	7	.045	.060	.790	8	384	561
CWC 4-04WGLSZHTC	4	7	.045	.080	.950	8	578	822
CWC 2-04WGLSZHTC	2	7	.045	.080	1.090	6	919	1235
CWC 1-04WGLSZHTC	1	19	.055	.080	1.235	6	1136	1521
CWC 1/0-04WGLSZHTC	1/0	19	.055	.080	1.330	6	1413	1820
CWC 2/0-04WGLSZHTC	2/0	19	.055	.080	1.440	6	1760	2208
CWC 3/0-04WGLSZHTC	3/0	19	.055	.080	1.570	4	2245	2788
CWC 4/0-04WGLSZHTC	4/0	19	.055	.110	1.790	4	2796	3495
CWC 250-04WGLSZHTC	250	37	.065	.110	1.915	4	3282	4019
CWC 350-04WGLSZHTC	350	37	.065	.110	2.165	3	4577	5436
CWC 500-04WGLSZHTC	500	37	.065	.110	2.475	2	6509	7607
CWC 750-04WGLSZHTC	750	61	.080	.140	3.115	1	9712	11805

Instrumentation

Pairs/Triads, Type PLTC/ITC, PVC, PVC, OS, 300V

PRODUCT CONSTRUCTION

Conductor: 20 AWG through 16 AWG bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free Polyvinyl Chloride (PVC). Color-coded per ICEA Method 1: Pairs – black and white; Triads – black, white and red. One conductor in each pair or triad is printed alphanumerically for easy identification.

Shield: Overall shielded pairs/triads. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In ducts, cable trays or conduit. In accordance with UL Subject 13 as Power-Limited Circuit Cable. In Class 3 circuits in accordance with NEC Article 725. In accordance with UL Subject 2250 as Instrumentation Tray Cable (ITC). Permitted for use in Class I, Division 2 industrial Tray Cable (ITC). Permitted for use in Class I, Division 2 industrial hazardous locations per NEC Article 501.10(B)(4) for UL Type PLTC/ITC cables. Per NEC Article 727 for Type PLTC/ITC.

FEATURES

Rated at 105°C. Oil- and sunlight-resistant. Flame-retardant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL Type PLTC/ITC. RoHS compliant.

Flame Test: IEEE 383 (70,000 BTU/hr). UL Subject 13 (70,000 BTU/hr) for PLTC. UL Subject 2250 (70,000 BTU/hr) for ITC.

Other: EPA 40 CFR, Part 261, for leachable lead content per TLCP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF PAIRS/TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 20-01POSPLTC	1	20	7/str	12	.035	.207	6.3	25
CWC 20-02POSPLTC	2	20	7/str	12	.040	.313	12.6	52
CWC 20-04POSPLTC	4	20	7/str	12	.040	.356	25	70
CWC 20-08POSPLTC	8	20	7/str	12	.050	.473	50	127
CWC 20-12POSPLTC	12	20	7/str	12	.050	.565	76	175
CWC 20-24POSPLTC	24	20	7/str	12	.060	.740	153	376
CWC 20-36POSPLTC	36	20	7/str	12	.060	.850	238	530
CWC 20-01TOSPLTC	1 Triad	20	7/str	12	.035	.216	9.5	30

CWC 18-01POSPLTC	1	18	7/str	15	.035	.239	10	35
CWC 18-02POSPLTC	2	18	7/str	15	.040	.368	20	68
CWC 18-04POSPLTC	4	18	7/str	15	.050	.443	40	106
CWC 18-08POSPLTC	8	18	7/str	15	.050	.565	80	181
CWC 18-12POSPLTC	12	18	7/str	15	.060	.700	120	267
CWC 18-16POSPLTC	16	18	7/str	15	.060	.750	171	374
CWC 18-24POSPLTC	24	18	7/str	15	.070	.915	253	564
CWC 18-36POSPLTC	36	18	7/str	15	.070	1.030	453	787
CWC 18-01TOSPLTC	1 Triad	18	7/str	15	.035	.251	15	42

CWC 16-01POSPLTC	1	16	7/str	15	.035	.263	16	46
CWC 16-02POSPLTC	2	16	7/str	15	.050	.430	32	96
CWC 16-04POSPLTC	4	16	7/str	15	.050	.493	64	141
CWC 16-08POSPLTC	8	16	7/str	15	.060	.654	128	260
CWC 16-12POSPLTC	12	16	7/str	15	.060	.787	191	367
CWC 16-16POSPLTC	16	16	7/str	15	.070	.845	270	526
CWC 16-24POSPLTC	24	16	7/str	15	.070	1.030	400	803
CWC 16-36POSPLTC	36	16	7/str	15	.070	1.165	599	1122
CWC 16-01TOSPLTC	1 Triad	16	7/str	15	.035	.277	24	56

Instrumentation

Pairs, Type PLTC/ITC, PVC, PVC, SPOS, 300V

PRODUCT CONSTRUCTION

Conductor: 20 AWG through 16 AWG bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free Polyvinyl Chloride (PVC). Color-coded per ICEA Method 1: Pairs – black and white. One conductor in each pair is printed alphanumerically for easy identification; Triads – black, white and red. One conductor in each pair or triad is printed alphanumerically for easy identification.

Shield: Individual and overall shielded pairs. Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In ducts, cable trays or conduit. In accordance with UL Subject 13 as Power-Limited Circuit Cable. In Class 3 circuits in accordance with NEC Article 725. In accordance with UL Subject 2250 as Instrumentation Tray Cable (ITC). Permitted for use in Class I, Division 2 industrial Tray Cable (ITC). Permitted for use in Class I, Division 2 industrial hazardous locations per NEC Article 501.10(B)(4) for UL Type PLTC/ITC cables. Per NEC Article 727 for Type PLTC/ITC.

FEATURES

Rated at 105°C. Oil- and sunlight-resistant. Flame-retardant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL Type PLTC/ITC. RoHS compliant.

Flame Test: IEEE 383 (70,000 BTU/hr). UL Subject 13 (70,000 BTU/hr) for PLTC. UL Subject 2250 (70,000 BTU/hr) for ITC.

Other: EPA 40 CFR, Part 261, for leachable lead content per TLCP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF PAIRS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 20-02SPOSPLTC	2	20	7/str	12	42	.349	21	66
CWC 20-04SPOSPLTC	4	20	7/str	12	52	.423	40	101
CWC 20-08SPOSPLTC	8	20	7/str	12	52	.543	78	170
CWC 20-12SPOSPLTC	12	20	7/str	12	62	.674	117	250
CWC 20-16SPOSPLTC	16	20	7/str	12	62	.747	155	316
CWC 20-24SPOSPLTC	24	20	7/str	12	72	.393	231	466
CWC 20-36SPOSPLTC	36	20	7/str	12	72	1.071	346	655
CWC 20-50SPOSPLTC	50	20	7/str	12	82	1.278	479	902

CWC 18-02SPOSPLTC	2	18	7/str	15	52	.382	28	84
CWC 18-04SPOSPLTC	4	18	7/str	15	52	.443	53	121
CWC 18-08SPOSPLTC	8	18	7/str	15	62	.577	104	211
CWC 18-12SPOSPLTC	12	18	7/str	15	62	.743	155	327
CWC 18-16SPOSPLTC	16	18	7/str	15	62	.824	206	415
CWC 18-24SPOSPLTC	24	18	7/str	15	72	1.038	308	614
CWC 18-36SPOSPLTC	36	18	7/str	15	72	1.187	461	870
CWC 18-50SPOSPLTC	50	18	7/str	15	82	1.417	640	1201

CWC 16-02SPOSPLTC	2	16	7/str	15	52	.446	40	120
CWC 16-04SPOSPLTC	4	16	7/str	15	52	.516	78	174
CWC 16-08SPOSPLTC	8	16	7/str	15	62	.690	153	317
CWC 16-12SPOSPLTC	12	16	7/str	15	62	.834	229	449
CWC 16-16SPOSPLTC	16	16	7/str	15	72	.948	304	592
CWC 16-24SPOSPLTC	24	16	7/str	15	72	1.171	455	852
CWC 16-36SPOSPLTC	36	16	7/str	15	82	1.362	662	1245
CWC 16-50SPOSPLTC	50	16	7/str	15	82	1.603	945	1684

Instrumentation

Triads, Type PLTC/ITC, PVC, PVC, STOS, 300V

PRODUCT CONSTRUCTION

Conductor: 20 AWG through 16 AWG bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Lead-free Polyvinyl Chloride (PVC). Color-coded per ICEA Method 1: Triads – black, white and red. One conductor in each triad is printed alphanumerically for easy identification.

Shield: Individual and overall shielded triads. Individual triads are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In ducts, cable trays or conduit. In accordance with UL Subject 13 as Power-Limited Circuit Cable. In Class 3 circuits in accordance with Power-Limited Circuit Cable. In Class 3 circuits in accordance with NEC Article 725. In accordance with UL Subject 2250 as Instrumentation | Tray Cable (ITC). Permitted for use in Class 1, Division 2 industrial hazardous locations per NEC Article 501.10(B)(4) for UL Type PLTC/ITC cables. Per NEC Article 727 for Type PLTC/ITC.

FEATURES

Rated at 105°C. Oil- and sunlight-resistant. Flame-retardant. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL Type PLTC/ITC. RoHS compliant.

Flame Test: Flame Test: IEEE 383 (70,000 BTU/hr). UL Subject 13 (70,000 BTU/hr) for PLTC. UL Subject 2250 (70,000 BTU/hr) for ITC.

Other: EPA 40 CFR, Part 261, for leachable lead content per TLCP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 20-02STOSPLTC	2	20	7/str	12	42	.357	26	77
CWC 20-04STOSPLTC	4	20	7/str	12	52	.433	48	122
CWC 20-08STOSPLTC	8	20	7/str	12	52	.556	97	212
CWC 20-12STOSPLTC	12	20	7/str	12	62	.690	145	313
CWC 20-16STOSPLTC	16	20	7/str	12	62	.765	192	399
CWC 20-24STOSPLTC	24	20	7/str	12	72	.963	288	591

CWC 18-02STOSPLTC	2	18	7/str	15	52	.431	38	108
CWC 18-04STOSPLTC	4	18	7/str	15	52	.476	73	160
CWC 18-08STOSPLTC	8	18	7/str	15	62	.635	147	293
CWC 18-12STOSPLTC	12	18	7/str	15	62	.764	215	416
CWC 18-16STOSPLTC	16	18	7/str	15	62	.849	286	533
CWC 18-24STOSPLTC	24	18	7/str	15	72	1.070	428	793

CWC 16-02STOSPLTC	2	16	7/str	15	52	.460	54	146
CWC 16-04STOSPLTC	4	16	7/str	15	52	.533	108	221
CWC 16-08STOSPLTC	8	16	7/str	15	62	.713	218	410
CWC 16-12STOSPLTC	12	16	7/str	15	62	.863	325	587
CWC 16-16STOSPLTC	16	16	7/str	15	72	.981	433	777
CWC 16-24STOSPLTC	24	16	7/str	15	72	1.212	649	1130

Instrumentation

Pairs, Type TC-ER, PVC/Nylon, PVC, SPOS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1: Pairs – black and white. One conductor in each pair is printed alphanumerically for easy identification.

Shield: Individual and overall shielded pairs. Individual triads are 100% shielded with aluminum/pc in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact it stranded tinned copper drain wire.

Jacket: Lead-free, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C dry, 75°C wet. Ripcord applied to all cables with jacket thickness of 60 mils or less. Provides sunlight, cold bend and cold impact resistance. Offers the smallest cable O.D. available for suitable applications. Provides excellent oil and chemical resistance. Meets cold bend test at -25° C.

COMPLIANCES

Industry: UL 1277 Type TC. UL 1581. NEC Type TFN conductors. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NO OF PAIRS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-02SPOSVNTC	2	18	7/Str	15/4	47	.429	30	96
CWC 18-04SPOSVNTC	4	18	7/Str	15/4	47	.498	55	139
CWC 18-08SPOSVNTC	8	18	7/Str	15/4	62	.678	105	257
CWC 18-12SPOSVNTC	12	18	7/Str	15/4	62	.819	156	359
CWC 18-16SPOSVNTC	16	18	7/Str	15/4	82	.951	207	490
CWC 18-24SPOSVNTC	24	18	7/Str	15/4	82	1.169	302	695
CWC 18-36SPOSVNTC	36	18	7/Str	15/4	82	1.336	452	987
CWC 18-50SPOSVNTC	50	18	7/Str	15/4	82	1.572	628	1314

CWC 16-02SPOSVNTC	2	16	7/Str	15/4	47	.480	42	127
CWC 16-03SPOSVNTC	3	16	7/Str	15/4	47	.514	61	145
CWC 16-04SPOSVNTC	4	16	7/Str	15/4	62	.590	80	207
CWC 16-06SPOSVNTC	6	16	7/Str	15/4	62	.694	116	270
CWC 16-08SPOSVNTC	8	16	7/Str	15/4	62	.763	155	344
CWC 16-12SPOSVNTC	12	16	7/Str	15/4	82	.966	230	521
CWC 16-16SPOSVNTC	16	16	7/Str	15/4	82	1.072	306	660
CWC 16-24SPOSVNTC	24	16	7/Str	15/4	82	1.323	456	944
CWC 16-36SPOSVNTC	36	16	7/Str	15/4	92	1.536	674	1370
CWC 16-50SPOSVNTC	50	16	7/Str	15/4	112	1.849	935	1914

INSTRUMENTATION TRAY CABLE Type TC (POS/TOS)

INSTRUMENT WIRE 600 VOLT TC

COPPER WIRE AND CABLE PART #	NO OF PAIRS/ TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-01POSVNTC	1 Pair	18	7/Str	15/4	47	.270	12	42
CWC 16-01POSVNTC	1 Pair	16	7/Str	15/4	47	.294	18	55
CWC 18-01TOSVNTC	1 Triad	18	7/Str	15/4	47	.283	18	51
CWC 16-01TOSVNTC	1 Triad	16	7/Str	15/4	47	.309	27	68

Instrumentation

Triads, Type TC-ER, PVC/Nylon, PVC, STOS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG bare, annealed copper per ASTM B3. Class B stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon). Color-coded per ICEA Method 1: Triads – black, white and red. One conductor in each triad is printed alphanumerically for easy identification.

Shield: Individual and overall shielded triads. Individual triads are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C dry, 75°C wet. Ripcord applied to all cables with jacket thickness of 60 mils or less. Provides sunlight, cold bend and cold impact resistance. Offers the smallest cable O.D. available for suitable applications. Provides excellent oil and chemical resistance. Meets cold bend test at -25° C.

COMPLIANCES

Industry: UL 1277 Type TC. UL 1581. NEC Type TFN conductors. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable. RoHS compliant.

COPPER WIRE AND CABLE PART #	NO OF TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-02STOSVNTC	2	18	7/Str	15/4	47	.453	38	117
CWC 18-04STOSVNTC	4	18	7/Str	15/4	62	.557	73	190
CWC 18-08STOSVNTC	8	18	7/Str	15/4	62	.718	144	327
CWC 18-12STOSVNTC	12	18	7/Str	15/4	82	.909	218	495
CWC 18-16STOSVNTC	16	18	7/Str	15/4	82	1.008	290	628
CWC 18-24STOSVNTC	24	18	7/Str	15/4	82	1.242	433	899
CWC 18-36STOSVNTC	36	18	7/Str	15/4	82	1.421	649	1279
CWC 16-02STOSVNTC	2	16	7/Str	15/4	47	.509	57	156
CWC 16-04STOSVNTC	4	16	7/Str	15/4	62	.624	108	253
CWC 16-08STOSVNTC	8	16	7/Str	15/4	62	.810	217	444
CWC 16-12STOSVNTC	12	16	7/Str	15/4	82	1.024	328	671
CWC 16-16STOSVNTC	16	16	7/Str	15/4	82	1.138	436	858
CWC 16-24STOSVNTC	24	16	7/Str	15/4	82	1.408	653	1238
CWC 16-36STOSVNTC	36	16	7/Str	15/4	82	1.615	979	1777

Instrumentation

Pairs/Triads, FR-EPR, CPE, OS, Type TC-ER, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 1: Pairs – black and white; Triads – black, white and red. One conductor in each pair is printed alphanumerically for easy identification.

Shield: Overall shielded pairs/triads. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical, thermal and electrical properties. Excellent moisture resistance. Excellent resistance to compression cuts and heat deformation. Excellent flame resistance – burns to an ash; does not exhibit thermoplastic drip. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Excellent low temperature cold bend characteristics. Meets cold bend test at -40°C.

COMPLIANCES

Industry: UL 1277 Type TC. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF PAIRS/ TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-01POSECPETC	1	18	7 str	.025	.045	.300	13	42
CWC 18-01TOSECPETC	1 TRI	18	7 str	.025	.045	.315	18	53
CWC 16-01POSECPETC	1	16	7 str	.025	.045	.320	18	52
CWC 16-01TOSECPETC	1 TRI	16	7 str	.025	.045	.335	26	66

Instrumentation

Pairs, Type TC-ER, FR-EPR, CPE, SPOS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II. Color-coded per ICEA Method 1: Pairs – black and white. One conductor in each pair is printed alphanumerically for easy identification.

Shield: Individual and overall shielded pairs. Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, thermoplastic Chlorinated Polyethylene (CPE).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical, thermal and electrica properties. Excellent moisture resistance. Excellent resistance to compression cuts and heat deformation. Excellent flame resistance – burns to an ash; does not exhibit thermoplastic drip. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Excellent low temperature cold bend characteristics. Meets cold bend test at -40°C..

COMPLIANCES

Industry: UL 1277 Type TC. UL 1581. ICEA S-73-532/NEMA WC57.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TLCP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF PAIRS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-02SPOSECPETC	2	18	7/Str	.025	.045	.473	27	83
CWC 18-04SPOSECPETC	4	18	7/Str	.025	.060	.586	53	152
CWC 18-08SPOSECPETC	8	18	7/Str	.025	.060	.751	103	259
CWC 18-12SPOSECPETC	12	18	7/Str	.025	.080	.948	153	398
CWC 18-16SPOSECPETC	16	18	7/Str	.025	.080	1.050	206	502
CWC 18-24SPOSECPETC	24	18	7/Str	.025	.080	1.220	311	709
CWC 18-36SPOSECPETC	36	18	7/Str	.025	.080	1.474	461	1008
CWC 18-50SPOSECPETC	50	18	7/Str	.025	.110	1.780	640	1454
CWC 16-02SPOSECPETC	2	16	7/Str	.025	.045	.500	40	103
CWC 16-04SPOSECPETC	4	16	7/Str	.025	.060	.650	77	189
CWC 16-06SPOSECPETC	6	16	7/Str	.025	.060	.755	115	268
CWC 16-08SPOSECPETC	8	16	7/Str	.025	.060	.840	151	330
CWC 16-12SPOSECPETC	12	16	7/Str	.025	.080	1.065	226	506
CWC 16-16SPOSECPETC	16	16	7/Str	.025	.080	1.185	305	643
CWC 16-24SPOSECPETC	24	16	7/Str	.025	.080	1.485	455	932
CWC 16-36SPOSECPETC	36	16	7/Str	.025	.080	1.760	683	1410
CWC 16-50SPOSECPETC	50	16	7/Str	.025	.110	2.035	946	1883

Instrumentation

Pairs/Triads, Type TC, LS-XLP, LSZH, OS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-Linked Polyethylene (XLPE). Color-coded per ICEA Method 1: Pairs – black and white. Triads – black, white and red. One conductor in each pair or triad is printed alphanumerically for easy identification.

Shield: Overall shielded pairs/triads. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 1277 Type TC-LS. UL 1581. ICEA S-73-532/NEMA WC57. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF PAIRS/ TRIADS	SIZE	STRANDS	INSULATION THICKNESS (MILS)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WT. (LBS./1000 FT.)	WEIGHT (LBS./1000 FT.)
CWC 18-01POSLSZHTC	1	18	7/Str	.030	.045	.315	13	46
CWC 18-01TOSLSZHTC	1 TRI	18	7/Str	.030	.045	.340	18	58
CWC 16-01POSLSZHTC	1	16	7/Str	.030	.045	.345	18	32
CWC 16-01TOSLSZHTC	1 TRI	16	7/Str	.030	.045	.360	26	72

Instrumentation

Pairs, Type TC, LS-XLP, LSZH, SPOS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-Linked Polyethylene (XLPE). Color-coded per ICEA Method 1: Triads – black, white and red.

One conductor in each triad is printed alphanumerically for easy identification.

Shield: Individual and overall shielded triads. Individual triads are 100% individually shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and

corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 1277 Type TC-LS. UL 1581. ICEA S-73-532/NEMA WC57. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO. OF PAIRS	SIZE STRANDS	INSULATION THICKNESS (INCHES)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WEIGHT (LBS./1000 FT.)	APPROX. NET WT. (LBS./1000 FT.)
CWC 18-02SPOSECPETC	2	18 7/Str	.030	.045	.510	27	92
CWC 18-04SPOSLSZHTC	4	18 7/Str	.030	.060	.630	53	167
CWC 18-08SPOSLSZHTC	8	18 7/Str	.030	.080	.855	103	326
CWC 18-12SPOSLSZHTC	12	18 7/Str	.030	.080	1.030	153	441
CWC 18-16SPOSLSZHTC	16	18 7/Str	.030	.080	1.140	206	554
CWC 18-24SPOSLSZHTC	24	18 7/Str	.030	.080	1.450	311	795
CWC 18-36SPOSLSZHTC	36	18 7/Str	.030	.110	1.650	461	1118
CWC 18-50SPOSLSZHTC	50	18 7/Str	.030	.110	2.085	640	1616
CWC 16-02SPOSLSZHTC	2	16 7/Str	.030	.060	.585	40	130
CWC 16-04SPOSLSZHTC	4	16 7/Str	.030	.060	.675	77	204
CWC 16-06SPOSLSZHTC	6	16 7/Str	.030	.060	.800	115	301
CWC 16-08SPOSLSZHTC	8	16 7/Str	.030	.080	.915	151	394
CWC 16-12SPOSLSZHTC	12	16 7/Str	.030	.080	1.110	226	548
CWC 16-16SPOSLSZHTC	16	16 7/Str	.030	.080	1.350	305	713
CWC 16-24SPOSLSZHTC	24	16 7/Str	.030	.080	1.570	455	1001
CWC 16-36SPOSLSZHTC	36	16 7/Str	.030	.110	1.980	683	1548
CWC 16-50SPOSLSZHTC	50	16 7/Str	.030	.110	2.165	946	2020

Note: Standard color coding is Method E-1 for NEC applications per ICEA; Pairs – black and white. One conductor in each pair is printed alphanumerically.

Instrumentation

Triads, Type TC, LS-XLP, LSZH, STOS, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG tinned, annealed copper per ASTM B33. Class B stranding per ASTM B8.

Insulation: Lead-free, flame-retardant, low-smoke, Cross-Linked Polyethylene (XLPE). Color-coded per ICEA Method 1: Triads – black, white and red.

One conductor in each triad is printed alphanumerically for easy identification.

Shield: Individual and overall shielded triads. Individual triads are 100% individually shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: Lead-free, flame-retardant, sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).



APPLICATIONS

In free air, raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2 industrial hazardous locations per NEC.

FEATURES

Rated at 90°C wet or dry. Ripcord applied to all cables with jacket thickness of 60 mils or less. Excellent physical and electrical properties. Excellent moisture resistance. Excellent resistance to compression and impact. Chemical-resistant. Low coefficient of friction for easy pulling. Sunlight- and weather-resistant. Meets cold bend test at -30°C. Low-Smoke, Zero-Halogen jacket is environmentally safe and reduces the amount of toxic and corrosive gases emitted during combustion.

COMPLIANCES

Industry: UL 1277 Type TC-LS. UL 1581. ICEA S-73-532/NEMA WC57. ICEA T-33-655. RoHS compliant.

Flame Test: UL 1581/UL 2556 VW-1. UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202. CSA FT4. ICEA T-29-520.

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO OF TRIADS	SIZE STRANDS	INSULATION THICKNESS (INCHES)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	COPPER WEIGHT (LBS./1000 FT.)	APPROX. NET WT. (LBS./1000 FT.)
CWC 18-02STOSLSZHTC	2	18 7/Str	.030	.060	.595	38	150
CWC 18-04STOSLSZHTC	4	18 7/Str	.030	.060	.690	74	231
CWC 18-08STOSLSZHTC	8	18 7/Str	.030	.080	.940	145	435
CWC 18-12STOSLSZHTC	12	18 7/Str	.030	.080	1.135	217	612
CWC 18-16STOSLSZHTC	16	18 7/Str	.030	.080	1.265	289	773
CWC 18-24STOSLSZHTC	24	18 7/Str	.030	.080	1.565	432	1097
CWC 18-36STOSLSZHTC	36	18 7/Str	.030	.110	1.860	647	1662
CWC 16-02STOSLSZHTC	2	16 7/Str	.030	.060	.640	57	183
CWC 16-04STOSLSZHTC	4	16 7/Str	.030	.060	.745	111	494
CWC 16-08STOSLSZHTC	8	16 7/Str	.030	.080	1.015	219	549
CWC 16-12STOSLSZHTC	12	16 7/Str	.030	.080	1.230	328	777
CWC 16-16STOSLSZHTC	16	16 7/Str	.030	.080	1.370	437	988
CWC 16-24STOSLSZHTC	24	16 7/Str	.030	.110	1.760	654	1530
CWC 16-36STOSLSZHTC	36	16 7/Str	.030	.110	2.015	979	2142

Thermocouple Pairs, Type PLTC/ITC, PVC, OS/SPOS, 300V

PRODUCT CONSTRUCTION

Conductor: Solid thermocouple extension alloy conductors per ANSI MC96.1

Insulation: 105°C PVC. Minimum average insulation thickness for 20 and 16 AWG is .0015 in.

Shield: Pairs are shielded with 100% coverage aluminum/polyester tape and include a tinned copper drain wire. Shield tape provides total shield isolation from all other shields. Cabled pairs are overall shielded with 100% coverage aluminum/polyester with 100% coverage aluminum/polyester tape, including a 20 AWG, seven-strand tinned copper drain wire. Aluminum/polyester tape thickness of .00135 in. Overall shielded designs with copper tape or braided tinned copper are also available.

Jacket: 105°C FR PVC, sunlight-resistant, thickness per UL 13 and UL 2250, footage sequentially printed. Thermocouple extension cables use the ANSI color corresponding to the thermocouple extension alloy type contained in the construction. Additional colors are available upon request.



APPLICATIONS

UL listed 300 V Power Limited Tray Cable (PLTC)/Instrumentation Tray Cable (ITC) to UL 13 and UL 2250 for use in Class I, Zone 2 and Class II, Division 2 industrial hazardous locations per NEC.

FEATURES

Sunlight-resistant. Overall cable rated 105°C per UL.

COMPLIANCES

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202.

Jackets: KX – yellow jacket, EX – purple jacket, JX – black jacket, NX – orange jacket, SX – green jacket, TX – blue jacket. Solid conductors are standard; stranded is available upon request. 300 V is standard; 600 V is available upon request.

Replace underscore with alloy type.

COPPER WIRE AND CABLE PART #	NO. OF PAIRS	SIZE (AWG)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	WEIGHT (LBS./1000 FT.)
CWC 20-01POS_XPVC	1	20	.035	.203	24
CWC 20-02SPOS_XPVC	2	20	.040	.322	58
CWC 20-04SPOS_XPVC	4	20	.040	.367	81
CWC 20-08SPOS_XPVC	8	20	.050	.488	148
CWC 20-12SPOS_XPVC	12	20	.050	.584	208
CWC 20-16SPOS_XPVC	16	20	.060	.666	272
CWC 20-24SPOS_XPVC	24	20	.060	.812	389
CWC 20-36SPOS_XPVC	36	20	.070	.949	566
CWC 20-50SPOS_XPVC	50	29	.070	1.088	756
CWC 16-01POS_XPVC	1	16	.035	.253	43
CWC 16-02SPOS_XPVC	2	16	.050	.432	106
CWC 16-04SPOS_XPVC	4	16	.050	.495	160
CWC 16-08SPOS_XPVC	8	16	.060	.657	299
CWC 16-12SPOS_XPVC	12	16	.060	.791	426
CWC 16-16SPOS_XPVC	16	16	.060	.877	540
CWC 16-24SPOS_XPVC	24	16	.070	1.106	811
CWC 16-36SPOS_XPVC	36	16	.070	1.264	1153
CWC 16-50SPOS_XPVC	50	16	.080	1.479	1589

Replace CPE in the part number with AIA for Aluminum Interlocked Armor. Replace CPE in the part number with SWA for Steel Served Wire Armor. Jackets: KX – yellow jacket, EX – purple jacket, JX – black jacket, NX – orange jacket, SX – green jacket, TX – blue jacket. Solid conductors are standard; stranded is available upon request. 300V is standard; 600V is available upon request.

Thermocouple Pairs, Type PLTC/ITC, XLP, PVC, OS, 300V

PRODUCT CONSTRUCTION

Conductor: Solid thermocouple extension alloy conductors per ANSI MC96.1. Stranded thermocouple extension alloys available upon request.

Insulation: 105°C PVC. Minimum average insulation thickness for 20, 18 and 16 AWG is .0015 in. VW-1 rated conductors are available upon request.

Shield: Pairs are shielded with 100% coverage aluminum/polyester tape and include a tinned copper drain wire. Aluminum/polyester tape thickness of .00135 in. Overall shielded designs with copper tape or braided tinned copper are also available.

Jacket: 105°C FR PVC, sunlight-resistant, thickness per UL 13 and UL 2250, footage sequentially printed. Suitable for -70°C environment. Black 90°C FR, sunlight-resistant Thermoset Chlorosulfonated Polyethylene (CSPE), commonly referred to as Hypalo®, rated Oil Res I and Oil Res II. Thermocouple extension cables use the ANSI color corresponding to the thermocouple extension alloy type contained in the construction. Additional colors are available upon request.



APPLICATIONS

UL listed 300V Power Limited Tray Cable (PLTC)/Instrumentation Tray Cable (ITC) to UL 13 and UL 2250 for use in Class I, Zone 2 and Class II, Division 2 industrial hazardous locations per NEC.

FEATURES

Sunlight-resistant. Overall cable rated 105°C per UL.

COMPLIANCES

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202.

COPPER WIRE AND CABLE PART #	NO. OF PAIRS	UNARMORED			INTERLOCKED ALUMINUM ARMOR		
		JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	WEIGHT (LBS./1000 FT.)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	WEIGHT (LBS./1000 FT.)
20 AWG							
CWC 20-01POS_XXCPE	1	.035	.215	26	.040	.523	113
CWC 20-02POS_XXCPE	2	.040	.320	52	.050	.648	170
CWC 20-04POS_XXCPE	4	.040	.364	70	.050	.692	203
CWC 20-06POS_XXCPE	6	.050	.451	105	.050	.779	258
CWC 20-08POS_XXCPE	8	.050	.485	126	.050	.813	288
CWC 20-12POS_XXCPE	12	.050	.579	174	.050	.907	358
CWC 20-16POS_XXCPE	16	.060	.660	227	.050	.988	431
CWC 20-24POS_XXCPE	24	.060	.805	322	.050	1.153	564
CWC 20-36POS_XXCPE	36	.070	.941	465	.050	1.289	739
CWC 20-50POS_XXCPE	50	.070	1.079	615	.050	1.427	923
18 AWG							
CWC 18-01POS_XXCPE	1	.035	.231	32	.050	.559	134
CWC 18-02POS_XXCPE	2	.040	.348	63	.050	.676	192
CWC 18-04POS_XXCPE	4	.050	.418	96	.050	.746	242
CWC 18-06POS_XXCPE	6	.050	.493	133	.050	.821	297
CWC 18-08POS_XXCPE	8	.050	.530	164	.050	.858	336
CWC 18-12POS_XXCPE	12	.060	.657	240	.050	.985	443
CWC 18-16POS_XXCPE	16	.060	.726	300	.050	1.054	520
CWC 18-24POS_XXCPE	24	.060	.889	429	.050	1.237	691
CWC 18-36POS_XXCPE	36	.070	1.038	624	.050	1.386	922
CWC 18-50POS_XXCPE	50	.070	1.193	832	.050	1.541	1168
16 AWG							
CWC 16-01POS_XXCPE	1	.035	.253	42	.050	.581	149
CWC 16-02POS_XXCPE	2	.040	.386	80	.050	.714	218
CWC 16-04POS_XXCPE	4	.050	.464	129	.050	.792	286
CWC 16-06POS_XXCPE	6	.050	.550	183	.050	.878	360
CWC 16-08POS_XXCPE	8	.050	.594	226	.050	.922	414
CWC 16-12POS_XXCPE	12	.060	.736	333	.050	1.064	555
CWC 16-16POS_XXCPE	16	.060	.816	421	.050	1.164	666
CWC 16-24POS_XXCPE	24	.070	1.028	632	.050	1.376	927
CWC 16-36POS_XXCPE	36	.070	1.172	891	.050	1.520	1221
CWC 16-50POS_XXCPE	50	.080	1.371	1224	.050	1.739	1635

Replace CPE in the part number with AIA for Aluminum Interlocked Armor. Replace CPE in the part number with SWA for Steel Served Wire Armor. Jackets: KX – yellow jacket, EX – purple jacket, JX – black jacket, NX – orange jacket, SX – green jacket, TX – blue jacket
Solid conductors are standard; stranded is available upon request. 300V is standard; 600V is available upon request

Thermocouple Pairs, Type PLTC/ITC, PVC, PVC, OS, 300V

PRODUCT CONSTRUCTION

Conductor: Solid thermocouple extension alloy conductors per ANSI MC96.1. Stranded thermocouple extension alloys available upon request.

Insulation: 105°C PVC. Minimum average insulation thickness for 20, 18 and 16 AWG is .0015 in.

Shield: Overall shielded pairs. Overall shield is aluminum/polymer in contact with stranded tinned copper drain wire.

Jacket: 105°C FR PVC, sunlight-resistant, thickness per UL 13 and UL 2250, footage sequentially printed. Thermocouple extension cables use the ANSI color corresponding to the thermocouple extension alloy type contained in the construction. Additional colors are available upon request.



APPLICATIONS

UL listed 300V Power Limited Tray Cable (PLTC)/Instrumentation Tray Cable (ITC) to UL 13 and UL 2250 for use in Class I, Zone 2 and Class II, Division 2 industrial hazardous locations per NEC.

FEATURES

Sunlight-resistant. Overall cable rated 105°C per UL.

COMPLIANCES

Flame Test: UL 1685 Vertical Flame Test. IEEE 383. IEEE 1202.

COPPER WIRE AND CABLE PART #	NO. OF PAIRS	UNARMORED			INTERLOCKED ALUMINUM ARMOR		
		JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	WEIGHT (LBS./1000 FT.)	JACKET THICKNESS (INCHES)	NOMINAL OD (INCHES)	WEIGHT (LBS./1000 FT.)
20 AWG							
CWC 20-01POS_XPVC	1	.035	.203	24	.035	.501	104
CWC 20-02POS_XPVC	2	.040	.299	47	.035	.597	145
CWC 20-04POS_XPVC	4	.040	.339	65	.040	.647	180
CWC 20-06POS_XPVC	6	.050	.420	98	.040	.728	230
CWC 20-08POS_XPVC	8	.050	.450	118	.040	.758	257
CWC 20-12POS_XPVC	12	.050	.536	160	.040	.844	318
CWC 20-16POS_XPVC	16	.050	.591	201	.050	.919	388
CWC 20-24POS_XPVC	24	.060	.742	300	.050	1.071	524
CWC 20-36POS_XPVC	36	.060	.843	416	.050	1.191	667
CWC 20-50POS_XPVC	50	.070	.993	574	.050	1.341	861
18 AWG							
CWC 18-01POS_XPVC	1	.035	.231	32	.035	.529	118
CWC 18-02POS_XPVC	2	.040	.348	64	.035	.656	180
CWC 18-04POS_XPVC	4	.050	.418	97	.040	.726	229
CWC 18-06POS_XPVC	6	.050	.493	134	.040	.801	283
CWC 18-08POS_XPVC	8	.050	.530	166	.040	.838	322
CWC 18-12POS_XPVC	12	.060	.657	243	.040	.985	446
CWC 18-16POS_XPVC	16	.060	.726	304	.050	1.054	524
CWC 18-24POS_XPVC	24	.060	.889	435	.050	1.237	697
CWC 18-36POS_XPVC	36	.070	1.038	633	.050	1.386	931
CWC 18-50POS_XPVC	50	.070	1.193	845	.050	1.541	1180
16 AWG							
CWC 16-01POS_XPVC	1	.035	.253	43	.035	.551	133
CWC 16-02POS_XPVC	2	.040	.386	81	.040	.694	205
CWC 16-04POS_XPVC	4	.050	.464	131	.040	.772	272
CWC 16-06POS_XPVC	6	.050	.550	184	.050	.878	362
CWC 16-08POS_XPVC	8	.050	.594	228	.050	.922	416
CWC 16-12POS_XPVC	12	.060	.736	337	.050	1.064	559
CWC 16-16POS_XPVC	16	.060	.816	426	.050	1.164	671
CWC 16-24POS_XPVC	24	.070	1.058	639	.050	1.376	935
CWC 16-36POS_XPVC	36	.070	1.172	902	.050	1.520	1232
CWC 16-50POS_XPVC	50	.080	1.371	1239	.050	1.719	1617

Replace CPE in the part number with AIA for Aluminum Interlocked Armor. Replace CPE in the part number with SWA for Steel Served Wire Armor. Jackets: KX – yellow jacket, EX – purple jacket, JX – black jacket, NX – orange jacket, SX – green jacket, TX – blue jacket
Solid conductors are standard; stranded is available upon request. 300V is standard; 600V is available upon request

Portable Cord

Type DLO, Type RHH/RHW-2, EPR/XL-CPE, 600V-2kV

PRODUCT CONSTRUCTION

Conductor: 14 AWG through 1111.1 kcmil Class I, fully annealed, flexible, stranded, tin-coated copper per AAR 589.

Insulation: Flame-retardant, cross-linked Ethylene Propylene (EP) with separator tape over the conductor to facilitate stripping.

Jacket: Black, flame-retardant, sunlight-, ozone- and oil resistant, lead-free Cross-linked Chlorinated Polyethylene (XL-CPE). Other jacket colors available upon request



APPLICATIONS

For use up to 2 kV as power cables in wind turbine generator applications per UL Subject 6140. Also for use in diesel electric locomotives, mining and earth-moving equipment, and general purpose use as flexible power leads in cable trays (sizes 1/0 AWG and larger).

FEATURES

Resists oil, heat, flame, gear lubricants, ozone and sunlight. Designed to withstand continuous flexing. 90°C wet or dry temperature rating. Flexible tinned copper stranding.

COMPLIANCES

Industry: Type RHH/RHW-2 per UL 44, UL File #E90494. c(UL)US Type RW90 per CSA C.22.2-38, UL File #E90494. ICEA S-95-658/NEMA WC70. For CT Use on 1/0 AWG and larger in accordance with NEC®. Accepted for listing as flame resistant by MSHA. RoHS compliant.

Flame Test: UL 2556 VW-1, IEEE 1202/CSA FT4 for sizes 1/0 AWG and larger.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	COND. STRAND	NOMINAL INSULATION THICKNESS		NOMINAL O.D.		CURRENT AMPS		APPROX. NET WT.* (LBS./1000 FT.)
			(Inches)	(mm)	(Inches)	(mm)	(1)	(2)	
CWC 14-01DLO	14	19/0.0147	0.045	1.1	0.20	5.1	25	35	30
CWC 12-01DLO	12	19/0.0185	0.045	1.1	0.22	5.6	30	40	39
CWC 10-01DLO	10	27/24	0.045	1.1	0.25	6.4	40	55	56
CWC 8-01DLO	8	37/24	0.055	1.4	0.33	8.3	55	80	87
CWC 6-01DLO	6	61/24	0.060	1.5	0.38	9.7	75	105	131
CWC 4-01DLO	4	105/24	0.060	1.5	0.46	11.7	95	140	202
CWC 2-01DLO	2	154/24	0.060	1.5	0.51	13.0	130	190	285
CWC 1-01DLO	1	224/24	0.080	2.0	0.64	16.3	150	220	417
CWC 1/0-01DLO	1/0	280/24	0.080	2.0	0.70	17.8	170	260	494
CWC 2/0-01DLO	2/0	329/24	0.080	2.0	0.73	18.5	195	300	587
CWC 3/0-01DLO	3/0	456/24	0.080	2.0	0.80	20.3	225	350	718
CWC 4/0-01DLO	4/0	551/24	0.080	2.0	0.84	21.3	260	405	845
CWC 262-01DLO	262.6	650/24	0.090	2.3	0.94	23.9	296	467	1050
CWC 313-01DLO	313.3	777/24	0.090	2.3	1.00	25.3	326	522	1185
CWC 373-01DLO	373.7	925/24	0.090	2.3	1.06	26.9	362	591	1384
CWC 444-01DLO	444.4	110/24	0.090	2.3	1.11	28.2	400	652	1634
CWC 535-01DLO	535.3	1332/24	0.090	2.3	1.20	30.5	445	728	1925
CWC 646-01DLO	646.4	1609/24	0.090	2.3	1.29	32.8	493	815	2307
CWC 777-01DLO	777.7	1924/24	0.090	2.3	1.38	35.1	546	904	2728
CWC 929-01DLO	929.9	2318/24	0.090	2.3	1.56	39.6	602	1014	3570
CWC 1111-01DLO	1111.1	2745/24	0.115	2.9	1.77	44.9	635	1115	4232

Dimensions and weights are nominal and are subject to industry tolerances

(1) Ampacities based on 90°C conductor and 30°C ambient temperature, based on the National Electrical Code® for not more than three current-carrying conductors in raceway, cable or earth.

(2) Ampacities based on single-conductor in free air, 90°C conductor temperature and an ambient air temperature of 30°C, in accordance with the National Electrical Code®.

*Actual shipping weight may vary.

Portable Cord

Type W 2kV, Single Conductor, Type RHH/RHW, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 500 kcmil fully annealed, stranded, bare copper.

Insulation: Premium-grade 90°C EPDM.

Cable Reinforcement: An open polyester braid reinforcement is applied between the insulation and jacket for mechanical strength.

Jacket: 90°C, black. Temperature range: -40°C to +90°C. Voltage rating: 600V –Type RHH/RHW; 2kV –Type W.



APPLICATIONS

For use in portable power systems and entertainment industry activities such as theater, television, films, night clubs, mobile communication vans, spotlights and sound systems. Also for use in similar applications that require permanent or temporary power. Can be used in the permanent wiring of 600V power supplies, hoists, cranes and other applications where flexible power leads must be installed in conduit or raceways.

FEATURES

Water and sunlight resistant. Designed to withstand severe environmental conditions. Withstands exposure to oil, acids, alkalies, heat, flame, moisture and chemicals. Meets or exceeds flame test requirements of MSHA and UL.

COMPLIANCES

Industry: UL Type W, UL Type RHH or RHW, MSHA approved, RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF COND.	COND. STRAND	NOMINAL COND. O.D.		NOMINAL INS. THICKNESS		NOMINAL O.D.		CURRENT AMPS		APPROX. NET WT.* (LBS./1000 FT.)
				(Inches)	(mm)	(Inches)	(mm)	(Inches)	(mm)	(1)	(2)	
CWC 8-01W	8	1	133	0.167	4.24	0.070	1.78	0.485	12.32	55	80	150
CWC 6-01W	6	1	259	0.210	5.33	0.070	1.78	0.565	14.35	75	105	214
CWC 4-01W	4	1	259	0.245	6.22	0.070	1.78	0.605	15.37	95	140	277
CWC 2-01W	2	1	259	0.334	8.48	0.070	1.78	0.680	17.27	130	190	387
CWC 1-01W	1	1	259	0.375	9.53	0.090	2.29	0.765	19.43	150	220	485
CWC 1/0-01W	1/0 [†]	1	259	0.385	9.78	0.090	2.29	0.810	20.57	170	260	563
CWC 2/0-01W	2/0 [†]	1	259	0.475	12.07	0.090	2.29	0.885	22.48	195	300	679
CWC 3/0-01W	3/0 [†]	1	259	0.480	12.19	0.090	2.29	0.930	23.62	225	350	809
CWC 4/0-01W	4/0 [†]	1	259	0.570	14.48	0.090	2.29	0.980	24.89	260	405	973
CWC 250-01W	250 [†]	1	627	0.615	15.62	0.105	2.67	1.045	26.54	290	455	1155
CWC 35001W	350 [†]	1	855	0.725	18.42	0.105	2.67	1.145	29.08	350	570	1492
CWC 500-01W	500 [†]	1	1235	0.880	22.35	0.105	2.67	1.310	33.27	430	700	2048

(1) Ampacities based on 90°C conductor and 30°C ambient temperature based on Table 310-16 in the National Electrical Cod © for RHH/RHW with not more than three current-carrying conductors in raceway, cable or earth.

(2) Ampacities based on 90°C conductor and 30°C ambient temperature based on Table 310-17 and Table 400.5(B) in the National Electrical Cod © for single-conductor cables.

*Actual shipping weight may vary.

†Designated for CT use.

Portable Cord

Type W,
Multi-Conductor,
EPDM, 600V-2kV



PRODUCT CONSTRUCTION

Conductor: AWG through 500 kcmil, fully annealed, stranded, bare copper.
Insulation: Premium-grade, color-coded 90°C EPDM. Jacket: 90°C, black.
Temperature range: -40°C to +90°C.

APPLICATIONS

For use in industrial and light- to medium-duty mining applications; heavy-duty service as power supply cable; grounded and ungrounded AC systems; mobile and portable electrical equipment; motor and battery leads; two-conductor cables (DC or AC single-phase systems where grounding is not required); three-conductor cables (use on AC systems where no grounding is required or on DC systems with one conductor for grounding); four-conductor cables (use on two- or three-phase AC systems with one conductor used for grounding); five-conductor cables (use in applications where separating the system neutral from the frame ground is required).

FEATURES

Sunlight resistant. Designed to withstand severe environmental conditions and exposure to oil, acid, alkalies, heat, moisture and most chemicals. Excellent impact resistance. Cable core bound for superior flexibility and toughness. Rope lay stranding for maximum flex life.

COMPLIANCES

Industry: CSA, UL Type W, MSHA approved, RoHS compliant

COLORS

- 2 Conductors:** Black, white
- 3 Conductors:** Black, white, green
- 4 Conductors:** Black, white, red, green
- 5 Conductors:** Black, white, red, green

COPPER WIRE AND CABLEPART #	SIZE (AWG OR KCMIL)	NO. OF COND.	COND. STRAND	NOMINAL COND. O.D		NOMINAL INS. THICKNESS		NOMINAL O.D.		CURRENT AMPS*	APPROX. NET WT. LBS./M**
				(Inches)	(mm)	(Inches)	(mm)	(Inches)	(mm)		
Two Conductor – Type W – 2kV											
CWC 8-02W	8	2	133	0.60	4.6	0.60	1.2	0.70	19.6	74	325
CWC 6-02W	6	2	259	0.198	5.03	0.060	1.52	0.910	23.11	99	470
CWC 4-02W	4	2	259	0.245	6.22	0.060	1.52	1.020	25.91	130	620
CWC 2-02W	2	2	259	0.297	7.54	0.080	2.03	1.210	30.73	174	935
CWC 1-02W	1	2	259	0.353	8.97	0.080	2.03	1.370	34.80	202	1305
CWC 1/0-02W	1/0	2	259	0.385	9.78	0.080	2.03	1.435	36.45	234	1555
CWC 2/0-02W	2/0	2	259	0.442	11.23	0.080	2.03	1.555	39.50	271	1860
CWC 3/0-02W	3/0	2	259	0.480	12.19	0.080	2.03	1.670	42.42	313	2230
CWC 4/0-02W	4/0	2	259	0.555	14.10	0.080	2.03	1.815	46.10	361	2655
Three Conductor – Type W – 2kV											
CWC 8-03W	8	3	133	0.160	4.06	0.060	1.52	0.925	23.50	74	470
CWC 6-03W	6	3	259	0.198	5.03	0.060	1.52	0.995	25.27	99	625
CWC 4-03W	4	3	259	0.245	6.22	0.060	1.52	1.095	27.81	130	810
CWC 2-03W	2	3	259	0.297	7.54	0.080	2.03	1.285	32.64	174	1190
CWC 1-03W	1	3	259	0.353	8.97	0.080	2.03	1.445	36.70	202	1655
CWC 1/0-03W	1/0	3	259	0.385	9.78	0.080	2.03	1.555	39.50	234	1965
CWC 2/0-03W	2/0	3	259	0.442	11.23	0.080	2.03	1.670	42.42	271	2350
CWC 3/0-03W	3/0	3	259	0.480	12.19	0.080	2.03	1.815	46.10	313	2890
CWC 4/0-03W	4/0	3	259	0.555	14.10	0.080	2.03	1.930	49.02	361	3285
CWC 250-03W	250	3	627	0.615	15.62	0.095	2.41	2.390	60.71	402	5070
CWC 350-03W	350	3	855	0.725	18.42	0.095	2.41	2.680	68.07	495	6570
CWC 500-03W	500	3	1235	0.880	22.35	0.095	2.41	3.030	76.96	613	8700
Four Conductor – Type W – 2kV											
CWC 8-04W	8	4	133	0.160	4.06	0.060	1.52	0.980	24.89	65	615
CWC 6-04W	6	4	259	0.198	5.03	0.060	1.52	1.070	27.18	87	800
CWC 4-04W	4	4	259	0.245	6.22	0.060	1.52	1.210	30.73	114	1040
CWC 2-04W	2	4	259	0.297	7.54	0.080	2.03	1.435	36.45	152	1580
CWC 1-04W	1	4	259	0.353	8.97	0.080	2.03	1.595	40.51	177	2045
CWC 1/0-04W	1/0	4	259	0.385	9.78	0.080	2.03	1.705	43.31	205	2430
CWC 2/0-04W	2/0	4	259	0.442	11.23	0.080	2.03	1.845	46.86	237	2950
CWC 3/0-04W	3/0	4	259	0.480	12.19	0.080	2.03	1.965	49.91	274	3430
CWC 4/0-04W	4/0	4	259	0.555	14.10	0.080	2.03	2.145	54.48	316	3885
Five-Conductor – Type W – 2kV											
CWC 8-05W	8	5	133	0.160	4.06	0.060	1.52	1.030	26.16	52	650
CWC 6-05W	6	5	259	0.198	5.03	0.060	1.52	1.170	29.72	69	915
CWC 4-05W	4	5	259	0.245	6.22	0.060	1.52	1.360	34.54	91	1320
CWC 2-05W	2	5	259	0.297	7.54	0.080	2.03	1.595	40.51	121	1925
CWC 1-05W	1	5	259	0.353	8.97	0.080	2.03	1.820	46.23	141	2675
CWC 1/0-05W	1/0	5	259	0.385	0.78	0.080	2.03	1.900	48.26	164	2885
CWC 2/0-05W	2/0	5	259	0.442	11.23	0.080	2.03	2.060	52.32	189	3630
CWC 3/0-05W	3/0	5	259	0.480	12.19	0.080	2.03	2.260	57.40	219	4900
CWC 4/0-05W	4/0	5	259	0.555	14.10	0.080	2.03	2.460	62.48	252	5980

Portable Cord

Type G-GC, 3 and 4 Conductor, EPDM, 600V - 2kV

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 500 kcmil fully annealed, stranded, bare copper. 3 Insulation: Premium-grade, color-coded 90°C EPDM. Insulated grounds and ground checks.
Jacket: 90°C, black. Temperature range: -40°C to +90°C.

APPLICATIONS

For use in industrial and light- to medium-duty mining applications; heavy-duty service as power supply cable; mobile and portable electrical equipment; three- and four-conductor cables (use on three-phase AC systems where grounding is required).

FEATURES

Sunlight resistant. Designed to withstand exposure to oil, acids, alkalies, heat, moisture and most chemicals. Excellent impact and abrasion resistance. Indent-printed for easy identification. Non-wicking rubber fillers. Rope lay stranding for maximum flex life. Cable core bound for superior flexibility and toughness.

COMPLIANCES

Industry: CSA, UL Type G, G-GC, MSHA approved, RoHS compliant.



COLORS

3 Conductors: Black, white, red

4 Conductors: Black, white, red, orange

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KC-MIL)	NO. OF COND.	COND. STRAND	NOMINAL COND. O.D.		YELLOW GROUND CHECK (AWG)	GREEN GROUND CHECK (AWG)	NOMINAL INSULATION THICKNESS		NOMINAL O.D.		CURRENT AMPS*	APPROX. NET WT.* (LBS./1000 FT.)
				(INCHES)	(MM)			(INCHES)	(MM)	(INCHES)	(MM)		
Three Conductor – Type G-GC – 2kV													
CWC 8-03GGC	8	3	133	0.60	4.06	10	2#10	0.060	1.52	0.65	24.1	65	600
CWC 6-03GGC	6	3	259	0.198	5.03	10	2#10	0.060	1.52	1.020	25.91	87	770
CWC 4-03GGC	4	3	259	0.245	6.22	10	2#8	0.060	1.52	1.125	28.58	114	1005
CWC 2-03GGC	2	3	259	0.297	7.54	10	2#7	0.080	2.03	1.315	33.40	152	1480
CWC 1-03GGC	1	3	259	0.353	8.97	8	2#6	0.080	2.03	1.445	36.70	177	1815
CWC 1/0-03GGC	1/0	3	259	0.385	9.78	8	2#5	0.080	2.03	1.570	39.88	205	2205
CWC 2/0-03GGC	2/0	3	259	0.442	11.23	8	2#4	0.080	2.03	1.660	42.16	237	2545
CWC 3/0-03GGC	3/0	3	259	0.480	12.19	8	2#3	0.080	2.03	1.810	45.97	274	3230
CWC 4/0-03GGC	4/0	3	259	0.555	14.10	8	2#2	0.080	2.03	1.920	48.77	316	3675
CWC 250-03GGC	250	3	627	0.615	15.62	8	2#2	0.095	2.41	2.390	60.71	352	6060
CWC 350-03GGC	350	3	855	0.725	18.42	8	2#1/0	2#1/0	0.095	2.41	2.680	68.07	433
CWC 500-03GGC	500	3	1235	0.880	22.35	8	2#2/0	2#2/0	0.095	2.41	3.030	76.96	536

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KC-MIL)	NO. OF COND.	COND. STRAND	NOMINAL COND. O.D.		GREEN GROUND CHECK AWG SIZE	NOMINAL INSULATION THICKNESS		NOMINAL O.D.		CURRENT AMPS*	APPROX. NET WT.* (LBS./1000 FT.)
				(INCHES)	(MM)		(INCHES)	(MM)	(INCHES)	(MM)		
Four Conductor – Type G – 600V/2kV												
CWC 8-04GGC	8	4	133	0.160	4.06	4#12	0.060	1.52	1.045	26.54	52	690
CWC 6-04GGC	6	4	259	0.198	5.03	4#12	0.060	1.52	1.125	28.58	70	880
CWC 4-04GGC	4	4	259	0.245	6.22	4#10	0.060	1.52	1.225	31.12	91	1160
CWC 2-04GGC	2	4	259	0.297	7.54	4#9	0.080	2.03	1.435	36.45	122	1720
CWC 1-04GGC	1	4	259	0.353	8.97	4#8	0.080	2.03	1.595	40.51	142	2200
CWC 1/0-04GGC	1/0	4	259	0.385	9.78	4#7	0.080	2.03	1.730	43.94	164	2705
CWC 2/0-04GGC	2/0	4	259	0.442	11.23	4#6	0.080	2.03	1.855	47.12	190	3190
CWC 3/0-04GGC	3/0	4	259	0.480	12.19	4#5	0.080	2.03	2.040	51.82	219	4005
CWC 4/0-04GGC	4/0	4	259	0.555	14.10	4#4	0.080	2.03	2.145	54.48	253	4560

†Ampacities based on 90°C conductor and 30°C ambient temperature based on Table 400.5(B) of the National Electrical Cod ®.

*Actual shipping may vary.

Portable Cord

Welding Cable, Class K, 30 AWG Stranding, 600V

PRODUCT CONSTRUCTION

Conductor: 6 AWG through 500 kcmil fully annealed, stranded, bare copper, Class K.

Jacket: Premium-grade 90°C EPDM, black or red. Temperature range: -40°C to +90°C.

APPLICATIONS

For use with secondary voltage resistance welding leads and power supply applications not exceeding 600V AC.



FEATURES

Good flexibility, abrasion resistance, good color retention.

COMPLIANCES

Industry: RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG)	COND. STRAND	NOMINAL O.D.		APPROX. NET WT.* (LBS./1000 FT.)	STANDARD CARTON
			(INCHES)	(MM)		
Class K Welding Cable – 600V – 30 AWG Stranding						
CWC 6-01WELD	6	259/30	0.380	9.65	135	250'
CWC 4-01WELD	4	406/30	0.400	10.16	172	250'
CWC 2-01WELD	2	646/30	0.465	11.81	260	250'
CWC 1-01WELD	1	812/30	0.495	12.57	317	250'
CWC 1/0-01WELD	1/0	1025/30	0.560	14.22	400	250'
CWC 2/0-01WELD	2/0	1274/30	0.615	15.62	487	250'
CWC 3/0-01WELD	3/0	1613/30	0.670	17.02	605	250'
CWC 4/0-01WELD	4/0	2029/30	0.750	19.5	827	250'
CWC 250-01WELD	250 kcmil	2496/30	0.830	21.08	976	250'
CWC 350-01WELD	350 kcmil	3441/30	0.960	24.38	1338	250'
CWC 500-01WELD	500 kcmil	5054/30	1.200	30.48	1995	250'

Welding Cable Ampacities Single Conductor

Required Cable Sizes: For Welding Cable Application

LENGTH IS IN FEET FOR TOTAL CIRCUIT FOR SECONDARY VOLTAGES ONLY – DO NOT USE THIS TABLE FOR 600V INLINE APPLICATIONS.

Amps	100'	150'	200'	250'	300'	350'	400'
100	4	4	2	2	1	1/0	1/0
150	4	2	1	1/0	2/0	3/0	3/0
200	2	1	1/0	2/0	3/0	4/0	4/0
250	1	1/0	2/0	3/0	4/0		
300	1/0	2/0	3/0	4/0			
350	1/0	3/0	4/0				
400	2/0	3/0					
450	2/0	4/0					
500	3/0	4/0					
550	3/0	4/0					
600	4/0						

Required cable sizes shown in AWG numbers.

The total circuit length includes both welding and ground leads (based on 4-volt drop) 60% duty cycle. These values are based on a copper temperature of 60°C (140°F), an ambient temperature of 40°C (104°F) and yield load factors from approximately 32% for the 2 AWG cable to approximately 23% for the 3/0 AWG cable, and higher for smaller sizes. The sizes of cables generally used range from 2 AWG to 3/0 AWG. In actual service, the load factor may be much higher than indicated without overheating the cable, as the ambient temperature will generally be substantially lower than 40°C.

Suggested Ampacities for 600V Inline Applications

AWG or kcmil	Amperes	AWG	Amperes
500 kcmil	695	1/0	190
350 kcmil	552	1	160
250 kcmil	445	2	140
4/0	310	4	100
3/0	265	6	75
2/0	223		

Ampacities for portable cable, continuous duty (ambient temperature of 40°C). May not be suitable for all installations per National Electrical Code ®.

Portable Cord

Type SOOW, 18-16AWG, Multi-Conductor, EPDM, 600V

PRODUCT CONSTRUCTION

Conductor: 18 AWG and 16 AWG fully annealed, stranded, bare copper per ASTM B-174.
Insulation: Premium-grade, color-coded 90°C EPDM. See color chart.
Jacket: Black. Temperature range: -40°C to +90°C.



APPLICATIONS

For use with control circuits; tools; and heavy industrial, processing and construction equipment.

FEATURES

Resistant to oil, solvents, flame, abrasion, ozone, sunlight (UV), water and weather. Extra-flexible stranding. 90°C-rated conductors and jacket.
 UL listed and CSA certified for indoor and outdoor use.

COMPLIANCES

Industry: UL flexible cord (UL Subject 62, CSA Flexible Cord (C22.2-49), MSHA approved, RoHS compliant)

COPPER WIRE AND CABLE PART #	SIZE (AWG)	NO. OF COND.	COND. STRAND	NOMINAL INSULATION THICKNESS		NOMINAL INSULATION THICKNESS		CURRENT AMPS [†]	APPROX. NET WT.* (LBS./1000 FT.)
				(INCHES)	(MM)	(INCHES)	(MM)		
Type SOOW, Non-UL – 600V									
CWC 18-05SOOW	18	5	16/30	0.030	0.76	0.465	11.81	5.6	141
CWC 18-06SOOW	18	6	16/30	0.030	0.76	0.495	12.57	5.6	152
CWC 18-07SOOW	18	7	16/30	0.030	0.76	0.520	13.21	5.6	172
CWC 18-08SOOW	18	8	16/30	0.030	0.76	0.530	13.46	4.9	177
CWC 18-10SOOW	18	10	16/30	0.30	0.6	0.95	15.11	4.9	225
CWC 18-12SOOW	18	12	16/30	0.030	0.76	0.600	15.24	3.5	240
CWC 18-14SOOW	18	14	16/30	0.030	0.76	0.630	16.00	3.5	265
CWC 18-16SOOW	18	16	16/30	0.030	0.76	0.700	17.78	3.5	310
CWC 18-18SOOW	18	18	16/30	0.030	0.76	0.760	19.30	3.5	345
CWC 18-20SOOW	18	20	16/30	0.030	0.76	0.795	20.19	3.5	382
CWC 18-22SOOW	18	22	16/30	0.030	0.76	0.805	20.45	3.1	400
CWC 18-24SOOW	18	24	16/30	0.030	0.76	0.850	21.59	3.1	451
CWC 18-27SOOW	18	27	16/30	0.030	0.76	0.865	21.97	3.1	475
CWC 18-30SOOW	18	30	16/30	0.030	0.76	0.915	23.24	3.1	533
CWC 16-05SOOW	16	5	26/30	0.030	0.76	0.495	12.57	8.0	167
CWC 16-06SOOW	16	6	26/30	0.030	0.76	0.520	13.21	8.0	182
CWC 16-07SOOW	16	7	26/30	0.030	0.76	0.540	13.72	8.0	194
CWC 16-08SOOW	16	8	26/30	0.030	0.76	0.575	14.61	7.0	218
CWC 16-09SOOW	16	9	26/30	0.030	0.76	0.600	15.24	7.0	243
CWC 16-10SOOW	16	10	26/30	0.030	0.76	0.620	15.75	5.0	255
CWC 16-12SOOW	16	12	26/30	0.030	0.76	0.660	16.76	5.0	296
CWC 16-14SOOW	16	14	26/30	0.030	0.76	0.730	18.54	5.0	352
CWC 16-16SOOW	16	16	26/30	0.030	0.76	0.740	18.80	5.0	383
CWC 16-18SOOW	16	18	26/30	0.030	0.76	0.770	19.56	5.0	417
CWC 16-20SOOW	16	20	26/30	0.030	0.76	0.810	20.57	5.0	457
CWC 16-22SOOW	16	22	26/30	0.030	0.76	0.900	22.86	4.5	510
CWC 16-24SOOW	16	24	26/30	0.030	0.76	0.925	23.50	4.5	563
CWC 16-26SOOW	16	26	26/30	0.030	0.76	0.965	24.51	4.5	611
CWC 16-30SOOW	16	30	26/30	0.030	0.76	1.010	25.65	4.5	767

[†]Values shown are for current-carrying conductors. A grounding conductor, or one which carries only the unbalance current from other conductors, is NOT counted in determining current-carrying capacity. Ampacities are based on NEC Table 400.5(A)
 *Actual shipping weight may vary.

COLOR CODE CHART

No. of Cond.	Color	Tracer	No. of Cond.	Color	Tracer	No. of Cond.	Color	Tracer
1	Black	—	8	Red	Black	15	Blue	White
2	White	—	9	Green	Black	16	Black	Red
3	Red	—	10	Orange	Black	17	White	Red
4	Green	—	11	Blue	Black	18	Orange	Red
5	Orange	—	12	Black	White	19	Blue	Red
6	Blue	—	13	Red	White	20	Red	Green
7	White	Black	14	Green	White	21	Orange	Green

Note: Colors repeat after 21 conductors.

Portable Cord

Type SOOW, 14-10AWG, Multi-Conductor, EPDM, 600V

PRODUCT CONSTRUCTION

Conductor: 14 through 10 AWG fully annealed, stranded, bare copper per ASTM B174.

Insulation: Premium-grade, color-coded 90°C EPDM. See color chart. Jacket: Black. Temperature range: -40°C to +90°C..

APPLICATIONS

For use with control circuits and tools plus heavy industrial, processing and construction equipment.



FEATURES

Ozone, sunlight (UV) and weather resistant. Excellent resistance to oil, moisture and abrasion. High flexibility. Good tensile strength, elongation and aging characteristics.

COMPLIANCES

Industry: MSHA approved, RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG)	NO. OF COND.	COND. STRAND	NOMINAL INSULATION THICKNESS		NOMINAL INSULATION THICKNESS		CURRENT AMPS [†]	APPROX. NET WT.* (LBS./1000 FT.)
				(INCHES)	(MM)	(INCHES)	(MM)		
Type SOOW – 600V – UL/CSA									
CWC 14-05SOOW	14	5	41/30	0.045	1.14	0.645	16.38	12.0	269
CWC 14-06SOOW	14	6	41/30	0.045	1.14	0.710	18.03	12.0	317
CWC 14-07SOOW	14	7	41/30	0.045	1.14	0.710	18.03	12.0	347
CWC 14-08SOOW	14	8	41/30	0.045	1.14	0.760	19.30	10.5	430
CWC 14-09SOOW	14	9	41/30	0.045	1.14	0.830	21.08	10.5	417
CWC 14-10SOOW	14	10	41/30	0.045	1.14	0.820	20.83	10.5	427
CWC 14-12SOOW	14	12	41/30	0.045	1.14	0.855	21.72	7.5	493
CWC 14-14SOOW	14	14	41/30	0.045	1.14	1.000	25.40	7.5	601
CWC 14-16SOOW	14	16	41/30	0.045	1.14	1.030	26.16	7.5	678
CWC 14-18SOOW	14	18	41/30	0.045	1.14	1.100	27.94	7.5	720
CWC 14-20SOOW	14	20	41/30	0.045	1.14	1.120	28.45	7.5	806
CWC 14-24SOOW	14	24	41/30	0.045	1.14	1.260	32.00	6.7	1003
CWC 14-28SOOW	14	28	41/30	0.045	1.14	1.330	33.78	6.7	1080
CWC 14-30SOOW	14	30	41/30	0.045	1.14	1.335	33.91	6.0	1153
CWC 12-05SOOW	12	5	65/30	0.045	1.14	0.715	18.16	16.0	333
CWC 12-06SOOW	12	6	65/30	0.045	1.14	0.740	18.80	16.0	412
CWC 12-07SOOW	12	7	65/30	0.045	1.14	0.790	20.07	16.0	465
CWC 12-08SOOW	12	8	65/30	0.045	1.14	0.825	20.96	14.0	526
CWC 12-09SOOW	12	9	65/30	0.045	1.14	0.900	22.86	14.0	517
CWC 12-10SOOW	12	10	65/30	0.045	1.14	1.000	25.40	14.0	649
CWC 12-12SOOW	12	12	65/30	0.045	1.14	1.010	25.65	10.0	669
CWC 12-14SOOW	12	14	65/30	0.045	1.14	1.020	25.91	10.0	731
CWC 12-16SOOW	12	16	65/30	0.045	1.14	1.135	28.83	10.0	933
CWC 12-18SOOW	12	18	65/30	0.045	1.14	1.175	29.85	10.0	920
CWC 12-20SOOW	12	20	65/30	0.045	1.14	1.170	29.72	10.0	989
CWC 12-24SOOW	12	24	65/30	0.045	1.14	1.435	36.45	9.0	1273
CWC 12-26SOOW	12	26	65/30	0.045	1.14	1.380	35.05	9.0	1324
CWC 12-27SOOW	12	27	65/30	0.045	1.14	1.455	37.72	9.0	1325
CWC 12-28SOOW	12	28	65/30	0.045	1.14	1.500	38.10	9.0	1355
CWC 12-30SOOW	12	30	65/30	0.045	1.14	1.455	36.96	9.0	1492
CWC 10-05SOOW	10	5	104/30	0.045	1.14	0.770	19.56	20.0	472
CWC 10-06SOOW	10	6	104/30	0.045	1.14	0.875	22.23	20.0	565
CWC 10-07SOOW	10	7	104/30	0.045	1.14	0.900	22.86	20.0	552
CWC 10-08SOOW	10	8	104/30	0.045	1.14	0.935	23.75	17.5	682
CWC 10-10SOOW	10	10	104/30	0.045	1.14	1.020	25.91	17.5	758
CWC 10-12SOOW	10	12	104/30	0.045	1.14	1.070	27.18	12.5	871
CWC 10-16SOOW	10	16	104/30	0.045	1.14	1.230	31.24	12.5	1147
CWC 10-20SOOW	10	20	104/30	0.045	1.14	1.325	33.66	12.5	1445

COLOR CODE CHART

No. of Cond.	Color	Tracer	No. of Cond.	Color	Tracer	No. of Cond.	Color	Tracer
1	Black	—	8	Red	Black	15	Blue	White
2	White	—	9	Green	Black	16	Black	Red
3	Red	—	10	Orange	Black	17	White	Red
4	Green	—	11	Blue	Black	18	Orange	Red
5	Orange	—	12	Black	White	19	Blue	Red
6	Blue	—	13	Red	White	20	Red	Green
7	White	Black	14	Green	White	21	Orange	Green

[†]Values shown are for current-carrying conductors. A grounding conductor, or one which carries only the unbalance current from other conductors, is NOT counted in determining current-carrying capacity. Ampacities are based on NEC Table 400.5(A).

*Actual shipping weight may vary.

Portable Cord

Type SOOW, 8-2AWG, Multi-Conductor, EPDM, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 2 AWG fully annealed, stranded, bare copper per ASTM B174.

Insulation: Premium-grade, color-coded 90°C EPDM. See color chart.

Jacket: Black. Temperature range: -40°C to +90°C.

APPLICATIONS

For use with portable tools and equipment, motors and associated machinery, and for temporary and portable power.



FEATURES

Ozone, sunlight (UV) and weather resistant. Excellent resistance to oil, moisture and abrasion. High flexibility. Good tensile strength, elongation and aging characteristics.

COMPLIANCES

Industry: MSHA approved, RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG)	NO. OF CONDUCTORS	COND. STRAND	NOMINAL INSULATION THICKNESS		NOMINAL O.D.		CURRENT AMPS	STANDARD CARTON	APPROX. NET WT.* (LBS./1000 FT.)
				(INCHES)	(MM)	(INCHES)	(MM)			
TYPE SOOW, NON-UL – 600V										
CWC 8-02SOOW	8	2	65/26	0.050	1.27	0.660	16.76	40	250'	278
CWC 8-03SOOW	8	3	65/26	0.050	1.27	0.695	17.65	40	250'	343
CWC 8-04SOOW	8	4	65/26	0.050	1.27	0.760	19.30	35	250'	442
CWC 8-05SOOW	8	5	65/26	0.050	1.27	0.840	21.34	28	250'	542
CWC 6-03SOOW	6	3	101/26	0.050	1.27	0.790	20.07	55	250'	482
CWC 6-04SOOW	6	4	101/26	0.050	1.27	0.865	21.97	45	250'	599
CWC 6-05SOOW	6	5	101/26	0.050	1.27	0.945	24.00	36	250'	750
CWC 4-02SOOW	4	2	119/25	0.050	1.27	0.860	21.84	70	250'	515
CWC 4-03SOOW	4	3	119/25	0.050	1.27	0.915	23.24	70	250'	683
CWC 4-04SOOW	4	4	119/25	0.050	1.27	1.000	25.40	60	250'	851
CWC 4-05SOOW	4	5	119/25	0.050	1.27	1.095	27.81	48	250'	1039
CWC 2-03SOOW	2	3	133/.0211	0.055	1.40	1.085	27.56	95	250'	1003
CWC 2-04SOOW	2	4	133/.0211	0.055	1.40	1.170	29.72	80	250'	1248
CWC 2-05SOOW	2	5	133/.0211	0.055	1.40	1.390	35.31	64	250'	1684

†Green conductor for grounding only. Ampacities based on NEC Table 400.5(A)

*Actual shipping weight may vary.

No. Cond.	Color
2	Black, white
3	Black, white, green
4	Black, white, red, green
5	Black, white, red, orange, green

Portable Cord

Lighting Cable, UL Type SC, CSA Type PPC, 600V

PRODUCT CONSTRUCTION

Conductor: 8 AWG through 4/0 AWG fully annealed, stranded, bare copper per ASTM B172.

Jacket: 105°C, black. Temperature range: -50°C to +105°C.

APPLICATIONS

For use in portable power systems and entertainment industry activities such as theater, television, films, nightclubs, mobile communication vans, spotlights and sound systems. Also for use in similar applications that require temporary power.



FEATURES

Resistant to water and sunlight. Designed to withstand severe environmental conditions. Withstands exposure to oil, acids, alkalis, heat, flame, moisture and chemicals. Meets or exceeds flame test requirements of MSHA, CSA and UL. Indent printed..

COMPLIANCES

Industry: UL listed, CSA certified, RoHS compliant

COPPER WIRE AND CABLE PART #	SIZE (AWG)	NOMINAL STRAND	NOMINAL O.D.		CURRENT AMPS	APPROX NET WT. (LBS./1000 FT.)
			(INCHES)	(MM)		
Class K Welding Cable – 600V – 30 AWG Stranding						
CWC 6-01WELD	6	259/30	0.380	9.65	135	250'
CWC 4-01WELD	4	406/30	0.400	10.16	172	250'
CWC 2-01WELD	2	646/30	0.465	11.81	260	250'
CWC 1-01WELD	1	812/30	0.495	12.57	317	250'
CWC 1/0-01WELD	1/0	1025/30	0.560	14.22	400	250'
CWC 2/0-01WELD	2/0	1274/30	0.615	15.62	487	250'
CWC 3/0-01WELD	3/0	1613/30	0.670	17.02	605	250'
CWC 4/0-01WELD	4/0	2029/30	0.750	19.5	827	250'
CWC 250-01WELD	250 KCMIL	2496/30	0.830	21.08	976	250'
CWC 350-01WELD	350 KCMIL	3441/30	0.960	24.38	1338	250'
CWC 500-01WELD	500 KCMIL	5054/30	1.200	30.48	1995	250'

*Actual shipping weight may vary

Portable Cord

Exit Cable, EPR, CPE, 2kV

PRODUCT CONSTRUCTION

Conductor: 1500 kcmil, 3721W Class I tinned copper. Separator is rubber-backed fabric tape, helically applied and lapped.

Insulation: 0.145" (min. avg.) of ethylene propylene rubber (EPR).

Jacket: 0.110" (min. avg.) of black, extra-heavy duty chlorinated polyethylene (CPE), surface printed.

Bend Radius: 12.9"



APPLICATIONS

For furnishing direct current to the rotating field winding of a synchronous generator.

COMPLIANCES

Industry: ASTM B3, ASTM B172

COPPER WIRE AND CABLE PART #	CONDUCTOR STRANDING	APPROX. SIZE AWG/MCM	CONDUCTOR DIAMETER (INCHES)	INSULATION THICKNESS (INCHES)	JACKET THICKNESS (INCHES)	NOMINAL DIAMETER (INCHES)	NET WT. (LBS./1000 FT.)	COPPER WT. (LBS./1000 FT.)	CURRENT AMPS*
CWC 1550-012KVDLO	3721	1500	1.528	0.145	0.110	2.15	5675	5015	1448

Medium Voltage Power

1 Conductor, Type MV-105, 5kV and 8kV, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 4 AWG through 1000 kcmil annealed bare copper compact Class B strand. Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.



APPLICATIONS

For use in aerial, conduit, open tray and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Can be used in direct burial if installed in a system with a ground conductor that is in close proximity and conforms with NEC 250.4(A)(5). Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants and other industrial three-phase applications.

FEATURES

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C. loss.

COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test. IEEE 1202 (70,000 BTU/hr)/CSA FT4.

Optional Flame Test: ICEA T-29-520 (210,000 BTU/hr).

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER OVER INS. (INCHES)	NOMINAL DIAMETER (INCHES)	COPPER CONDUCTOR				
			INSULATION	JACKET			APPROX. NET WT. (LBS./1000 FT.)	COPPER WT. (LBS./1000 FT.)	AMPACITY*		
									TRAY	CONDUIT	DUCT
5000 VOLTS – 133% INSULATION LEVEL OR 8000 VOLTS – 100% INSULATION LEVEL											
CWC 4-015KVESP	4	7	115	60	.50	.71	350	178	-	110	120
CWC 2-015KVESP	2	7	115	60	.56	.77	460	259	-	145	155
CWC 1-015KVESP	1	19	115	60	.60	.81	565	315	-	175	180
CWC 1/0-015KVESP	1/0	19	115	60	.64	.84	620	386	290	200	210
CWC 2/0-015KVESP	2/0	19	115	80	.68	.93	755	474	330	225	235
CWC 3/0-015KVESP	3/0	19	115	80	.73	.99	890	585	385	270	270
CWC 4/0-015KVESP	4/0	19	115	80	.79	1.04	1055	725	445	305	310
CWC 250-015KVESP	250	37	115	80	.85	1.09	1205	849	495	355	345
CWC 350-015KVESP	350	37	115	80	.95	1.20	1570	1165	615	430	415
CWC 500-015KVESP	500	37	115	80	1.08	1.34	2115	1639	775	530	505
CWC 750-015KVESP	750	61	115	80	1.27	1.53	2995	2427	1000	665	630
CWC 1000-015KVESP	1000	61	115	80	1.42	1.68	3870	3210	1200	770	720

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.

Medium Voltage Power

1 Conductor, Type MV-105,
15kV-133%, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 2 AWG through 1000 kcmil annealed bare copper compact Class B strand. Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.



APPLICATIONS

For use in aerial, conduit, open tray and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Can be used in wet or dry locations when installed in accordance with the NEC. Can be used in direct burial if installed in a system with a ground conductor that is in close proximity and conforms with NEC 250.4(A)(5). Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants and other industrial three-phase applications.

FEATURES

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C. loss.

COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test. IEEE 1202 (70,000 BTU/hr)/CSA FT4.

Optional Flame Test: ICEA T-29-520 (210,000 BTU/hr).

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER OVER INS. (INCHES)	NOMINAL DIAMETER (INCHES)	COPPER CONDUCTOR					
			INSULATION	JACKET			APPROX. NET WT. (LBS./1000 FT.)	COPPER WT. (LBS./1000 FT.)	AMPACITY*			
									TRAY	CONDUIT	DUCT	
15000 VOLTS, SHIELDED, 133% INSULATION LEVEL												
CWC 2-0115KVESPU	2	7	220	80	.77	1.02	685	276	-	165	165	
CWC 1-0115KVESPU	1	19	220	80	.81	1.06	760	332	-	190	185	
CWC 1/0-0115KVESPU	1/0	19	220	80	.85	1.10	840	403	290	215	215	
CWC 2/0-0115KVESPU	2/0	19	220	80	.89	1.14	955	492	335	255	245	
CWC 3/0-0115KVESPU	3/0	19	220	80	.95	1.19	1115	603	385	290	275	
CWC 4/0-0115KVESPU	4/0	19	220	80	1.00	1.25	1275	743	445	330	315	
CWC 250-0115KVESPU	250	37	220	80	1.06	1.33	1465	866	495	365	345	
CWC 350-0115KVESPU	350	37	220	80	1.16	1.43	1840	1184	610	440	415	
CWC 500-0115KVESPU	500	37	220	80	1.29	1.56	2395	1657	765	535	500	
CWC 750-0115KVESPU	750	61	220	110	1.48	1.81	3415	2445	990	655	610	
CWC 1000-0115KVESPU	1000	61	220	110	1.63	1.98	4435	3228	1185	755	690	

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.

Medium Voltage Power

1 Conductor, Type MV-105,
35kV-100%, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 1/0 AWG through 1000 kcmil annealed bare copper compact Class B strand. Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.



APPLICATIONS

For use in aerial, conduit, open tray and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Can be used in wet or dry locations when installed in accordance with the NEC. Can be used in direct burial if installed in a system with a ground conductor that is in close proximity and conforms with NEC 250.4(A)(5). Superior performance in petrochemical plants, pulp and paper mills, sewage and water treatment plants, environmental protection systems, railroads, mines, utility power generating stations, steel mills, textile plants and other industrial three-phase applications.

FEATURES

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C. loss.

COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test. IEEE 1202 (70,000 BTU/hr)/CSA FT4.

Optional Flame Test: ICEA T-29-520 (210,000 BTU/hr).

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER OVER INS. (INCHES)	NOMINAL DIAMETER (INCHES)	COPPER CONDUCTOR				
			INSULATION	JACKET			APPROX. NET WT. (LBS./1000 FT.)	COPPER WT. (LBS./1000 FT.)	AMPACITY*		
									TRAY	CONDUIT	DUCT
35000 VOLTS, SHIELDED, 100% INSULATION LEVEL											
CWC 1/0-0135KVESPG	1/0	19	345	80	1.11	1.31	1160	425	290	215	215
CWC 2/0-0135KVESPG	2/0	19	345	80	1.15	1.35	1290	514	330	255	245
CWC 3/0-0135KVESPG	3/0	19	345	80	1.20	1.40	1445	625	380	290	275
CWC 4/0-0135KVESPG	4/0	19	345	80	1.26	1.45	1635	765	445	330	315
CWC 250-0135KVESPG	250	37	345	80	1.34	1.51	1805	888	490	365	345
CWC 350-0135KVESPG	350	37	345	80	1.43	1.60	2205	1206	605	440	415
CWC 500-0135KVESPG	500	37	345	80	1.56	1.72	2920	1679	755	535	500
CWC 750-0135KVESPG	750	61	345	110	1.75	1.96	3895	2467	970	655	610
CWC 1000-0135KVESPG	1000	61	345	110	1.90	2.10	4840	3250	1160	755	690

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.

Medium Voltage Power

3 Conductors, Type MV-105, 5kV and 8kV, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 4 AWG through 1000 kcmil annealed bare copper compact Class B strand. Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.



APPLICATIONS

For use in aerial, conduit, open tray, direct burial and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Suitable for commercial, industrial and utility applications where space is limited, ease of installation is critical and reliability is the major concern

FEATURES

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C.

COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (70,000 BTU/hr)

Optional Flame Test: IEEE 1202 (70,000 BTU/hr)/CSA FT4. ICEA T-29-520 (210,000 BTU/hr.)

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	AWG OR KCMIL	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER OVER INS. (INCHES)	NOMINAL DIAMETER (INCHES)	COPPER CONDUCTOR				
			INSULATION	JACKET			APPROX. NET WT. (LBS./1000 FT.)	COPPER WT. (LBS./1000 FT.)	AMPACITY*		
									TRAY	CONDUIT	DUCT
5000 VOLTS – 133% INSULATION LEVEL OR 8000 VOLTS – 100% INSULATION LEVEL											
CWC 4-035KVESP	4	7	115	80	.50	1.44	6	1245	616	100	115
CWC 2-035KVESP	2	7	115	80	.56	1.57	6	1575	860	135	154
CWC 1-035KVESP	1	19	115	80	.60	1.70	4	1950	1074	155	180
CWC 1/0-035KVESP	1/0	19	115	110	.64	1.80	4	2250	1290	185	205
CWC 2/0-035KVESP	2/0	19	115	110	.68	1.89	4	2585	1556	210	240
CWC 3/0-035KVESP	3/0	19	115	110	.73	2.00	3	3040	1918	245	280
CWC 4/0-035KVESP	4/0	19	115	110	.79	2.13	3	3685	2344	285	320
CWC 250-035KVESP	250	37	115	110	.85	2.25	3	4160	2759	315	355
CWC 350-035KVESP	350	37	115	110	.95	2.47	2	5340	3713	390	440
CWC 500-035KVESP	500	37	115	110	1.08	2.79	1	6610	5191	475	545
CWC 750-035KVESP	750	61	115	140	1.27	3.26	1/0	10275	7629	585	685
CWC 1000-035KVESP	1000	61	115	140	1.42	3.59	1/0	12990	10070	660	790

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.

Medium Voltage Power

3 Conductors, Type MV-105, 15kV-133%, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 2 AWG through 1000 kcmil annealed bare copper compact Class B strand. Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black conducting shield layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free stripping from insulation.

Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Lead-free, flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC). Also available: (CPE) jacket.



APPLICATIONS

For use in aerial, conduit, open tray, direct burial and underground duct installations. For use in wet or dry locations when installed in accordance with the NEC. Suitable for commercial, industrial and utility applications where space is limited, ease of installation is critical and reliability is the major concern

FEATURES

Rated at 105°C. Excellent heat, flame and moisture resistance. Outstanding corona resistance. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical-resistant. Meets cold bend test at -35°C.

COMPLIANCES

Industry: National Electrical Code (NEC). UL 1072. ICEA S-93-639/NEMA WC74. ICEA S-97-682. AEIC CS8. UL listed as type MV-105 for use in accordance with the NEC. Sizes 1/0 AWG and larger are listed and marked "Sunlight-Resistant FOR CT USE" in accordance with NEC.

Flame Test: UL 1685 (70,000 BTU/hr)

Optional Flame Test: IEEE 1202 (70,000 BTU/hr)/CSA FT4. ICEA T-29-520 (210,000 BTU/hr.)

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	THICKNESS IN MILS		NOMINAL DIAMETER OVER INS. (INCHES)	NOM. DIAM. (INCHES)	GROUNDING CONDUCTOR SIZE (AWG)	APPROX. NET WT. (LBS./1000 FT.)	COPPER WEIGHT (LBS./1000 FT.)	Ampacity*	
			INSULATION	JACKET						CONDUIT	DUCT
15000 VOLTS – 133% INSULATION LEVEL											
CWC 2-0315KVESPU	2	7	220	110	.77	2.09	6	2410	913	165	185
CWC 1-0315KVESPU	1	19	220	110	.81	2.22	4	2690	1125	185	210
CWC 1/0-0315KVESPU	1/0	19	220	110	.85	2.26	4	2965	1343	215	240
CWC 2/0-0315KVESPU	2/0	19	220	110	.90	2.36	4	3330	1609	245	275
CWC 3/0-0315KVESPU	3/0	19	220	110	.95	2.52	3	3800	1972	280	315
CWC 4/0-0315KVESPU	4/0	19	220	110	1.00	2.59	3	4375	2398	320	360
CWC 250-0315KVESPU	250	37	220	110	1.06	2.75	2	5025	2812	350	400
CWC 350-0315KVESPU	350	37	220	110	1.16	3.04	2	6465	3766	430	490
CWC 500-0315KVESPU	500	37	220	140	1.29	3.32	1	8340	5244	525	600
CWC 750-0315KVESPU	750	61	220	140	1.48	3.73	1/0	11510	7682	635	745
CWC 1000-0315KVESPU	1000	61	220	140	1.61	3.99	2/0	13983	10124	725	860

*TRAY: Single layer in uncovered cable tray with one cable diameter spacing, 105°C Conductor Temperature, 40°C Ambient. CONDUIT: Three cables in isolated conduit in air, 105°C Conductor Temperature, 40°C Ambient. DUCT: Three cables per duct, 105°C Conductor Temperature, 20°C Ambient, One Circuit, 100% Load Factor, Rho = 90. For other installation conditions refer to the NEC.

MC Interlocked Armored

Multi-Conductor, TYPE MC,
FR-XLPE, AIA/PVC, 600V

PRODUCT CONSTRUCTION

- Conductor:** 14, 12 or 10 AWG bare copper. Class B stranding per ASTM B3 and B8.
- Insulation:** Flame-retardant Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 1, Table E-2 (does not include white or green).
- Ground:** Annealed bare copper Class B stranding per ASTM B8.
- Armor:** Aluminum Interlocked Armor (AIA)
- Jacket:** Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), black.

APPLICATIONS

In all raceways or direct burial. In wet or dry locations. Permitted for use in Class I, Division 2; and Class III, Division 1 and 2 per NEC Article 334.

FEATURES

Rated at 90°C wet or dry. Sunlight-resistant. Provides excellent oil and chemical resistance. Excellent crush resistance. Flame-retardant and resistant to moisture. Cost-effective alternative to installations in conduit. Meets cold bend test at -25°C



COMPLIANCES

- Industry:** UL 1569. UL 44. ICEA S-95-658/NEMA WC70. UL Type MC-600 volts. NEC Type XHHW-2 conductors.
- Flame Test:** IEEE 383 (70,000 BTU/hr). UL 1581 (70,000 BTU/hr). IEEE 1202 (70,000 BTU/hr) CSA FT4. ICEA T-29-520 (210,000 BTU/hr).
- Other:** EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	NO. OF CONDUCTORS	GROUND WIRE SIZE (AWG)	NOMINAL DIAMETER OVER AMOR (INCHES)	OVERALL PVC JACKET (MILS)	NOMINAL DIAMETER (INCHES)	WEIGHT (LBS./1000 FT.)	
						NET	COPPER
14 AWG – 7 STRAND							
CWC 14-02AIAWGPVC	2	14	.46	50	.56	160	39
CWC 14-03AIAWGPVC	3	14	.48	50	.58	185	52
CWC 14-04AIAWGPVC	4	14	.53	50	.64	220	65
CWC 14-05AIAWGPVC	5	14	.55	50	.66	245	79
CWC 14-07AIAWGPVC	7	14	.59	50	.70	295	104
CWC 14-09AIAWGPVC	9	14	.68	50	.78	360	130
CWC 14-12AIAWGPVC	12	14	.76	50	.87	430	168
CWC 14-19AIAWGPVC	19	14	.90	50	1.00	590	259
CWC 14-25AIAWGPVC	25	14	1.03	50	1.14	750	337
CWC 14-37AIAWGPVC	37	14	1.17	50	1.27	1110	492
12 AWG – 7 STRAND							
CWC 12-02AIAWGPVC	2	12	.52	50	.61	205	64
CWC 12-03AIAWGPVC	3	12	.53	50	.63	230	83
CWC 12-04AIAWGPVC	4	12	.56	50	.67	275	103
CWC 12-05AIAWGPVC	5	12	.63	50	.73	315	129
CWC 12-07AIAWGPVC	7	12	.67	50	.78	375	165
CWC 12-09AIAWGPVC	9	12	.77	50	.87	460	214
CWC 12-12AIAWGPVC	12	12	.85	50	.96	570	279
CWC 12-19AIAWGPVC	19	12	1.00	50	1.10	790	428
CWC 12-25AIAWGPVC	25	12	1.15	50	1.26	1035	557
CWC 12-37AIAWGPVC	37	12	1.31	50	1.41	1395	793
10 AWG – 7 STRAND							
CWC 10-02AIAWGPVC	2	10	.57	50	.67	260	96
CWC 10-03AIAWGPVC	3	10	.58	50	.68	300	131
CWC 10-04AIAWGPVC	4	10	.64	50	.75	355	164
CWC 10-05AIAWGPVC	5	10	.69	50	.80	410	192
CWC 10-07AIAWGPVC	7	10	.75	50	.85	500	256
CWC 10-09AIAWGPVC	9	10	.86	50	.96	620	320
CWC 10-12AIAWGPVC	12	10	.96	50	1.07	770	416
CWC 10-19AIAWGPVC	19	10	1.12	50	1.22	1095	640
CWC 10-25AIAWGPVC	25	10	1.30	50	1.40	1390	832
CWC 10-37AIAWGPVC	37	10	1.48	50	1.58	1935	1216

MC Interlocked Armored

3 Conductors. Type MC, FR-XLPE, AIA/PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG through 750 kcmil bare copper. Class B stranding per ASTM B8.
Insulation: Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 3, Table E-2.
Ground: Annealed bare copper Class B stranding per ASTM B8.
Armor: Aluminum Interlocked Armor (AIA)
Jacket: Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), black.

APPLICATIONS

For installation in exposed or concealed work in wet or dry locations, indoors or outdoors and cable trays. Permitted for use in Class I; Class II, Division 2; and Class III, Division 1 and 2 hazardous locations per the NEC. Ideal for use in commercial, industrial and utility applications that require ease of installation, maximum performance and fire resistance.

FEATURES

Rated at 90°C wet or dry. Provides excellent oil and chemical resistance. Excellent crush resistance. Provides a long service life. Cost-effective alternative to installations in conduit. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 1569. UL 44. ICEA S-95-658/NEMA WC70. UL Type MC-600 volts, NEC Type XHHW-2 conductors. | Flame Test: IEEE 383 (70,000 BTU/hr). UL 1581 (70,000 BTU/hr). IEEE 1202 (70,000 BTU/hr) CSA FT4. ICEA T-29-520 (210,000 BTU/hr).
Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.



COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULATION THICK. (MILS)	NOM. DIAM. OVER INS. (INCHES)	PVC JKT. THICK. (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)			AMPACITY*	
								ALUM ARMOR	STEEL ARMOR	COPPER	90°C	75°C
CWC 14-04AIAWGPVC	14	7	30	.51	50	.62	16	230	350	60	20	16
CWC 12-04AIAWGPVC	12	7	30	.56	50	.67	14	290	420	97	24	20
CWC 10-04AIAWGPVC	10	7	30	.62	50	.73	12	370	530	148	32	28
CWC 8-04AIAWGPVC	8	7	45	.76	50	.86	10	505	675	241	44	40
CWC 6-04AIAWGPVC	6	7	45	.85	50	.95	8	685	870	383	60	52
CWC 4-04AIAWGPVC	4	7	45	.97	50	1.07	6	925	1150	577	76	68
CWC 2-04AIAWGPVC	2	7	45	1.10	50	1.22	6	1290	1560	919	104	92
CWC 1-04AIAWGPVC	1	19	55	1.25	50	1.36	6	1605	1910	1136	120	104
CWC 1/0-04AIAWGPVC	1/0	19	55	1.35	50	1.46	6	1935	2265	1512	136	120
CWC 2/0-04AIAWGPVC	2/0	19	55	1.46	50	1.56	6	2355	2720	1760	156	140
CWC 3/0-04AIAWGPVC	3/0	19	55	1.58	60	1.71	4	2935	3330	2245	180	160
CWC 4/0-04AIAWGPVC	4/0	19	55	1.75	60	1.88	4	3640	3965	2796	208	184
CWC 250-04AIAWGPVC	250	37	65	1.92	60	2.04	4	4210	4635	3282	232	204
CWC 350-04AIAWGPVC	350	37	65	2.16	60	2.30	3	5710	6120	4576	280	248
CWC 500-04AIAWGPVC	500	37	65	2.47	75	2.63	2	7910	8390	6509	344	304
CWC 750-04AIAWGPVC	750	61	80	3.03	85	3.22	1	11480	12170	9713	428	380

MC Interlocked Armored

4 Conductors, Type MC,
FR-XLPE, AIA/PVC, 600V

PRODUCT CONSTRUCTION

Conductor: 14 AWG through 750 kcmil bare copper. Class B stranding per ASTM B8.
Insulation: Cross-linked Polyethylene (XLPE). Color-coded per ICEA Method 3, Table E-2.
Ground: Annealed bare copper Class B stranding per ASTM B8.
Armor: Aluminum Interlocked Armor (AIA)
Jacket: Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), black.

APPLICATIONS

For installation in exposed or concealed work in wet or dry locations, indoors or outdoors and cable trays. Permitted for use in Class I; Class II, Division 2; and Class III, Division 1 and 2 hazardous locations per the NEC. Ideal for use in commercial, industrial and utility applications that require ease of installation, maximum performance and fire resistance.

FEATURES

Rated at 90°C wet or dry. Provides excellent oil and chemical resistance. Excellent crush resistance. Provides a long service life. Cost-effective alternative to installations in conduit. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 1569. UL 44. ICEA S-95-658/NEMA WC70. UL Type MC-600 volts, NEC Type XHHW-2 conductors.
Flame Test: IEEE 383 (70,000 BTU/hr). UL 1581 (70,000 BTU/hr). IEEE 1202 (70,000 BTU/hr) CSA FT4. ICEA T-29-520 (210,000 BTU/hr).
Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.



COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULATION THICK. (MILS)	NOM. DIAM. OVER INS. (INCHES)	PVC JKT. THICK. (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)			AMPACITY*	
								ALUM ARMOR	STEEL ARMOR	COPPER	90°C	75°C
CWC 14-04AIAWGPVC	14	7	30	.51	50	.62	16	230	350	60	20	16
CWC 12-04AIAWGPVC	12	7	30	.56	50	.67	14	290	420	97	24	20
CWC 10-04AIAWGPVC	10	7	30	.62	50	.73	12	370	530	148	32	28
CWC 8-04AIAWGPVC	8	7	45	.76	50	.86	10	505	675	241	44	40
CWC 6-04AIAWGPVC	6	7	45	.85	50	.95	8	685	870	383	60	52
CWC 4-04AIAWGPVC	4	7	45	.97	50	1.07	6	925	1150	577	76	68
CWC 2-04AIAWGPVC	2	7	45	1.10	50	1.22	6	1290	1560	919	104	92
CWC 1-04AIAWGPVC	1	19	55	1.25	50	1.36	6	1605	1910	1136	120	104
CWC 1/0-04AIAWGPVC	1/0	19	55	1.35	50	1.46	6	1935	2265	1512	136	120
CWC 2/0-04AIAWGPVC	2/0	19	55	1.46	50	1.56	6	2355	2720	1760	156	140
CWC 3/0-04AIAWGPVC	3/0	19	55	1.58	60	1.71	4	2935	3330	2245	180	160
CWC 4/0-04AIAWGPVC	4/0	19	55	1.75	60	1.88	4	3640	3965	2796	208	184
CWC 250-04AIAWGPVC	250	37	65	1.92	60	2.04	4	4210	4635	3282	232	204
CWC 350-04AIAWGPVC	350	37	65	2.16	60	2.30	3	5710	6120	4576	280	248
CWC 500-04AIAWGPVC	500	37	65	2.47	75	2.63	2	7910	8390	6509	344	304
CWC 750-04AIAWGPVC	750	61	80	3.03	85	3.22	1	11480	12170	9713	428	380

*AMPACITY in accordance with the NEC for cables installed in uncovered cable tray without maintained spacing at the conductor temperature indicated in wet or dry locations, 30°C ambient temperature.

MC Interlocked Armored

3 Conductors, UL MC/MV-105, 5kV-133%, 8kV-100%, EPR, AIA/PVC

PRODUCT CONSTRUCTION

- Conductor:** 4 AWG through 1000 kcmil bare copper compact, Class B strand. Extruded Strand Shield (ESS): Thermoset semi-conducting stress-control layer over conductor.
- Insulation:** Ethylene Propylene Rubber (EPR) insulation, colored to contrast with black conducting layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer, free stripping from insulation.
- Shield:** 5 mil annealed copper tape with a minimum 25% overlap.
- Ground:** Annealed bare copper Class B stranding per ASTM B8.
- Armor:** Aluminum Interlocked Armor (AIA)
- Jacket:** Flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC), yellow.



APPLICATIONS

For use in wet or dry locations, indoors or outdoors, in exposed or concealed work. May be used in cable trays or on approved support in protected areas. Permitted for use in Class I; Class II, Division 2; and Class III, Divisions 1 and 2 hazardous locations per the NEC. Ideal for use in commercial, industrial and utility applications where space is limited and reliability, maximum performance, ease of installation and fire resistance are important.

FEATURES

Rated at 105°C wet or dry. Excellent heat and moisture resistance. Outstanding corona resistance. Flexible for easy handling. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical- and radiation-resistant. Excellent crush resistance. Cost-effective alternative to installations in conduit. Meets cold bend test at -25°C.

COMPLIANCES

- Industry:** UL 1072. ICEA S-93-639/NEMA WC74. AEIC CS8. UL Type MV-105. UL Type MC.
- Flame Test:** IEEE 383 (70,000 BTU/hr). UL 1581 (70,000 BTU/hr). IEEE 1202 (70,000 BTU/hr) CSA FT4. ICEA T-29-520 (210,000 BTU/hr). ICEA T-30-520 (210,000 BTU/hr).
- Other:** EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULATION THICK. (MILS)	NOM. DIAM. OVER INS. (INCHES)	PVC JKT. THICK. (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER PHASE CONDUCTORS					
							COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)			AMPACITY*	AMPACITY**
								ALUM ARMOR	STEEL ARMOR	COPPER		
5000 VOLTS – 133% INSULATION LEVEL or 8000 VOLTS – 100% INSULATION LEVEL												
CWC 4-035KVESAIA	4	7	115	1.44	50	1.54	6	1360	1745	619	100	115
CWC 2-035KVESAIA	2	7	115	1.57	60	1.70	6	1775	2160	864	135	154
CWC 1-035KVESAIA	1	19	115	1.65	60	1.78	4	2055	2475	1074	155	180
CWC 1/0-035KVESAIA	1/0	19	115	1.78	60	1.91	4	2335	2745	1298	185	205
CWC 2/0-035KVESAIA	2/0	19	115	1.88	60	2.01	4	2705	3130	1566	210	240
CWC 3/0-035KVESAIA	3/0	19	115	1.99	60	2.12	3	2920	3375	1918	245	280
CWC 4/0-035KVESAIA	4/0	19	115	2.11	60	2.24	3	3730	4290	2360	285	320
CWC 250-035KVESAIA	250	37	115	2.23	60	2.36	3	4200	4770	2735	315	355
CWC 350-035KVESAIA	350	37	115	2.46	75	2.62	2	5590	6220	3736	390	440
CWC 500-035KVESAIA	500	37	115	2.77	75	2.93	1	7490	8210	5222	475	545
CWC 750-035KVESAIA	750	61	115	3.18	85	3.37	1/0	10385	11195	7684	585	685
CWC 1000-035KVESAIA	1000	61	115	3.50	85	3.69	1/0	13345	14150	10057	660	790

*AMPACITY for cables installed in uncovered cable tray without maintained spacing: 105°C conductor temperature, 40°C ambient.

**AMPACITY for cables installed in uncovered cable tray with maintained spacing of one cable diameter: 105°C conductor temperature, 40°C ambient. For other installation conditions refer to the NEC.

MC Interlocked Armored

3 Conductors, UL MC/MV-105, 15kV-133%, EPR, AIA/PVC

PRODUCT CONSTRUCTION

Conductor: 2 AWG through 1000 kcmil bare copper compact, Class B strand.
Extruded Strand Shield (ESS): Thermoset semi-conducting stress-control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with black conducting layers. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer, free stripping from insulation.

Shield: 5 mil annealed copper tape with a minimum 25% overlap.

Ground: Annealed bare copper Class B stranding per ASTM B8.

Armor: Aluminum Interlocked Armor (AIA)

Jacket: Flame-retardant moisture- and sunlight-resistant Polyvinyl Chloride (PVC), yellow.



APPLICATIONS

For use in wet or dry locations, indoors or outdoors, in exposed or concealed work. May be used in cable trays or on approved support in protected areas. Permitted for use in Class I; Class II, Division 2; and Class III, Divisions 1 and 2 hazardous locations per the NEC. Ideal for use in commercial, industrial and utility applications where space is limited and reliability, maximum performance, ease of installation and fire resistance are important.

FEATURES

Rated at 105°C wet or dry. Excellent heat and moisture resistance. Outstanding corona resistance. Flexible for easy handling. High dielectric strength. Low moisture absorption. Electrically stable under stress. Low dielectric loss. Chemical- and radiation-resistant. Excellent crush resistance. Cost-effective alternative to installations in conduit. Meets cold bend test at -25°C.

COMPLIANCES

Industry: UL 1072. ICEA S-93-639/NEMA WC74. AEIC CS8. UL Type MV-105. UL Type MC.

Flame Test: IEEE 383 (70,000 BTU/hr). UL 1581 (70,000 BTU/hr). IEEE 1202 (70,000 BTU/hr) CSA FT4. ICEA T-29-520 (210,000 BTU/hr). ICEA T-30-520 (210,000 BTU/hr).

Other: EPA 40 CFR, Part 261, for leachable lead content per TCLP. OSHA acceptable.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULATION THICK. (MILS)	NOM. DIAM. OVER INS. (INCHES)	NOM. DIAM. OVER ARMOR (INCHES)	PVC JKT. THICK. (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)			AMPACITY*	AMPACITY**
									ALUM ARMOR	STEEL ARMOR	COPPER		
15000 VOLTS, 133% INSULATION LEVEL													
CWC 2-0315KVESAIA	2	7	220	.78	2.11	60	2.24	6	2605	3125	919	165	185
CWC 1-0315KVESAIA	1	19	220	.82	2.20	60	2.33	4	2835	3390	1125	185	210
CWC 1/0-0315KVESAIA	1/0	19	220	.86	2.28	60	2.41	4	3100	3620	1352	215	240
CWC 2/0-0315KVESAIA	2/0	19	220	.91	2.39	75	2.55	4	3530	4025	1620	245	275
CWC 3/0-0315KVESAIA	3/0	19	220	.96	2.50	75	2.66	3	3990	4510	1972	280	315
CWC 4/0-0315KVESAIA	4/0	19	220	1.02	2.61	75	2.77	3	4615	5200	2114	320	360
CWC 250-0315KVESAIA	250	37	220	1.07	2.79	75	2.95	3	5315	5895	2789	350	400
CWC 350-0315KVESAIA	350	37	220	1.18	3.01	75	3.17	2	6600	7225	3790	430	490
CWC 500-0315KVESAIA	500	37	220	1.30	3.29	85	3.47	1	8710	9350	5276	525	600
CWC 750-0315KVESAIA	750	61	220	1.49	3.67	85	3.85	1/0	11695	12850	7738	635	745

*AMPACITY for cables installed in uncovered cable tray without maintained spacing: 105°C conductor temperature, 40°C ambient.

**AMPACITY for cables installed in uncovered cable tray with maintained spacing of one cable diameter: 105°C conductor temperature, 40°C ambient. For other installation conditions refer to the NEC.

MC-HL Armored

HazoGuard Instrumentation Cable, Type P-OS/SP-OS, Type MC-HL Cable/600V | For CT Use, Sun Res

UL and ABS listed as Marine Shipboard Cable 600V/1000V

CONSTRUCTION

Stranded copper conductors, PVC insulation with nylon covering on primaries, color coded, twisted into pair or triad, or groups of pairs or triads, numeric print group identification, aluminum/polyester shield and coated stranded copper drain wire over each group with 100% isolation between group shields, multiple groups assembled, aluminum/polyester shield and coated stranded copper drain wire overall, rip cord, PVC inner jacket with, wit Continuous-Lightweight-Exterior. Welded and corrugated, impervious metallic sheath with flame/chemical resistant PVC jacket.



PAIRS

Black/white and numbered color code.

TRIADS

Black/white and numbered color code.

SIZES

#16 AWG

APPLICATIONS

For use on Class 1 remote control and signaling circuits; where a 600V rated cable is desired; for control, signal and communication circuits; indoors or outdoors, in cable trays, in raceways, direct burial, supported by a messenger in outdoor locations. Suitable for Class I, Division 2, or Class II, Division 2, as well as Class I, Class II and Class III, Division 2, hazardous locations. Also for use as nonpower-limited fire protective signaling cable (NPLF) per NEC Code 760. Meets IEEE 383-74 and IEEE 1202 vertical tray flame tests. Also passes 210,000 BTU vertical tray flame test per ICEA T-29-520.

SINGLE PAIR AND TRIAD CABLES P-OS

COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NUMBER OF PAIRS	NUMBER OF TRIADS	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	INNER JACKET	OUTER JACKET	APPROX. O.D. (INCHES)
CWC MCHL-IN 843-161P	16 (7X)	1		15/4	.53	66	50	.64
CWC MCHL-IN 843-161T	16 (7X)		1	15/4	.53	58	50	.64

MULTI-PAIR AND TRIAD CABLES SP-OS

COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NUMBER OF PAIRS	NUMBER OF TRIADS	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	INNER JACKET	OUTER JACKET	APPROX. O.D. (INCHES)
CWC MCHL-IN 843-162P	16 (7X)	2		15/4	.67	50	50	.78
CWC MCHL-IN 843-1641	16 (7X)	4	1	15/4	.80	50	50	.91
CWC MCHL-IN 843-166	16 (7X)	6		15/4	.93	50	50	1.04
CWC MCHL-IN 843-168	16 (7X)	8		15/4	1.11	50	50	1.22
CWC MCHL-IN 843-1612	16 (7X)	12		15/4	1.42	50	50	1.53
CWC MCHL-IN 843-1624	16 (7X)	24		15/4	1.64	50	50	1.82
CWC MCHL-IN 843-16364	16 (7X)	36	4	15/4	.84	50	50	.95
CWC MCHL-IN 843-168	16 (7X)		8	15/4	1.06	50	50	1.17
CWC MCHL-IN 843-1612	16 (7X)		12	15/4	1.24	50	50	1.35

MC-HL Armored

HazoGuard Control Cable, Type MC-HL Multi-Conductor/600V, For CT Use (XHHW-2), Sun Res

PRODUCT CONSTRUCTION

Two or more stranded copper conductors (sizes #8 AWG and larger are compact stranded), XLPE insulated, and color-coded conductors, ground wire, Fillers, binder tape over core, aluminum continuously welded and corrugated sheath, PVC jacket overall.



CONDUCTOR TEMPERATURE

90°C dry or wet

SIZES

#14 AWG - #10 AWG

APPLICATION

Economical and versatile alternate to a conduit system; for services, feeders and branch circuits in industrial and commercial applications; power, lighting, control and signal circuits; indoors or outdoors, in wet or dry locations, direct burial, in cable tray, in raceways, as open runs of cable, as aerial cable on a messenger, and in Class I, II and III, Division 1 and 2 hazardous locations. Recommended for VFD/PWM drives.

TYPE MC-HL CONTROL CABLE (INCLUDES GROUNDING CONDUCTOR(S))								
COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NUMBER OF UNGROUNDED CONDUCTORS	GROUNDING CONDUCTOR SIZE	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	JACKET THICKNESS (MILS)	APPROX.O.D. (INCHES)	APPROX NET WEIGHT (LBS/1,000 FT.)
CWC MCHL-CNTR 844-143	14(7x)	3	3x18 bare	30	0.53	50	0.64	160
CWC MCHL-CNTR 844-144	14(7x)	4	3x18 bare	30	0.58	50	0.69	222
CWC MCHL-CNTR 844-146	14(7x)	6	#14 green insulated	30	0.62	50	0.73	267
CWC MCHL-CNTR 844-148	14(7x)	8	#14 green insulated	30	0.71	50	0.82	321
CWC MCHL-CNTR 844-1411	14(7x)	11	#14 green insulated	30	0.80	50	0.91	395
CWC MCHL-CNTR 844-1418	14(7x)	18	#14 green insulated	30	0.93	50	1.04	554
CWC MCHL-CNTR 844-1236	12(7x)	36	#14 green insulated	30	1.24	50	1.35	948
CWC MCHL-CNTR 844-123	12(7x)	3	3x16 bare	30	0.58	50	0.69	239
CWC MCHL-CNTR 844-124	12(7x)	4	3x16 bare	30	0.67	50	0.77	286
CWC MCHL-CNTR 844-126	12(7x)	6	#12 green insulated	30	0.67	50	0.78	338
CWC MCHL-CNTR 844-128	12(7x)	8	#12 green insulated	30	0.80	50	0.91	426
CWC MCHL-CNTR 844-1211	12(7x)	11	#12 green insulated	30	0.89	50	1.00	519
CWC MCHL-CNTR 844-1218	12(7x)	18	#12 green insulated	30	1.02	50	1.13	739
CWC MCHL-CNTR 844-1036	10(7x)	36	#12 green insulated	30	1.37	50	1.48	1302
CWC MCHL-CNTR 844-103	10(7x)	3	3x14 bare	30	0.62	50	0.73	300
CWC MCHL-CNTR 844-104	10(7x)	4	3x14 bare	30	0.67	50	0.78	348
CWC MCHL-CNTR 844-106	10(7x)	6	#10 green insulated	30	0.75	50	0.86	451
CWC MCHL-CNTR 844-108	10(7x)	8	#10 green insulated	30	0.89	50	1.00	568
CWC MCHL-CNTR 844-1011	10(7x)	11	#10 green insulated	30	0.97	50	1.08	704

Color coding per ICEA Method 1, Table E-2 (for non-grounding conductors)

MC-HL Armored

HazoGuard Power Cable, Type MC-HL Multi-Conductor/600V, For CT Use (XHHW-2), Sun Res

PRODUCT CONSTRUCTION

Two or more stranded copper conductors (sizes #8 AWG and larger are compact stranded), XLPE insulated, and color-coded conductors, ground wire, Fillers, binder tape over core, aluminum continuously welded and corrugated sheath, PVC jacket overall.

CONDUCTOR TEMPERATURE

90°C dry or wet

SIZES

#14 AWG - 750 kcmil

APPLICATION

Economical and versatile alternate to a conduit system; for services, feeders and branch circuits in industrial and commercial applications; power, lighting, control and signal circuits; indoors or outdoors, in wet or dry locations, direct burial, in cable tray, in raceways, as open runs of cable, as aerial cable on a messenger, and in Class I, II and III, Division 1 and 2 hazardous locations. Recommended for VFD/PWM drives.



TYPE MC-HL CONTROL CABLE (INCLUDES GROUNDING CONDUCTORS)								
COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NUMBER OF UNGROUNDED CONDUCTORS	GROUNDING CONDUCTOR SIZE	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	JACKET THICKNESS (MILS)	APPROX.O.D. (INCHES)	APPROX NET WEIGHT (LBS/1,000 FT.)
CWC MCHL-PWR 855-143	14(7x)	3	3x18	30	0.53	50	0.64	160
CWC MCHL-PWR 855-144	14(7x)	4	3x18	30	0.58	50	0.69	222
CWC MCHL-PWR 855-123	12(7x)	3	3x16	30	0.58	50	0.69	239s
CWC MCHL-PWR 855-124	12(7x)	4	3x16	30	0.67	50	0.77	286
CWC MCHL-PWR 855-103	10(7x)	3	3x14	30	0.62	50	0.73	300
CWC MCHL-PWR 855-104	10(7x)	4	3x14	30	0.67	50	0.78	348
CWC MCHL-PWR 855-83	8(7x)	3	3x14	45	0.71	50	0.82	385
CWC MCHL-PWR 855-84	8(7x)	4	10	45	0.80	50	0.91	465
CWC MCHL-PWR 855-63	6(7x)	3	3x10	45	0.80	50	0.95	525
CWC MCHL-PWR 855-64	6(7x)	4	8	45	0.89	50	0.99	630
CWC MCHL-PWR 855-43	4(7x)	3	3x12	45	0.89	50	0.99	704
CWC MCHL-PWR 855-44	4(7x)	4	8	45	0.97	50	1.08	845
CWC MCHL-PWR 855-23	2(7x)	3	3x10	45	1.02	50	1.13	995
CWC MCHL-PWR 855-24	2(7x)	4	6	45	1.15	50	1.26	1245
CWC MCHL-PWR 855-1/03	1/0(19x)	3	3x10	55	1.24	50	1.35	1470
CWC MCHL-PWR 855-2/03	2/0(19x)	3	3x10	55	1.34	50	1.45	1770
CWC MCHL-PWR 855-2/04	2/0(19x)	4	6	55	1.51	60	1.65	2310
CWC MCHL-PWR 855-4/03	4/0(19x)	3	3x8	55	1.60	60	1.73	2675
CWC MCHL-PWR 855-4/04	4/0(19x)	4	4	65	1.78	60	1.91	3430
CWC MCHL-PWR 855-2503	250(37x)	3	3x8	65	1.74	60	1.87	3140
CWC MCHL-PWR 855-3503	350(37x)	3	3x7	65	1.96	60	2.09	4210
CWC MCHL-PWR 855-3504	350(37x)	4	3	65	2.19	60	2.32	5440
CWC MCHL-PWR 855-5003	500(37x)	3	3x6	65	2.28	75	2.44	5930
CWC MCHL-PWR 855-5004	500(37x)	4	3	65	2.49	75	2.65	7570
CWC MCHL-PWR 855-7503	750(61x)	3	3x5	80	2.75	75	2.92	8700

*#8 and larger is compact round conductor *Minimum size

MC-HL Armored

3 Conductors, MCHL/MV-105, 5kV-133%, 8kV-100%, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 6 AWG through 1000 kcmil bare annealed copper per ASTM B3. Compact stranding per ASTM B496. Extruded Strand Shield (ESS): Extruded thermoset semi-conductor stress control layer over the conductor per ICEA S-93-639 and UL 1072.

Insulation: 115 mil Ethylene Propylene Rubber (EPR) insulation per ICEA S-93-639 and UL 1072. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer, free stripping from the insulation per ICEA S-93-639 and UL 1072.

Shield: 5 mil annealed bare copper tape with 25% overlap.

Grounding Conductor(s): Three split Class B stranded bare annealed copper ground conductors sized in accordance with UL 1072 and NEC Article 250.

Armor: Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1072 and 1569. Meets grounding requirements of NEC Article 250.

Jacket: Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), yellow. Low-temperature performance meets ASTM D746 brittleness temperature at or below -40°C.

APPLICATIONS

Variable Frequency Drives: 3-conductor CCW armored cables with three symmetrical grounding wires are the preferred wiring method for use with AC motors controlled by pulse-width modulated inverters in VFD applications. For use in Class I, II and III, Divisions 1 and 2; or Class 1, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505. For installation on metal racks, troughs, in raceways and cable trays, or secured to supports not more than six feet apart. For exposed and concealed work in wet or dry locations, directly buried or embedded in concrete. For use on feeders and branch circuits in industrial power distribution systems per NEC Articles 328 and 330.



FEATURES

Armor provides impervious barrier to moisture, gas and liquids. The strand shield, EPR insulation and insulation shield are extruded in one operation. The EPR insulation system has outstanding corona resistance and high dielectric strength, and it provides electrical stability under stress. Meets cold impact test at -40°C.

COMPLIANCES

Industry: UL Type MV-105. UL Type MC-HL, XHHW-2, CT USE, SUN RES, DIR BUR -40°C, FT4. UL Listed Marine Shipboard, American Bureau of Shipping (ABS) Listed for CWCMC.

Design Adherence: ICEA S-93-639/WC74, 5-46 kV Shielded Power Cable. AEIC CS8 Specification for Shielded Power Cable, 5-46 kV. UL 1072 Medium-Voltage Power Cables. UL 1569 Metal Clad Cables. UL 2225 Cables and Cable Fittings for Use in Hazardous Locations. UL 1309 Marine Shipboard Cable. CSA C68.3

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 1072. | IEC 60332-3 Category A.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULAT. THICK. (MILS)	NOM. DIAM. OVER ARMOR (INCHES)	PVC JKT. THICK (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER PHASE CONDUCTORS				
							COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)		AMPACITY	
								NET	COPPER	IN AIR	DIRECT BURIAL
5000 VOLTS – 133% INSULATION LEVEL or 8000 VOLTS – 100% INSULATION LEVEL											
CWC 6-035KVMCHL	6	7	115	1.37	50	1.48	3 X #10	1121	460	88	115
CWC 4-035KVMCHL	4	7	115	1.51	60	1.65	3 X #10	1418	616	115	150
CWC 2-035KVMCHL	2	7	115	1.64	60	1.78	3 X #10	1731	860	154	190
CWC 1-035KVMCHL	1	19	115	1.69	60	1.82	3 X #8	1978	1074	180	215
CWC 1/0-035KVMCHL	1/0	19	115	1.78	60	1.91	3 X #8	2259	1290	205	245
CWC 2/0-035KVMCHL	2/0	19	115	1.92	60	2.05	3 X #8	2626	1556	240	280
CWC 4/0-035KVMCHL	4/0	19	115	2.15	60	2.28	3 X #7	3650	2344	320	360
CWC 250-035KVMCHL	250	37	115	2.23	60	2.36	3 X #7	4060	2759	355	395
CWC 350-035KVMCHL	350	37	115	2.45	75	2.61	3 X #6	5045	3713	440	475
CWC 500-035KVMCHL	500	37	115	2.75	75	2.92	3 X #5	7137	5191	545	570
CWC 750-035KVMCHL	750	61	115	3.32	85	3.50	3 X #4	10268	7629	685	700
CWC 1000-035KVMCHL	1000	61	115	3.76	85	3.94	3 X #4	13051	10070	790	785

MC-HL Armored

3 Conductors, MCHL/MV-105, 15kV-133%, EPR, PVC

PRODUCT CONSTRUCTION

Conductor: 2 AWG through 750 kcmil bare annealed copper per ASTM B3. Compact stranding per ASTM B496. Extruded Strand Shield (ESS): Extruded thermoset semi-conductor stress control layer over the conductor per ICEA S-93-639 and UL 1072. Insulation: 220 mil Ethylene Propylene Rubber (EPR) insulation per ICEA S-93-639 and UL 1072. Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer, free stripping from the insulation per ICEA S-93-639 and UL 1072. Shield: 5 mil annealed bare copper tape with 25% overlap.

Grounding Conductor(s): Class B stranded bare annealed copper ground conductor sized in accordance with UL 1072 and NEC Article 250.

Armor: Impervious, continuously welded and corrugated aluminum alloy sheath per UL 1072 and 1569. Meets grounding requirements of NEC Article 250.

Jacket: Flame-retardant, moisture- and sunlight-resistant Polyvinyl Chloride (PVC), red. Low-temperature performance meets ASTM D746 brittleness temperature at or below -40°C.



APPLICATIONS

For use in Class I, II and III, Divisions 1 and 2; or Class 1, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505. For installation on metal racks, troughs, in raceways and cable trays, or secured to supports not more than six feet apart. For exposed and concealed work in wet or dry locations and in directly buried or embedded in concrete. For use on feeders and branch circuits in industrial power distribution systems per NEC Articles 328 and 330.

FEATURES

Armor provides impervious barrier to moisture, gas and liquids. The strand shield, EPR insulation and insulation shield are extruded in one operation. The EPR insulation system has outstanding corona resistance and high dielectric strength, and it provides electrical stability under stress. Meets cold impact test at -40°C.

COMPLIANCES

Industry: UL Type MV-105. UL Type MC-HL, XHHW-2, CT USE, SUN RES, DIR BUR -40°C, FT4. UL Listed Marine Shipboard, American Bureau of Shipping (ABS) Listed for CWC MC. Design Adherence: ICEA S-93-639/WC74, 5-46 kV Shielded Power Cable. AEIC CS8 Specification for Shielded Power Cable, 5-46 kV. UL 1072 Medium-Voltage Power Cables. UL 1569 Metal Clad Cables. UL 2225 Cables and Cable Fittings for Use in Hazardous Locations. UL 1309 Marine Shipboard Cable. CSA C68.3

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 1072. IEC 60332-3 Category A.

COPPER WIRE AND CABLE PART #	SIZE (AWG OR KCMIL)	NO. OF STRANDS	INSULAT. THICK. (MILS)	NOM. DIAM. OVER ARMOR (INCHES)	PVC JKT. THICK (MILS)	NOM. DIAM. OVER PVC JKT. (INCHES)	COPPER PHASE CONDUCTORS				
							COPPER GROUNDING CONDUCTOR (AWG)	WEIGHT (LBS./1000 FT.)		AMPACITY	
								NET	COPPER	IN AIR	DIRECT BURIAL
15000 VOLTS – 133% INSULATION LEVEL											
CWC 2-0315KVMCHL	2	7	220	2.15	60	2.28	6	2473	913	185	200
CWC 1-0315KVMCHL	1	19	220	2.23	60	2.36	4	2811	1125	210	225
CWC 1/0-0315KVMCHL	1/0	19	220	2.32	75	2.48	4	3190	1343	240	255
CWC 2/0-0315KVMCHL	2/0	19	220	2.40	75	2.56	4	3630	1609	275	290
CWC 4/0-0315KVMCHL	4/0	19	220	2.62	75	2.79	3	4435	2398	360	345
CWC 250-0315KVMCHL	250	37	220	2.75	75	2.92	3	5086	2812	400	410
CWC 350-0315KVMCHL	350	37	220	3.03	85	3.21	2	6445	3766	490	495
CWC 500-0315KVMCHL	500	37	220	3.32	85	3.50	1	8376	5244	600	590
CWC 750-0315KVMCHL	750	61	220	3.80	85	3.98	1/0	11431	7682	745	720

MC Continuous Armored Multi-Conductor, Type MC, XLPE, PVC, 600V

TYPE MC FOR CT USE (XHHW-2), 600 V CONTROL CABLE, SUN RES. UL AND ABS LISTED AS MARINE SHIPBOARD CABLE TYPE

PRODUCT CONSTRUCTION

Conductor: Two or more stranded copper conductors, sizes #8 AWG and larger are compact stranded.

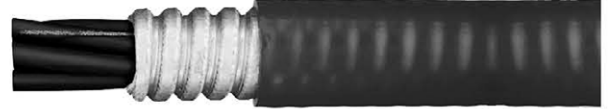
Insulation: XLPE-insulated, color-coded conductors.

Color Code: Per ICEA Method 1, Table E-2.

Assembly and Jacket: The individual conductors are cabled together with non-hygroscopic fillers and binder tape overall, continuous corrugated aluminum sheath armor with black PVC jacket overall.

Conductor Temperature: 90°C dry or wet

Sizes: #14 AWG – #10 AWG



APPLICATIONS

Economical and versatile alternate to a conduit system; for services, feeders and branch circuits in industrial and commercial applications; power, lighting, control and signal circuits; indoors or outdoors, in wet or dry locations, direct burial, in cable tray, in raceways, as open runs of cable, as aerial cable on a messenger and in Class I, Division 2; Class II, Division 2; and Class III hazardous locations.

COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE/STRANDS	NO. OF CONDUCTORS	INSULAT. THICK. (MILS)	NOM. DIAM. OVER ARMOR (INCHES)	JACKET THICK. (MILS)	APPROXIMATE O.D. (INCHES)	WEIGHT (LBS./ 1000 FT.)
TYPE MC CONTROL CABLE (DOES NOT INCLUDE GROUNDING CONDUCTOR)							
14 AWG							
CWC 14-03CCS	14 (7X)	3	30	0.49	50	0.60	153
CWC 14-04CCS	14 (7X)	4	30	0.53	50	0.64	181
CWC 14-05CCS	14 (7X)	5	30	0.58	50	0.69	210
CWC 14-07CCS	14 (7X)	7	30	0.62	50	0.73	254
CWC 14-09CCS	14 (7X)	9	30	0.71	50	0.82	308
CWC 14-12CCS	14 (7X)	12	30	0.80	50	0.91	381
CWC 14-19CCS	14 (7X)	19	30	0.93	50	1.04	537
CWC 14-37CCS	14 (7X)	37	30	1.24	50	1.35	946
12 AWG							
CWC 12-03CCS	12 (7X)	3	30	0.53	50	0.64	189
CWC 12-04CCS	12 (7X)	4	30	0.58	50	0.69	226
CWC 12-05CCS	12 (7X)	5	30	0.62	50	0.73	262
CWC 12-07CCS	12 (7X)	7	30	0.67	50	0.78	324
CWC 12-09CCS	12 (7X)	9	30	0.80	50	0.91	405
CWC 12-12CCS	12 (7X)	12	30	0.89	50	1.00	503
CWC 12-19CCS	12 (7X)	19	30	1.02	50	1.13	721
CWC 12-37CCS	12 (7X)	37	30	1.37	50	1.48	1301
10 AWG							
CWC 10-03CCS	10 (7X)	3	30	0.58	50	0.69	238
CWC 10-04CCS	10 (7X)	4	30	0.67	50	0.78	297
CWC 10-07CCS	10 (7X)	7	30	0.75	50	0.86	436

CAT 5E Armored Cable

24-4 Pr CAT 5E, PE/PVC, Alum Sheath Armor, PVC Jacket

PRODUCT CONSTRUCTION

Conductor: 24 AWG solid bare copper

Dielectric: Solid PE

Assembly: Each pair has different lay length for crosstalk prevention and rip cord added.

Inner Jacket: PVC

Armor: A close-fitting, impervious, continuous, aluminum sheath

Outer Jacket: Blue PVC



CLASSIFICATIONS

UL listed as Type MC, according to NEC Article 300, and for use in Class I, Division II, hazardous locations according to NEC Article 501.10 (B).

FEATURES

Includes a protective, continuous, corrugated aluminum sheath and an overall PVC jacket suitable for direct burial.

COPPER WIRE AND CABLE PART #	CONDUCTOR	ARMOR THICKNESS (INCHES)	CABLE DIAMETER UNDER JACKET (INCHES)	JACKET THICKNESS (INCHES)	OVERALL CABLE DIAMETER (INCHES)
CWC 24-04CAT5sECCS	24/4PR Cat 5E	0.021 nom.	0.352 nom.	0.042 nom.	0.446 nom.

CMP Connectors

HazoGuard Instrumentation Cable, Type P-OS/SP-OS, Type MC-HL Cable/600V | For CT Use, Sun Res.

UL and ABS listed as Marine Shipboard Cable 600V/1000V

CONSTRUCTION

Stranded copper conductors, PVC insulation with nylon covering on primaries, color coded, twisted into pair or triad, or groups of pairs or triads, numeric print group identification, aluminum/polyester shield and coated stranded copper drain wire over each group with 100% isolation between group shields, multiple groups assembled, aluminum/polyester shield and coated stranded copper drain wire overall, rip cord, PVC inner jacket with, wit Continuous-Lightweight-Exterior. Welded and corrugated, impervious metallic sheath with flame/chemical resistant PVC jacket.



PAIRS

Black/white and numbered color code.

TRIADS

Black/white and numbered color code.

SIZES

#16 AWG

APPLICATIONS

For use on Class 1 remote control and signaling circuits; where a 600V rated cable is desired; for control, signal and communication circuits; indoors or outdoors, in cable trays, in raceways, direct burial, supported by a messenger in outdoor locations. Suitable for Class I, Division 2, or Class II, Division 2, as well as Class I, Class II and Class III, Division 2, hazardous locations. Also for use as nonpower-limited fire protective signaling cable (NPLF) per NEC Code 760. Meets IEEE 383-74 and IEEE 1202 vertical tray flame tests. Also passes 210,000 BTU vertical tray flame test per ICEA T-29-520.

SINGLE PAIR AND TRIAD CABLES P-OS

COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NO. OF PAIRS	NO. OF TRIADS	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	INNER JACKET	OUTER JACKET	APPROX. O.D. (INCHES)	APPROX. NET WT. (LBS/1,000 FT.)	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF
CWC MCHL-IN 843-161P	16 (7X)	1		15/4	.53	66	50	.64	182	TMC2-050A075	TMC2X-050A075X	TMCX050A	TMCX050A
CWC MCHL-IN 843-161T	16 (7X)		1	15/4	.53	58	50	.64	190	TMC2-050A075	TMC2X-050A075X	TMCX050A	TMCX050A

MULTI-PAIR AND TRIAD CABLES SP-OS

COPPER WIRE AND CABLE PART #	CONDUCTOR SIZE & NO. OF STRANDS	NO. OF PAIRS	NO. OF TRIADS	INSULATION THICKNESS (MILS)	SHEATH O.D. (INCHES)	INNER JACKET	OUTER JACKET	APPROX. O.D. (INCHES)	APPROX. NET WT. (LBS/1,000 FT.)	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF
CWC MCHL-IN 843-162P	16 (7X)	2		15/4	.67	50	50	.78	234	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A
CWC MCHL-IN 843-1641	16 (7X)	4	1	15/4	.80	50	50	.91	335	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A
CWC MCHL-IN 843-166	16 (7X)	6		15/4	.93	50	50	1.04	492	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A
CWC MCHL-IN 843-168	16 (7X)	8		15/4	1.11	50	50	1.22	674	TMC2-125A137	TMC2X-125A137X	TMC125A	TMCX125A
CWC MCHL-IN 843-1612	16 (7X)	12		15/4	1.42	50	50	1.53	1118	TMC2-125A162	TMC2X-125A162X	TMC150A	TMCX150A
CWC MCHL-IN 843-1624	16 (7X)	24		15/4	1.64	50	50	1.82	1586	TMC2-200A200	TMC2X-200A200X	TMC200A	TMCX200A
CWC MCHL-IN 843-16364	16 (7X)	36	4	15/4	.84	50	50	.95	395	TMC2-100A118	TMC2X-100A118X	TMC075A	TMCX075A
CWC MCHL-IN 843-168	16 (7X)		8	15/4	1.06	50	50	1.17	637	TMC2-125A137	TMC2X-125A137X	TMC100A	TMCX100A
CWC MCHL-IN 843-1612	16 (7X)		12	15/4	1.24	50	50	1.35	863	TMC2-100A137	TMC2X-100A137X	TMC125A	TMCX125A

Cable Connectors

HazoGuard Control Cable, Type MC-HL Multi-Conductor/600V, For CT Use (XHHW-2), Sun Res

UL and ABS listed as Marine Shipboard Cable (CLXM-CWCMC) 600V/1000V CSA listed RA90 FT4HL

CONSTRUCTION

Two or more stranded copper conductors (sizes #8 AWG and larger are compact stranded), XLPE insulated, and color-coded conductors, ground wire, Fillers, binder tape over core, aluminum continuously welded and corrugated sheath, PVC jacket overall.

CONDUCTOR TEMPERATURE

90°C dry or wet

SIZES

#14 AWG – 750 kcmil

APPLICATIONS

Economical and versatile alternate to a conduit system; for services, feeders and branch circuits in industrial and commercial applications; power, lighting, control and signal circuits; indoors or outdoors, in wet or dry locations, direct burial, in cable tray, in raceways, as open runs of cable, as aerial cable on a messenger, and in Class I, II and III, Division 1 and 2, hazardous locations. Three-conductor power with three symmetrical grounding conductors recommended for VFD/PWM drive applications.



CONTROL CABLES													
COPPER WIRE AND CABLE PART #	COND. SIZE & NO. OF STRAND	NO. OF COND	GRD. COND. SIZE	INSUL. THICK. (MILS)	SHEATH O.D. (INCHES)	JACKET THICK. (MILS)	APPROX. O.D. (INCHES)	APPROX. NET WT. (LBS/1,000 FT.)	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF
CWC MCHL-CNTR 844-143	14(7x)	3	3x18	30	0.53	50	0.64	160	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-CNTR 844-144	14(7x)	4	3x18	30	0.58	50	0.69	222	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-CNTR 844-146	14(7x)	6	#14 grn.insul.	30	0.62	50	0.73	267	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-CNTR 844-148	14(7x)	8	#14 grn. insul.	30	0.71	50	0.82	321	TMC2-050A099	TMC2X-050A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-1411	14(7x)	11	#14 grn.insul.	30	0.80	50	0.91	395	TMC2-050A099	TMC2X-050A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-1418	14(7x)	18	#14 grn. insul.	30	0.93	50	1.04	554	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-CNTR 844-1236	14(7x)	36	#14 grn. insul.	30	1.24	50	1.35	948	TMC2-100A137	TMC2X-100A137X	TMC125A	TMCX125A	TMCX125A
CWC MCHL-CNTR 844-123	12(7x)	3	3x16	30	0.58	50	0.69	239	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-CNTR 844-124	12(7x)	4	3x16	30	0.67	50	0.77	286	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-126	12(7x)	6	#12 grn. insul.	30	0.67	50	0.78	338	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-128	12(7x)	8	#12 grn. insul.	30	0.80	50	0.91	426	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-1211	12(7x)	11	#12 grn. insul.	30	0.89	50	1.00	519	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-CNTR 844-1218	12(7x)	18	#12 grn. insul.	30	1.02	50	1.13	739	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-CNTR 844-1036	12(7x)	36	#12 grn. insul.	30	1.37	50	1.48	1302	TMC2-125A162	TMC2X-125A162X	TMC150A	TMCX150A	TMCX150A
CWC MCHL-CNTR 844-103	10(7x)	3	3x14	30	0.62	50	0.73	300	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-104	10(7x)	4	3x14	30	0.67	50	0.78	348	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-106	10(7x)	6	#10 grn. insul.	30	0.75	50	0.86	451	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-CNTR 844-108	10(7x)	8	#10 grn. insul.	30	0.89	50	1.00	568	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-CNTR 844-1011	10(7x)	11	#10 grn. insul.	30	0.97	50	1.08	704	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A

Cable Connectors

HazoGuard Power Cable, Type MC-HL Multi-Conductor/600V, For CT Use (XHHW-2), Sun Res

UL and ABS listed as Marine Shipboard Cable 600V/1000V CSA listed RA90 FT4HL

CONSTRUCTION

Two or more stranded copper conductors (sizes #8 AWG and larger are compact stranded), XLPE insulated, and color-coded conductors, ground wire, Fillers, binder tape over core, aluminum continuously welded and corrugated sheath, PVC jacket overall.

CONDUCTOR TEMPERATURE

90°C dry or wet

SIZES

#14 AWG – 750 kcmil

APPLICATIONS

Economical and versatile alternate to a conduit system; for services, feeders and branch circuits in industrial and commercial applications; power, lighting, control and signal circuits; indoors or outdoors, in wet or dry locations, direct burial, in cable tray, in raceways, as open runs of cable, as aerial cable on a messenger, and in Class I, II and III, Division 1 and 2, hazardous locations. Three-conductor power with three symmetrical grounding conductors recommended for VFD/PWM drive applications.



POWER CABLES

COPPER WIRE AND CABLE PART #	COND. SIZE & NO. OF STRAND	NO. OF COND	GRD. COND. SIZE	INSUL. THICK. (MILS)	SHEATH O.D. (INCHES)	JACKET THICK. (MILS)	APPROX. O.D. (INCHES)	APPROX. NET WT. (LBS/1,000 FT.)	CONNECTORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF	CONNEC-TORS NON EXPLOSION PROOF	CONNECTORS EXPLOSION PROOF
CWC MCHL-PWR 855-143	14(7x)	3	3x18	30	0.53	50	0.64	160	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-PWR 855-144	14(7x)	4	3x18	30	0.58	50	0.69	222	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-PWR 855-123	12(7x)	3	3x16	30	0.58	50	0.69	239	TMC2-050A075	TMC2X-050A075X	TMC050A	TMCX050A	TMCX050A
CWC MCHL-PWR 855-124	12(7x)	4	3x16	30	0.67	50	0.77	286	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-103	10(7x)	3	3x14	30	0.62	50	0.73	300	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-104	10(7x)	4	3x14	30	0.67	50	0.78	348	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-83	8(7x)	3	3x14	45	0.71	50	0.82	385	TMC2-050A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-84	8(7x)	4	10	45	0.80	50	0.91	465	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-63	6(7x)	3	3x12	45	0.80	50	0.95	525	TMC2-075A099	TMC2X-075A099X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-64	6(7x)	4	8	45	0.89	50	0.99	630	TMC2-100A118	TMC2X-075A118X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-43	4(7x)	3	3x12	45	0.89	50	0.99	704	TMC2-100A118	TMC2X-075A118X	TMC075A	TMCX075A	TMCX075A
CWC MCHL-PWR 855-44	4(7x)	4	8	45	0.97	50	1.08	845	TMC2-100A118	TMC2X-100A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-PWR 855-23	2(7x)	3	3x10	45	1.02	50	1.13	995	TMC2-125A118	TMC2X-125A118X	TMC100A	TMCX100A	TMCX100A
CWC MCHL-PWR 855-24	2(7x)	4	6	45	1.15	50	1.26	1245	TMC2-125A137	TMC2X-125A137X	TMC125A	TMCX125A	TMCX125A
CWC MCHL-PWR 855-1/03	1/0(19x)	3	3x10	55	1.24	50	1.35	1470	TMC2-125A162	TMC2X-125A162X	TMC125A	TMCX125A	TMCX125A
CWC MCHL-PWR 855-2/03	2/0(19x)	3	3x10	55	1.34	50	1.45	1770	TMC2-125A162	TMC2X-125A162X	TMC125A	TMCX125A	TMCX125A
CWC MCHL-PWR 855-2/04	2/0(19x)	4	6	55	1.51	60	1.65	2310	TMC2-150A190	TMC2X-150A190X	TMC150A	TMCX150A	TMCX150A
CWC MCHL-PWR 855-4/03	4/0(19x)	3	3x8	55	1.60	60	1.73	2675	TMC2-200A200	TMC2X-200A200X	TMC200SA	TMCX200SA	TMCX200SA
CWC MCHL-PWR 855-4/04	4/0(19x)	4	4	55	1.78	60	1.91	3430	TMC2-200A200	TMC2X-200A200X	TMC200SA	TMCX200SA	TMCX200SA
CWC MCHL-PWR 855-2503	250(37x)	3	3x8	65	1.74	60	1.87	3140	TMC2-250A200	TMC2X-250A200X	TMC200SA	TMCX200SA	TMCX200SA
CWC MCHL-PWR 855-3503	350(37x)	3	3x7	65	1.96	60	2.09	4210	TMC2-250A233	TMC2X-250A233X	TMC200A	TMCX200A	TMCX200A
CWC MCHL-PWR 855-3504	350(37x)	4	3	65	2.19	60	2.32	5440	TMC2-300A272	TMC2X-300A272X	TMC250SA	TMCX250SA	TMCX250SA
CWC MCHL-PWR 855-5003	500(37x)	3	3x6	65	2.28	75	2.44	5930	TMC2-300A272	TMC2X-300A272X	TMC250A	TMCX250A	TMCX250A
CWC MCHL-PWR 855-5004	500(37x)	4	3	65	2.49	75	2.65	7570	TMC2-300A272	TMC2X-300A272X	TMC250A	TMCX250A	TMCX250A
CWC MCHL-PWR 855-7503	750(61x)	3	3x5	80	2.75	75	2.92	8700	TMC2-300A325	TMC2X-300A325X	TMC300A	TMCX300A	TMCX300A

CONCENTRIC STRANDED CLASS B COPPER AND ALUMINUM CONDUCTORS

NOMINAL SIZE CONDUCTOR CMIL AWG	LBS/1000 FT.		NUMBER OF WIRES	DIAMETER OF WIRES	OUTSIDE DIAMETER IN INCHES
	COPPER	ALUMINUM			
3,000,000	9353	2843	169	.1332	1.998
2,500,000	7794	2369	127	.1403	1.824
2,000,000	6175	1877	127	.1255	1.632
1,750,000	5403	1642	127	.1174	1.526
1,500,000	4631	1408	91	.1284	1.412
1,250,000	3859	1173	91	.1172	1.289
1,000,000	3088	938.7	61	.1280	1.152
900,000	2779	844.8	61	.1215	1.094
800,000	2470	750.9	61	.1145	1.031
795,000	2466	749.8	61	.1142	1.028
750,000	2316	704.1	61	.1109	.998
700,000	2161	656.9	61	.1071	.964
650,000	2007	610.1	61	.1032	.929
600,000	1853	563.3	61	.0992	.893
550,000	1698	516.2	61	.0950	.855
500,000	1544	469.4	37	.1162	.813
450,000	1389	422.3	37	.1103	.772
400,000	1235	375.5	37	.1040	.728
397,500	1228	373.2	37	.1037	.726
350,000	1081	328.6	37	.0973	.681
300,000	926.3	281.6	37	.0900	.630
250,000	771.9	234.7	37	.0822	.575
0000	653.3	198.6	19	.1055	.528
000	518.1	157.5	19	.0940	.470
00	410.9	124.9	19	.0837	.419
0	325.8	99.04	19	.0745	.373
1	258.4	78.55	19	.0664	.332
2	204.9	62.29	7	.0974	.292
3	162.5	49.40	7	.0867	.260
4	128.9	39.19	7	.0772	.232
5	102.2	31.07	7	.0688	.206
6	81.05	24.64	7	.0612	.184
7	64.28	19.54	7	.0545	.164
8	50.97	15.49	7	.0486	.146
9	40.42	12.29	7	.0432	.130
10	32.06	9.746	7	.0385	.116
12	20.16	6.129	7	.0305	.0915
14	12.68	3.855	7	.0242	.0726
16	7.974	2.424	7	.0192	.0576
18	5.015	1.525	7	.0152	.0456
20	3.154	0.9588	7	.0121	.0363

SIZE AND STRANDING

MM2	AWG / MCM	NUMBER OF WIRES	NOMINAL OVERALL DIA.		COPPER WEIGHTS LBS./1000 FT.)	MM2	AWG / MCM	NUMBER OF WIRES	NOMINAL OVERALL DIA.		COPPER WEIGHTS LBS./1000 FT.)
			MILLIMETERS	INCHES					MILLIMETERS	INCHES	
1		7	1.29	.050	6.09	127	250	37	14.61	.575	772
1.31	16	7	1.47	.058	8.00	150		19	15.85	.624	914
1.5		7	1.56	.062	9.14	152	300	37	16.00	.630	926
2.08	14	7	1.85	.073	12.70	177	350	37	17.30	.681	1081
2.5		7	2.01	.080	15.23	185		19	17.60	.693	1127
3.31	12	7	2.34	.092	20.12	185		37	17.64	.695	1127
4.0		7	2.55	.101	24.37	203	400	37	18.49	.728	1235
5.26	10	7	2.95	.116	32.10	240		19	20.05	.790	1462
6.0		7	3.12	.123	36.56	240		37	20.09	.792	1462
8.37	8	7	3.71	.146	51.00	253.4	500	37	20.65	.813	1544
10.0		7	4.05	.160	60.93	280		37	21.70	.855	1706
13.30	6	7	4.67	.184	81.00	304	600	61	22.68	.893	1853
16		7	5.13	.202	97.49	310		37	22.89	.902	1889
21.15	4	7	5.89	.232	129.00	355		37	24.50	.963	2163
25		7	6.39	.252	152.30	380	750	61	25.35	.998	2316
26.67	3	7	6.61	.260	163.00	400		37	25.97	1.023	2437
33.62	2	7	7.42	.292	205.00	500		37	29.05	1.143	3047
35		7	7.56	.298	213.30	507	1,000	61	29.26	1.152	3088
35		19	7.65	.302	213.30	625		37	32.48	1.278	3808
42.41	1	19	8.43	.332	259.00	625		61	32.49	1.280	3808
50		19	9.15	.361	304.70	633	1,250	91	32.74	1.289	3859
53.49	1/0	19	9.47	.373	326.00	760	1,500	91	35.87	1.412	4632
67.43	2/0	19	10.64	.419	411.00	800		37	36.75	1.446	4875
70		19	10.86	.427	426.50	800		61	36.81	1.448	4875
85.01	3/0	19	11.94	.470	518.00	887	1,750	127	38.76	1.526	5412
95		19	12.60	.497	578.90	1000		37	41.09	1.617	6093
107.2	4/0	19	13.41	.528	653.00	1000		91	41.14	1.620	6093
120		19	14.15	.558	731.20	1010	2000	127	41.45	1.632	6176

APPROXIMATE SHIPPING WEIGHTS (LBS/1000 FT)

SIZE AWG OR KORNIL	lbs/1000 ft.		XHHW	XLPE-USE/ RHW/RHH	SIZE AWG OR KCMIL
	THW	THWN/ THHN			
Solid	-	16	-	-	Solid
14	-	16	-	-	14
12	-	24	-	31	12
10	-	39	-	45	10
STRANDED					STRANDED
14	-	17	19	-	14
12	-	25	28	33	12
10	-	40	42	47	10
8	77	67	69	76	8
6	112	101	100	108	6
4	167	159	153	160	4
3	206	196	-	-	3
2	254	244	236	244	2
1	333	314	302	319	1
1/0	410	389	376	394	1/0
2/0	506	483	469	488	2/0
3/0	626	601	584	607	3/0
4/0	775	748	731	754	4/0
250	920	884	870	901	250
300	1088	1050	1036	-	300
350	1259	1218	1202	1239	350
400	1427	1384	1367	-	400
			1697		
500	1761	1713	2054	1738	500
600	2146	2085	2553	-	600
750	2655	2589		2605	750
1000	3503	-		-	1000

Allowable Ampacities of Insulated Conductors Rated 0-2000 Volts)

Ampacities of Not More Than Three Current-Carrying Conductors in Raceway, Cable or Earth. Based on Ambient Temperature of 30°C (86°F)

COPPER CONDUCTORS
 Temperature Rating of Conductor

COPPER CONDUCTORS
 Temperature Rating of Conductor

SIZE AWG OR KCMIL	60°C			60°C			SIZE AWG OR KCMIL		
	TYPES			TYPES					
	TW UF	RHW THW THWN	THHW XHHW USE	RHH RHW-2 XHHW-2 XHH	THHW THWN-2 THHN USE-2	TW UF		RHW THW THWN	THHW XHHW USE
14**	20	20	20	-	-	-	-		
12**	25	25	25	20	20	25	12**		
10**	30	35	35	25	30	35	10**		
8	40	50	50	30	40	45	8		
6	55	65	65	40	50	60	6		
4	70	85*	85*	55	65	75	4		
3	85	100*	100*	65	75	85	3		
2	95	115*	115*	75	90*	100*	2		
1	110	130*	130*	85	100*	115*	1		
1/0	125	150*	150*	100	120*	135*	1/0		
2/0	145	175*	175*	115	135*	150*	2/0		
3/0	165	200*	200*	130	155*	175*	3/0		
4/0	195	230*	230*	150	180*	205*	4/0		
250	215	255*	255*	170	205*	230*	250		
300	240	285	285	190	230*	255*	300		
350	260	310*	310*	210	250*	280*	350		
400	280	335*	335*	225	270	305	400		
500	320	380	380	260	310*	350*	500		
600	355	420	420	285	340*	385*	600		
700	385	460	460	310	375	420	700		
750	400	475	475	320	385	435	750		
800	410	490	490	330	395	450	800		
900	435	520	520	355	425	480	900		
1000	455	545	545	375	445	500	1000		
1250	495	590	590	405	485	545	1250		
1500	520	625	625	435	520	585	1500		
1750	545	650	650	455	545	615	1750		
2000	560	665	665	470	560	630	2000		

Allowable Ampacities of Insulated Conductors Rated 0-2000 Volts

NOTE 1:

TEMP	TYPE AND LOCATION
60°C	Type TW, wet or dry
	Type UF, wet or dry, or corrosive locations
75°C	Types RHW, THW, THWN, USE, THHW, XHHW, wet or dry
	Types RHH, THHN, XHHW, XHH, dry and damp locations.
90°C	Type THHW, dry locations.
	Types THWN-2, XHHW-2, THW-2, RHW-2, USE-2, wet or dry

NOTE 2:

Max. size of Type UF is 4/0 AWG.

Max. size of Types THWN and THHN - 1000 kcmil

Max. size of Type THHW is 1000 kcmil

NOTE 3:

The allowable values in the Ampacity Table are based on temperature alone and do not take voltage drop into consideration.

** Unless specifically permitted in Section 240.4(E) through (G), the overcurrent protection shall not exceed 15 amperes for 14 AWG, 20 amperes for 12 AWG, and 30 amperes for 10 A WG copper; or 15 amperes for 12 AWG and 25 amoeres for 10 AWG aluminum after any correction factors Tor ambient temperature and number of conductors have been applied.

NOTE 4:

Where the number of current-carrying conductors in a raceway or cable exceeds three, or where single conductors or multiconductor cables are stacked or bundled longer than 24 inches without maintaining spacing and are not installed in raceways, the allowable ampacity of each conductor shall be reduced as shown in the following table:

NUMBER OF CURRENT CARRYING CONDUCTORS	PERCENT OF VALUES IN TABLE AS ADJUSTED FOR AMBIENT TEMP IF NECESSARY
4 thru 6	80
7 thru 9	70
10 thru 20	50
21 thru 30	45
31 thru 40	40
41 and above **	35

The above derating factors do not apply to conductors in nipples having a length not exceeding 24 inches.

NOTE 5:

For ambient temperatures other than 30°C, multiply the allowable ampacities by the appropriate factor shown below:

AMBIENT TEMPERATURE °C	60 °C	75 °C	90 °C	AMBIENT TEMPERATURE OF
21-25	1.08	1.05	1.04	70-77
26-30	1	1	1	78-86
31-35	0.91	0.94	0.96	87-95
36-40	0.82	0.88	0.91	96-104
41-45	0.71	0.82	0.87	105-113
46-50	0.58	0.75	0.82	114-122
51-55	0.41	0.67	0.76	123-131
56-60		0.58	0.71	132-140
61-70		0.33	0.58	141-158
71-80	500	350	0.41	159-176
	600	400		

*For dwelling units, conductors, as listed below, shall be permitted as 120/240 volt, 3 wire, single phase service-entrance conductors, service lateral conductors and feeder conductors that serve as the main power feeder to a dwelling unit and are installed in raceway or cable with or without an equipment grounding conductor. For application of this section, the main power feeder shall be the feeder(s) between the main disconnect and the lighting and appliance branch-circuit panel board(s) and the feeds conductors to a dwelling unit shall not be required to be larger than their service entrance conductors. The grounded conductor shall be permitted to be smaller than the ungrounded conductors provided the requirements of Sections 215.2, 220.22 and 230.42 are met.

RHH, RHW, THHW, THW, THWN, THHN, XHHW, USE, RHW-2, THW-2, THWN-2, XHHW-2, SE, USE-2

COPPER AWG OR KCMIL	*ALUMINUM AWG OR KCMIL*	*SERVICE OR FEEDER RATING (AMPERES)*
4	2	100
3	1	110
2	1/0	125
1	2/0	150
1/0	3/0	175
2/0	4/0	200
3/0	250	225
4/0	300	250
250	350	300
350	500	350
400	600	400

MATERIAL | THERMOPLASTIC PROPERTIES

INSULATION OR JACKET MATERIAL	CHLORINATED POLYETHYLENE (CPE)	POLYVINYL CHLORIDE (PVC)	LOW-DENSITY POLYETHYLENE	POLYETHYLENE CELLULAR	HIGH-DENSITY POLYETHYLENE	POLYURETHANE	POLYPROPYLENE	NYLON	TEFLON	TPE
Oxidation Resistance	E	E	E	E	E	E	E	E	O	E
Heat Resistance	G-E	G-E	G	G-E	E	E	G	E	O	G
Oil Resistance	E	E	G-E	G-E	G-E	E	E	E	O	P
Low Temperature Flexibility	G	P-G	G-E	E	E	E	G	G	O	E
Weather, Sun Resistance	E	G-E	E	E	E	E	F-G	E	O	
Ozone Resistance	E	E	E	E	E	E	E	E	E	E
Abrasion Resistance	E	F-G	F-G	G	E	F-G	O	E	G-E	F
Electrical Properties	F	F-G	E	E	E	E	P-F	F	E	G
Flame Resistance	F	E	P	P	P	P	P	P	O	F
Nuclear Radiation Resistance	G-E	P-F	G	G	G	F	G	F-G	P-F	F
Water Resistance	G	E	E	E	E	E	P	P-F	E	E
Acid Resistance	G-E	G-E	G-E	G-E	G-E	E	F	P-F	E	G
Alkali Resistance	G-E	G-E	G-E	G-E	G-E	E	F	E	E	G
Gasoline, Kerosene, Etc. (Aliphatic Hydrocarbons Resistance)	F	G-E	P-F	P-F	P-F	P-F	F	G	E	P
Benzol, Toluol, Etc. (Aromatic Hydrocarbons Resistance)	F	P-F	P	P	P	P-F	P	G	E	P
Degreaser Solvents (Halogenated Hydrocarbons Resistance)	P	P-F	P	P	P	P	P	G	E	P
Alcohol Resistance	G	G-E	E		E	E	P	P	E	E

MATERIAL | THERMOSET PROPERTIES

INSULATION OR JACKET MATERIAL	STYRENE BUTADIENE RUBBER (SBR)	NATURAL RUBBER	SYNTHETIC RUBBER	POLYBUTADIENE	NEOPRENE	HYPALON CHLORO SULFONATED POLYETHYLENE (CSPE)	NITRILE OR RUBBER BUTADINE NITRILE (NBR)	NITRILE/ POLY CHLORIDE (NBR/ PVC)	ETHYLENE POLY-PYLENE RUBBER (EPR)	CROSSLINKED POLYTHYLENE (XLPEE)	CHLOINATED POLYETHYLENE (CPE)	SILICONE RUBBER
Oxidation Resistance	F	F	G	G	G	E	F	E	G	E	E	E
Heat Resistance	F-G	F	F	F	G	E	G	G	E	G	E	G
Oil Resistance	P	P	P	P	G	G	G-E	G	F	G	G-E	F-G
Low Temperature Flexibility	F-G	G	E	E	F-G	F	F	F	G-E	O	F	O
Weather, Sun Resistance	F	F	F	F	G	E	F-G	G	E	G	E	O
Ozone Resistance	P	P	P	P	G	E	P	G	E	E	G-E	O
Abrasion Resistance	G-E	E	E	E	G-E	G	G-E	E	G	F-G	G-E	F
Electrical Properties	E	E	E	E	F	G	P	F	E	E	F-G	O
Flame Resistance	P	P	P	P	G	G	P	G	P	F-G	G	F-G
Nuclear Radiation Resistance	F-G	F-G	F-G	P	F-G	G	F-G	P	G	E	G	E
Water Resistance	G-E	G-E	E	E	G	G-E	G-E	E	G-E	G-E	G-E	G-E
Acid Resistance	F-G	F-G	F-G	F-G	G	E	G	G	G-E	G-E	E	F-G
Alkali Resistance	F-G	F-G	F-G	F-G	G	E	F-G	G	G-E	G-E	E	F-G
Gasoline, Kerosene, Etc. (Aliphatic Hydrocarbons Resistance)	P	P	P	P	G	F	E	G-E	P	F	F	P-F
Benzol, Toluol, Etc. (Aromatic Hydrocarbons Resistance)	P	P	P	P	P-F	F	G	G	F	F	F	P
Degreaser Solvents (Halogenated Hydrocarbons Resistance)	P	P	P	P	P	P-F	P	G	P	F	P	P-G
Alcohol Resistance	F	G	G	F-G	F	G	E	G	P	E	G-E	G

Physical and Electrical Specification Data

TEST REQUIRMENTS	0-2000 Volts		0-2000 Volts FR-XLPE	
	GUARANTEED VALUE	TYPICAL VALUE	GUARANTEED VALUE	TYPICAL VALUE
PHYSICAL PROPERTIES				
Original Tensile Strength, psi	1800 min.	2300	1800 min.	2100
Original Elongation, percent	250 min,	425	250 min.	400
Aged - Air Oven - 168 Hr. @ 121°C Percent of Original	75 min.	100	75 min.	95
Tensile Elongation	75 min.	95	75 min.	85
Hot Creep, 150°C Elongation, %	100 max.	40	100 max.	15
Set, %	5 max.	0	5 max.	0
ELECTRICAL PROPERTIES				
Insulation Resistance Constant (K) SIC at 75°C	10,000 min.	75,000	10,000 min.	50,000
Accelerated Water Absorption % Change in SIC, 75°C Water 1 - 14 days	6.0 max.	3.1	6.0 max.	3.45
7 - 14 days	3.0 max.	1.6	3.0 max.	2.6
Stability Factor after 14 Days	1.5 max.	0.6	1.5 max.	0.9
	1.0 max.	0.1	1.0 max.	0.3
COLD BEND 1 Hr. @ 3 X O.D.	-30°C	< - 40°C	-30°C	< - 40°C
FLAME RESISTANCE	G	.2576	.1563	.1580
Complies with: ICEA S-95-658 / NEMA WC70	Class X-2	Class X-2	Class X-2	Class X-2

Physical and Electrical Specification Data

TEST REQUIRMENTS	0-2000 Volts		0-2000 Volts FR-XLPE	
	GUARANTEED VALUE	TYPICAL VALUE	GUARANTEED VALUE	TYPICAL VALUE
PHYSICAL PROPERTIES				
Original Tensile Strength, psi	700 min.	1000	1200 min.	1800
Original Elongation, percent	250 min.	400	250 min.	370
Aged - Air Oven - 168 Hr. @ 121°C				
Percent of Original	N/A	N/A	500 min.	750
Tensile	75 min.	95	80 min.	95
Elongation				
Hot Creep, 150°C	75 min,	90	80 min,	95
Elongation, %	50 max.	10	50 max.	10
Set, %	5 max.	0	5 max.	0
ELECTRICAL PROPERTIES				
Insulation Resistance Constant (K)	20,000 min.	>100,000	20,000 min.	> 100,000
SIC at 75°C	4.0 max.	2.8	4.0 max.	2.7
D.F. at R.T., %	2.0 max.	1.0	1.5 max.	< 0.5
Accelerated Water Absorption				
SIC, 75°C Water	4.0 max.	2.8	4.0 max.	2.7
% Change in SIC, 75°C Water	3.5 max.	< 0.5	3.5 max.	< 0.5
1 - 14 days	1.5 max.	< 0.5	1.5 max,	< 0.5
7 - 14 days	1.0 max.	.10	1.0 max.	.10
Stability Factor after 14 Days				
COLD BEND 1 Hr. @ 3 X O.D.	- 35°C	< - 40°C	-- 35°C	< - 40°C
Complies with:				
ICEA S-95-658 / NEMA WC 70	Class E-1	Class E-1	Class E-1 and E-2	Class E-1 and E-2
ICEA S-96-659 / NEMA WC 71	Class E-1	Class E-1	Class E-1 and E-2	Class E-1 and E-2
ICEA S-93-639 / NEMA WC 74	Class I	Class I	Class I and II	Class I and II
ICEAS-97-682	Class I	Class I	Class I and II	Class I and II
ICEA S-94-649	Class I	Class I	Class I and II	Class I and II
ICEA S-75-381 / NEMA WC 58	Class I	Class I	Class I and II	Class I and II
	Type I	Type I	Type I and II	Type I and II

Specification Data

TEST REQUIRMENTS	GUARANTEED VALUE	TYPICAL VALUE
PHYSICAL PROPERTIES		
Original Tensile Strength, psi		
Original Elongation, percent	1500 min.	2400
Aged - Air Oven - 120 Hr. @ 100°C		
Percent of Original	100 min.	300
Tensile	85 min.	90
Elongation		
Oil Immersion - 4 Hr. @ 70°C	60 min.	85
IRM 902 Oil		
Percent of Original	80 min.	90
Tensile	60 min.	90
Elongation		
Heat Distortion @ 121°C	50 max.	20
Percent		
Heat Shock @ 121 OC	No Cracks	No Cracks
WEATHEROMETER		
720 Hour		
Percent of Original		
Tensile	80 min.	95
Elongation	80 min.	95
COLD BEND		
1 Hr. @ 8 X O.D.	- 35°C	< - 40°C
OXYGEN INDEX		
	28 min.	29
Complies with:		
ICEA S-95-658 / NEMA WC 70	Table 4-1	Table 4-1
ICEA S-96-659 / NEMA WC 71	Table 5-1	Table 5-1
ICEA S-93-639 / NEMA WC 74	Table 7-1	Table 7-1
ICEAS-97-682	Table 7-6	Table 7-6
ICEA S-94-649	Table 7-6	Table 7-6
ICEA S-75-381 / NEMA WC 58	Table 4-2	Table 4-2
	Table 4-7	Table 4-7

Chlorinated Polyethylene Specification Data

TEST REQUIRMENTS	GUARANTEED VALUE	TYPICAL VALUE
PHYSICAL PROPERTIES		
Original Tensile Strength, psi	1400 min.	1575
Original Elongation, percent	150 min.	270
Tensile Stress @ 100% Elong., psi	1000 min.	1350
Aged - Air Oven - 168 Hr. @ 121°C		
Percent of Original		
Tensile	85 min.	95
Elongation	50 min.	65
Oil Immersion - 18 Hr. @ 100°C		
IRM 902 Oil		
Percent of Original		
Tensile	60 min.	75
Elongation	60 min.	85
ENVIRONMENTAL PROPERTIES		
Heat Distortion @ 121°C, percent	25 max.	4
Heat Shock @ 121°C	No Cracks	No Cracks
Cold Bend 1 Hr. @ - 35°C, 8 X O.D.	No Cracks	No Cracks
7-Day Mechanical Moisture @ 70°C, mg/in ²	25 max.	15
COLD BEND		
1 Hr. @ 8 X O.D.	2 X 105 min.	5 X 106
OXYGEN INDEX		
	28 min. Pass 19 max.	30 Pass 18
Complies with:		
ICEA S-95-658 / NEMA WC 70	Table 4-1 CPE TP	Table 4-1 CPE TP
ICEA S-93-639 / NEMA WC 74	Table 7-1 CPE TP	Table 7-1 CPE TP
ICEA S-97-682	Table 7-7	Table 7-7
ICEA S-94-649	Table 7-7	Table 7-7
ICEA S-73-532 / NEMA WC 57	Table 4-2 CPE TP	Table 4-2 CPE TP

Bending Radius and Pulling Tensions

MINIMUM BENDING RADIUS

POWER CABLES 600 VOLTS. WITHOUT SHEATH. SHIELDING OR ARMOR

The minimum bending radii for single and multi-conductor cables rated 600 volts and less, and without lead sheath, shielding or armor;

THICKNESS OF CONDUCTOR INSULATION IN MILS	MINIMUM BENDING RADIUS AS A MULTIPLE OF CABLE DIAMETER OVERALL DIAMETER OF CABLE IN INCHES		
	1,000 and Less	1,000 and 2,000	2,000 and Over
169 and less	4	5	6
170-310	4	5	6
311 and over	4	5	6

POWER CABLES OVER 600 VOLTS WITHOUT SHEATH SHIELDING OR ARMOR

1. The minimum bending radius for all cables is eight times the overall cable diameter.

SHIELDED CABLES WITHOUT ARMOR | ALL VOLTAGES

- The minimum bending radius for single conductor cable and multi-conductor cable with an overall shield is twelve times the overall cable diameter.
- The minimum bending radius for multi-conductor or multiplexed cables having individually shielded conductors is twelve times the diameter of one of the individual conductors or seven times the overall diameter, whichever is greater.
- The minimum bending radius for lead sheathed cables is twelve times the overall cable diameter.

INTERLOCKED ARMORED CABLE | ALL VOLTAGES

- The minimum bending radius for cables with non-shielded conductors is seven times the armor O.D.
- The minimum-bending radius for cables with shielded conductors is twelve times the diameter of one phase conductor or seven times the overall diameter, whichever is greater.

Note: The minimum bending radius applies to the inner surface of the cable and not to the cable axis.

PULLING TENSIONS

MAXIMUM PULLING TENSION ON CABLE

- With pulling eye attached to copper conductors, the maximum pulling tension in pounds should not exceed 0.008 times cir-mil area.
- With pulling eye attached to aluminum conductors, the maximum pulling tension in pounds should not exceed 0.006 times cir-mil area.

$$T_M = 0.008 \times n \times CM$$

where

T_M = max. tension, lb.

n = number of conductors

CM = cir-mil area of each copper conductor

- With cable grip over lead sheath, the maximum pulling tension in pounds should not exceed 1500 lb. sq. inch of lead sheath cross-sectional area for commercial lead

$$T_M = 4712 t (O - t)$$

where

t = sheath thickness, inches

O = overall diameter of cable, inches

- With cable grip over non-lead cable, the maximum pulling tension should not exceed 1000 lb. and may not exceed the maximum tension based on 0.008 or 0.006 x total conductor area.

- When more than three conductors are pulled together, the maximum pulling tension should be reduced 20%.

B. Maximum Permissible Pulling Length

$$L_M = \frac{T_M}{fW}$$

L_M = pulling length, feet (straight section)

T_M = maximum tension, lb.

W = weight of cable per foot, lb.

f = coefficient of friction (usually 0.5)

C. Pulling Tension Requirements in Ducts or Conduits:

- For straight sections, the pulling tension in pounds equals the length of duct or conduit multiplied by the weight per foot of cable and the coefficient of friction

(paragraph B, above). $T = LWf$

- For curved sections, the following formula applies: $T_c = T_1 e^{fa}$

where

T_c = tension exiting curved section, lb.

T_1 = tension entering curved section, lb.

a = angle of bend in radians (1 radian = 57.3 deg.)

f = coefficient of friction (usually 0.5)

e = naperian logarithm base

- To limit the sidewall bearing pressure on cables at bends, the maximum pulling tension in pounds shall not exceed the following factor times the radius of curvature of bend expressed in feet:

CABLE TYPE	FACTOR
Low Voltage 16-10 AWG	300
Low Voltage 8 AWG & LGR	500
5kV NonShielded	500
5kV-35kV	500
Interlocked Armor (all voltages)	300

TABLE E1 COLOR SEQUENCE

COND. NO.	BACKGROUND BASE OR COLOR	FIRST TRACER COLOR OF WIRE	SECOND TRACER COLOR	COND. NO.	BACKGROUND OR BASE COLOR	FIRST TRACER COLOR	SECOND TRACER COLOR
1	Black	-	-	20	Red	Green	
2	White	-	-	21	Orange	Green	
3	Red	-	-	22	Black	White	Red
4	Green	-	-	23	White	Black	Red
5	Orange	-	-	24	Red	Black	White
6		-	-	25	Green	Black	White
7	White	Black	-	26	Orange	Black	White
8	Red	Black	-	27	Blue	Black	White
9	Green	Black	-	28	Black	Red	Green
10	Orange	Black	-	29	White	Red	Green
11		Black	-	30	Red	Black	Green
12	Black	White	-	31	Green	Black	Orange
13	Red	White	-	32	Orange	Black	Green
14	Green	White	-	33	Blue	White	Orange
15	Blue	White	-	34	Black	White	Orange
16	Black	Red	-	35	White	Red	Orange
17	White	Red	-	36	Orange	White	Blue
18	Orange	Red	-	37	White	Red	Blue
19	Blue	Red	-	36			

Pair cables are black, white and numbered. Triad cables are black, white, red and numbered

TABLE E2 COLOR SEQUENCE

COND. NO.	BACKGROUND OR BASE COLOR	TRACER COLOR
1	Black	-
2	Red	-
3	Blue	-
4	Orange	-
5	Yellow	-
6	Brown	-
7	Red	Black
8	Blue	Black
9	Orange	Black
10	Yellow	Black
11	Brown	Black
12	Black	Red
13	Blue	Red
14	Orange	Red
15	Yellow	Red
16	Brown	Red
17	Black	Blue
18	Red	Blue
19	Orange	Blue
20	Yellow	Blue
21	Brown	Blue
22	Black	Orange
23	Red	Orange
24	Blue	Orange
25	Yellow	Orange
26	Brown	Orange
27	Black	Yellow
28	Red	Yellow
29	Blue	Yellow
30	Orange	Yellow
31	Brown	Yellow
32	Black	Brown
33	Red	Brown
34	Blue	Brown
35	Orange	Brown
36	Yellow	Brown

Pair cables are black, red and numbered. Triad cables are black, red, blue and numbered. Colors repeat after 36 conductors. There are no green or white conductors or stripes

ANSI MC 96.1 CONDUCTOR ALLOY AND COLOR CODE

COND. TYPE	POSITIVE WIRE		NEGATIVE WIRE		OUTER JACKET
	ALLOY	COLOR	ALLOY	COLOR	
EX Purple	Chromel	Purple	Constantan	Red	Purple
JX	Iron	White	Constantan	Red	Black
KX	Chromel	Yellow	Alumel	Red	Yellow
TX	Copper	Blue	Constantan	Red	Blue

METHOD 4 ALL CONDUCTORS BLACK

CONDUCTOR	CONDUCTOR PRINTING
1	"1-One"
2	"2-Two"
3	"3-Three"
4	"4-Four"
5	"5-Five"



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