Caledonian Cables Ltd

Industrial Cables

UL Standard

Addison

Company Profile


QAS International

REGISTRATION CERTIFICATE

Caledonian Cables Limited / Addison Technology Limited

ISO 9001 : 2008

On behalf of QAS International

Caledonian, established in 1978, offers one of the most complete lines of fiber and copper cabling system solutions with over hundreds of different cabling system products. Our superior products provide leading edge within every cable series and for every application.

Among the national and international standards with which our cables could comply are: BS - British Standard; LPCB Fire Performance Standard, ISO Standard etc. Caledonian Cables offers a comprehensive stock of cables and cabling products through its nationwide network of resellers and distributors. Caledonian Cables has continually expanded its global presence in Europe and Asia.

Caledonian & Addison, produces a wide range of cables for communication, power and electronics in its primary plants in UK, Italy and Spain. To stay in front, we continually keep expanding our manufacturing capabilities in more low cost region such as Romania, Taiwan, Malaysia etc. This low-cost manufacturing facilities enable us provide a flexible, scalable global system that delivers superior operational performance and optimal results for our customers.

Our extensive global network of manufacturing facilities gives us significant scale and the flexibility to fulfill our customer requirements. This global presence provides design and consultancy solutions that are combined with core cable manufacturing, logistic services, and vertically integrated with our E commerce technologies, to optimize customer operations by lowering costs and reducing time to market.

Caledonian & Addison has been respected for its high standards of quality, excellent service level, competitive pricing and a unique and innovative spirit. With our latest technologies, we are both inspired and well-positioned to meet the changing needs of our customers. We have the resources to diversify and to enhance our product lines and services. We understand the need for change and with our accurate planning, we are ready for the future and the promise of new marketing opportunities. Our tradition of growth through excellence is assured.

Our Design Centers work closely with customers to constantly improve its standard range of products and technologies and to develop customized, country and industry-specific solutions. Caledonian & Addison has established an extensive network of design, manufacturing, and logistics facilities in the world's major markets to serve the growing outsourcing needs of both multinational and regional customers.

CONTENT

Industrial Medium-Voltage Cables

CONTENT

600V Industrial Power Cables

600V Flexible Control and Power Cables

CONTENT

CONTENT

Industrial Armored Cables

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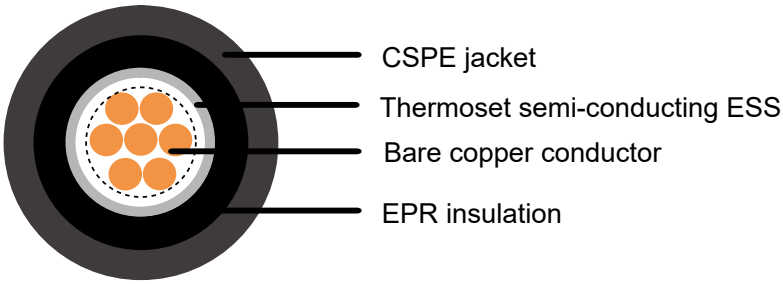
CONTENT

300V Instrumentation Cables

CONTENT

CONTENT

EPR/HYP, Medium-Voltage Power, Non-Shielded 2400V, UL Type MV-90



Applications:

These cables are used in these applications: pulp and paper mills, petrochemical plants, sewage treatment facilities, water treatment plants, steel mills, textile mills, utility power generating stations, scrubbers and other environmental protections systems, railroad and mining facilities. Also,they are used in industrial and utility applications, where ease of installation is a major concern because of limited space and exposure to personnel is minimal, in wet or dry locations when installed in accordance with NEC, and use in aerial, conduit, open tray and underground duct installations.

Standard:

National Electric Code (NEC)
ICEA S-96-659/NEMA WC71
UL 1072
FAA L824 specification for cable for Underground Airport Lighting Circuits
Listed “oil-resistant II”
Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Annealed bare copper Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

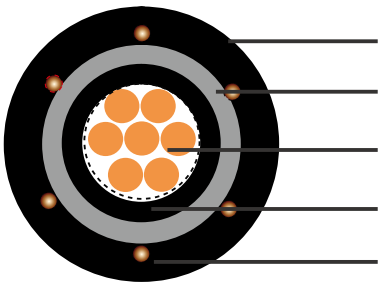
Insulation: Ethylene Propylene Rubber (EPR) insulation, colored to contrast with the black jacket material.

Jacket: Low-Lead Chlorosulfonated Polyethylene (CSPE)/ Elastomer blend.

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Nominal Extruded Strand Shield Diameter		Nominal Insulation Thickness		Nominal Insulation Diameter		Appr. Cable O.D.		Appr. Cable Weight	
	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
8	0.14	3.56	0.15	3.81	0.125	3.18	0.41	10.41	0.58	14.73	196	292
6	0.17	4.32	0.19	4.83	0.125	3.18	0.44	11.18	0.62	15.75	241	359
4	0.22	5.59	0.23	5.84	0.125	3.18	0.49	12.45	0.66	16.76	308	458
2	0.27	6.86	0.29	7.37	0.125	3.18	0.55	13.97	0.72	18.29	408	607
1	0.31	7.87	0.33	8.38	0.125	3.18	0.58	14.73	0.76	19.30	476	708
1/0	0.34	8.64	0.36	9.14	0.125	3.18	0.62	15.75	0.79	20.07	562	836
2/0	0.38	9.65	0.41	10.41	0.125	3.18	0.66	16.76	0.84	21.34	666	991
3/0	0.43	10.92	0.45	11.43	0.125	3.18	0.71	18.03	0.92	23.37	823	1225
4/0	0.48	12.19	0.50	12.70	0.125	3.18	0.76	19.30	0.97	24.64	983	1463
250	0.53	13.46	0.55	13.97	0.140	3.56	0.84	21.34	1.08	27.43	1183	1761
350	0.62	15.75	0.64	16.26	0.140	3.56	0.93	23.62	1.17	29.72	1545	2299
500	0.74	18.80	0.77	19.56	0.140	3.56	1.06	26.92	1.30	33.02	2077	3091
750	0.91	23.11	0.94	23.88	0.155	3.94	1.26	32.00	1.54	39.12	3040	4524
1000	1.06	26.92	1.09	27.69	0.155	3.94	1.42	36.07	1.70	43.18	3913	5823

EPR/Copper Wire Shield/CPE, Medium-Voltage Power, Shielded 5KV and 8KV, UL Type MV-105, 133% / 100% Ins. Levels, 115 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

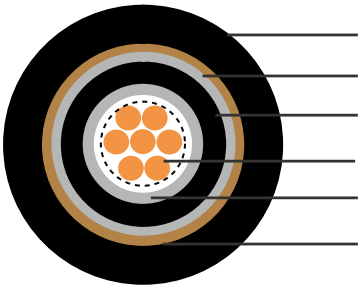
Insulation: Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers.

Composite Insulation Shield and Jacket: Six corrugated copper drain wires embedded in composite layers of semi-conducting thermoset copolymer and semi-conducting black flame-retardant Chlorinated Polyethylene (CPE) .

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Insulation Diameter Inches				Drain Wire Size	Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
	Inches	mm	Min.	mm	Max.	mm	AWG	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
2	0.27	6.86	0.510	12.95	0.590	14.99	20	0.71	18.03	404	601	165	165
1/0	0.34	8.64	0.580	14.73	0.655	16.64	20	0.78	19.81	555	825	215	215
2/0	0.38	9.65	0.620	15.75	0.695	17.65	19	0.83	21.08	666	990	255	245
3/0	0.43	10.92	0.665	16.89	0.745	18.92	19	0.88	22.35	791	1177	290	275
4/0	0.48	12.19	0.720	18.29	0.795	20.19	19	0.93	23.62	951	1415	330	315
250	0.53	13.46	0.770	19.56	0.850	21.59	18	1.01	25.65	1112	1655	365	345
350	0.62	15.75	0.870	22.10	0.945	24.00	18	1.11	28.19	1463	2176	440	415
500	0.74	18.80	0.990	25.15	1.065	27.05	17	1.24	31.50	2003	2980	535	500
750	0.91	23.11	1.170	29.72	1.250	31.75	17	1.44	36.57	2875	4278	655	610
1000	1.06	26.92	1.320	33.53	1.400	35.56	16	1.61	40.89	3746	5574	755	690

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded 5KV and 8KV, UL Type MV-105, 133% / 100% Ins. Levels, 115 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

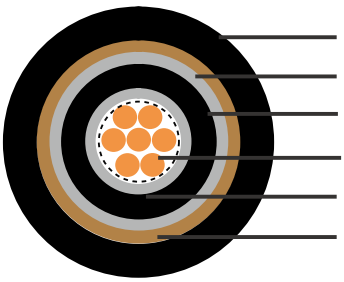
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
			Min.		Max.									
(AWG/ kcmil)	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
6	0.17	4.32	0.415	10.54	0.490	12.45	0.060	1.52	0.65	16.51	295	439	93	97
4	0.22	5.39	0.455	11.56	0.535	13.59	0.060	1.52	0.70	17.15	365	543	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	0.060	1.52	0.76	19.05	471	701	165	165
1	0.31	7.87	0.545	13.84	0.620	15.75	0.060	1.52	0.79	20.07	539	802	190	185
1/0	0.34	8.89	0.580	14.73	0.655	16.64	0.060	1.52	0.82	21.08	623	927	215	215
2/0	0.38	9.65	0.620	15.75	0.695	17.65	0.060	1.52	0.86	22.10	728	1083	255	245
3/0	0.43	10.92	0.665	16.89	0.745	18.92	0.080	2.03	0.94	24.38	886	1318	290	275
4/0	0.48	12.19	0.720	18.29	0.795	20.19	0.080	2.03	1.00	25.65	1053	1567	330	315
250	0.53	13.46	0.770	19.56	0.850	21.59	0.080	2.03	1.05	27.18	1199	1784	365	345
350	0.62	15.75	0.870	22.10	0.945	24.00	0.080	2.03	1.14	29.72	1559	2320	440	415
500	0.74	18.80	0.990	25.15	1.065	27.05	0.080	2.03	1.27	33.53	2088	3107	535	500
750	0.91	23.11	1.170	29.72	1.250	31.75	0.080	2.03	1.45	38.35	2962	4407	655	610
1000	1.06	26.92	1.330	33.78	1.400	35.56	0.080	2.03	1.60	42.42	3815	5677	755	690

EPR/Copper Tape Shield/CPE, Medium-Voltage Power, Shielded 5KV and 8KV, UL Type MV-105, 133% / 100% Ins. Levels, 115 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

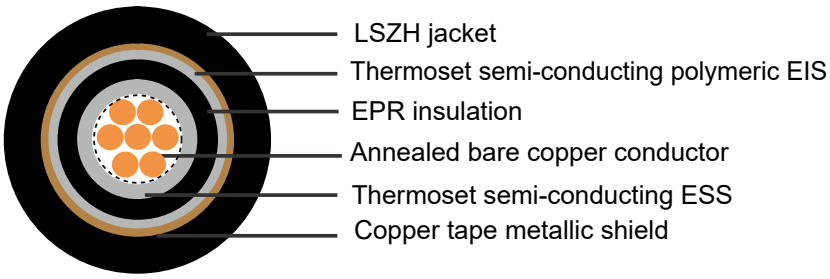
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
			Min.		Max.									
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
6	0.17	4.32	0.415	10.54	0.490	12.45	0.060	1.52	0.65	16.51	293	436	93	97
4	0.22	5.39	0.455	11.56	0.535	13.59	0.060	1.52	0.70	17.15	363	540	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	0.060	1.52	0.76	19.05	469	698	165	165
1	0.31	7.87	0.545	13.84	0.620	15.75	0.060	1.52	0.79	20.07	537	799	190	185
1/0	0.34	8.89	0.580	14.73	0.655	16.64	0.060	1.52	0.82	21.08	621	924	215	215
2/0	0.38	9.65	0.620	15.75	0.695	17.65	0.060	1.52	0.86	22.10	726	1080	255	245
3/0	0.43	10.92	0.665	16.89	0.745	18.92	0.080	2.03	0.94	24.38	883	1314	290	275
4/0	0.48	12.19	0.720	18.29	0.795	20.19	0.080	2.03	1.00	25.65	1049	1561	330	315
250	0.53	13.46	0.770	19.56	0.850	21.59	0.080	2.03	1.05	27.18	1195	1778	365	345
350	0.62	15.75	0.870	22.10	0.945	24.00	0.080	2.03	1.14	29.72	1555	2314	440	415
500	0.74	18.80	0.990	25.15	1.065	27.05	0.080	2.03	1.27	33.53	2083	3100	535	500
750	0.91	23.11	1.170	29.72	1.250	31.75	0.080	2.03	1.45	38.35	2981	4436	655	610
1000	1.06	26.92	1.330	33.78	1.400	35.56	0.080	2.03	1.60	42.42	3808	5666	755	690

EPR/Copper Tape Shield/LSZH, Medium-Voltage Power, Shielded 5KV and 8KV, UL Type MV-105, 133% / 100% Ins. Levels, 115 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

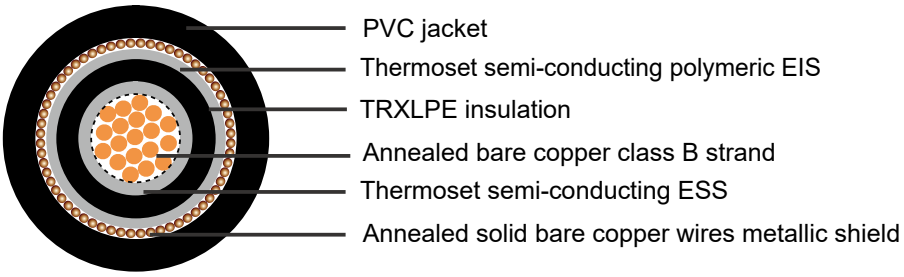
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
	Inches	mm	Min.		Max.		Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
			Inches	mm	Inches	mm								
6	0.17	4.32	0.415	10.54	0.490	12.45	0.060	1.52	0.65	16.51	295	439	93	97
4	0.22	5.39	0.455	11.56	0.535	13.59	0.060	1.52	0.70	17.15	365	543	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	0.060	1.52	0.76	19.05	471	701	165	165
1	0.31	7.87	0.545	13.84	0.620	15.75	0.060	1.52	0.79	20.07	539	802	190	185
1/0	0.34	8.89	0.580	14.73	0.655	16.64	0.060	1.52	0.82	21.08	623	927	215	215
2/0	0.38	9.65	0.620	15.75	0.695	17.65	0.060	1.52	0.86	22.10	728	1083	255	245
3/0	0.43	10.92	0.665	16.89	0.745	18.92	0.080	2.03	0.94	24.38	886	1318	290	275
4/0	0.48	12.19	0.720	18.29	0.795	20.19	0.080	2.03	1.00	25.65	1053	1567	330	315
250	0.53	13.46	0.770	19.56	0.850	21.59	0.080	2.03	1.05	27.18	1199	1784	365	345
350	0.62	15.75	0.870	22.10	0.945	24.00	0.080	2.03	1.14	29.72	1559	2320	440	415
500	0.74	18.80	0.990	25.15	1.065	27.05	0.080	2.03	1.27	33.53	2088	3107	535	500
750	0.91	23.11	1.170	29.72	1.250	31.75	0.080	2.03	1.45	38.35	2962	4407	655	610
1000	1.06	26.92	1.330	33.78	1.400	35.56	0.080	2.03	1.60	42.42	3815	5677	755	690

TRXLPE/Copper Wire Shield/PVC, Medium-Voltage Power 5KV, UL Type MV-105, 100% Ins. Level, 90 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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).

Standard:

National Electrical Code (NEC)
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1072
Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Annealed bare copper Class B compressed strand in accordance with ASTM B3 and B8.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress control layer over conductor.

Insulation: Tree Retardant Cross-Linked Polyethylene (TRXLPE).

Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free

stripping from insulation.

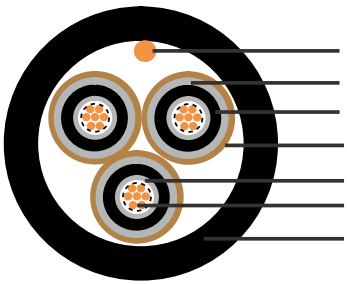
Metallic Shield: A concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
			Min.		Max.									
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
6	0.18	4.57	0.370	9.40	0.445	11.30	0.060	1.52	0.67	17.02	250	372	84	92
4	0.23	5.84	0.420	10.67	0.495	12.57	0.060	1.52	0.72	18.29	317	472	110	120
2	0.29	7.37	0.475	12.07	0.555	14.01	0.060	1.52	0.77	19.55	420	625	145	155
1/0	0.37	9.40	0.555	14.01	0.630	16.00	0.060	1.52	0.85	21.59	580	863	200	210
2/0	0.41	10.41	0.600	15.24	0.675	17.15	0.060	1.52	0.89	22.61	670	997	225	235
4/0	0.52	13.21	0.705	17.91	0.780	19.81	0.080	2.03	1.04	26.42	1000	1488	305	310
250	0.56	14.22	0.760	19.30	0.835	21.21	0.080	2.03	1.10	28.19	1155	1719	355	345
350	0.67	17.02	0.865	21.97	0.940	23.88	0.080	2.03	1.20	30.48	1505	2240	430	415
500	0.80	20.32	0.990	25.15	1.070	27.18	0.080	2.03	1.36	34.54	2060	3066	530	505
750	0.97	24.64	1.180	29.97	1.255	31.88	0.080	2.03	1.53	38.86	2868	4268	665	630
1000	1.12	28.45	1.325	33.66	1.405	35.69	0.080	2.03	1.66	42.16	3684	5482	770	720

EPR/Copper Tape Shield with Overall PVC Jacket Medium-Voltage Power, Shielded, 5KV and 8KV, UL Type MV-105 133% / 100% Ins. Levels, 115 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (70,000 BTU/hr)
Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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: 5mil annealed copper tape with an overlap of 25%.

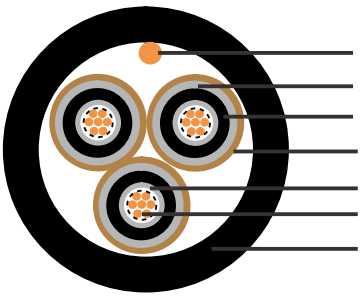
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Insulation Diameter				Ground Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
	Inches	mm	Min.		Max.			Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
			Inches	mm	Inches	mm	AWG								
6	0.17	4.32	0.415	10.54	0.490	12.45	6	0.080	2.03	1.29	32.77	939	1397	92	95
4	0.22	5.39	0.455	11.56	0.535	13.59	6	0.080	2.03	1.39	35.31	1158	1723	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	6	0.080	2.03	1.51	38.35	1511	2249	165	160
1/0	0.34	8.89	0.580	14.73	0.655	16.64	4	0.080	2.03	1.67	42.42	2030	3021	215	210
2/0	0.38	9.65	0.620	15.75	0.695	17.65	4	0.080	2.03	1.82	46.23	2449	3645	245	235
4/0	0.48	12.19	0.720	18.29	0.795	20.19	3	0.110	2.79	2.07	52.58	3438	5116	320	305
250	0.53	13.46	0.770	19.56	0.850	21.59	2	0.110	2.79	2.15	54.61	3968	5904	350	335
350	0.62	15.75	0.870	22.10	0.945	24.00	2	0.110	2.79	2.36	59.94	5009	7454	430	400
500	0.74	18.80	0.990	25.15	1.065	27.05	1	0.110	2.79	2.64	67.06	6793	10065	525	485
750	0.91	23.11	1.170	29.72	1.250	31.75	1/0	0.140	3.56	3.14	79.76	9833	14633	635	585
1000	1.06	26.92	1.330	33.78	1.400	35.56	2/0	0.140	3.56	3.48	88.39	12601	18753	725	660

EPR/Copper Tape Shield with Overall CPE Jacket Medium-Voltage Power, Shielded, 5KV and 8KV, UL Type MV-105 133% / 100% Ins. Levels, 115 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (70,000 BTU/hr)

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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: 5mil annealed copper tape with an overlap of 25%.

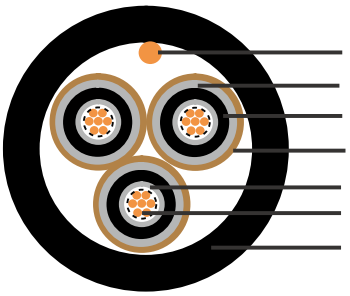
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Insulation Diameter				Ground Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
	Inches	mm	Min.		Max.			Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
			Inches	mm	Inches	mm	AWG								
6	0.17	4.32	0.415	10.54	0.490	12.45	6	0.080	2.03	1.29	32.77	939	1397	92	95
4	0.22	5.39	0.455	11.56	0.535	13.59	6	0.080	2.03	1.39	35.31	1158	1723	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	6	0.080	2.03	1.51	38.35	1511	2249	165	160
1/0	0.34	8.89	0.580	14.73	0.655	16.64	4	0.080	2.03	1.67	42.42	2030	3021	215	210
2/0	0.38	9.65	0.620	15.75	0.695	17.65	4	0.080	2.03	1.82	46.23	2449	3645	245	235
4/0	0.48	12.19	0.720	18.29	0.795	20.19	3	0.110	2.79	2.07	52.58	3438	5116	320	305
250	0.53	13.46	0.770	19.56	0.850	21.59	2	0.110	2.79	2.15	54.61	3968	5904	350	335
350	0.62	15.75	0.870	22.10	0.945	24.00	2	0.110	2.79	2.36	59.94	5009	7454	430	400
500	0.74	18.80	0.990	25.15	1.065	27.05	1	0.110	2.79	2.64	67.06	6793	10065	525	485
750	0.91	23.11	1.170	29.72	1.250	31.75	1/0	0.140	3.56	3.14	79.76	9833	14633	635	585
1000	1.06	26.92	1.330	33.78	1.400	35.56	2/0	0.140	3.56	3.48	88.39	12601	18753	725	660

EPR/Copper Tape Shield with Overall LSZH Jacket Medium-Voltage Power, Shielded, 5KV and 8KV, UL Type MV-105 133% / 100% Ins. Levels, 115 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
ICEA T-33-655
AEIC CS8
UL 1685 (70,000 BTU/hr)

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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%.

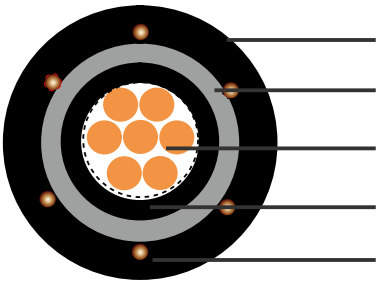
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant, moisture- and sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter		Insulation Diameter				Ground Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity	
			Min.		Max.										
	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.
6	0.17	4.32	0.415	10.54	0.490	12.45	6	0.080	2.03	1.29	32.77	939	1397	92	95
4	0.22	5.39	0.455	11.56	0.535	13.59	6	0.080	2.03	1.39	35.31	1158	1723	120	125
2	0.27	6.86	0.510	12.95	0.590	14.99	6	0.080	2.03	1.51	38.35	1511	2249	165	160
1/0	0.34	8.89	0.580	14.73	0.655	16.64	4	0.080	2.03	1.67	42.42	2030	3021	215	210
2/0	0.38	9.65	0.620	15.75	0.695	17.65	4	0.080	2.03	1.82	46.23	2449	3645	245	235
4/0	0.48	12.19	0.720	18.29	0.795	20.19	3	0.110	2.79	2.07	52.58	3438	5116	320	305
250	0.53	13.46	0.770	19.56	0.850	21.59	2	0.110	2.79	2.15	54.61	3968	5904	350	335
350	0.62	15.75	0.870	22.10	0.945	24.00	2	0.110	2.79	2.36	59.94	5009	7454	430	400
500	0.74	18.80	0.990	25.15	1.065	27.05	1	0.110	2.79	2.64	67.06	6793	10065	525	485
750	0.91	23.11	1.170	29.72	1.250	31.75	1/0	0.140	3.56	3.14	79.76	9833	14633	635	585
1000	1.06	26.92	1.330	33.78	1.400	35.56	2/0	0.140	3.56	3.48	88.39	12601	18753	725	660

EPR/Copper Wire Shield/CPE, Medium-Voltage Power, Shielded 15KV, UL Type MV-105, 133% Ins. Level, 220 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

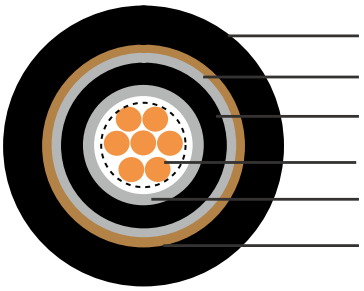
Insulation: Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers.

Composite Insulation Shield and Jacket: Six corrugated copper drain wires embedded in composite layers of semi-conducting thermoset copolymer and semi-conducting black flame-retardant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Drain Wire Size	Appr. Cable Diameter		Appr. Cable Weight		Appr. Copper Weight		Ampacity	
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	In Air	GND.
2	0.27	6.86	0.710	18.03	0.800	20.32	19	0.93	23.88	555	835	230	342	-	3
1/0	0.34	8.89	0.780	19.81	0.865	21.97	18	1.01	25.91	734	1102	358	533	220	3.5
2/0	0.38	9.65	0.820	20.83	0.905	22.99	18	1.05	27.18	844	1259	443	659	250	3.5
3/0	0.43	10.92	0.865	21.97	0.955	24.26	18	1.10	28.45	978	1458	550	818	290	3.5
4/0	0.48	12.19	0.920	23.37	1.005	25.53	18	1.16	29.72	1151	1716	685	1019	335	4
250	0.53	13.46	0.970	24.64	1.060	26.93	17	1.23	31.50	1325	1984	813	1210	370	4
350	0.62	15.75	1.070	27.18	1.155	29.34	17	1.33	33.78	1691	2530	1122	1669	460	5
500	0.74	18.80	1.190	30.23	1.275	32.39	17	1.46	37.08	2238	3344	1585	2358	575	5
750	0.91	23.11	1.370	34.80	1.460	37.08	16	1.67	42.42	3174	4739	2368	3523	745	6
1000	1.06	26.92	1.520	38.61	1.610	40.89	16	1.86	47.24	4122	6133	3138	4669	890	6

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded 15KV, UL Type MV-105, 133% Ins. Level, 220 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

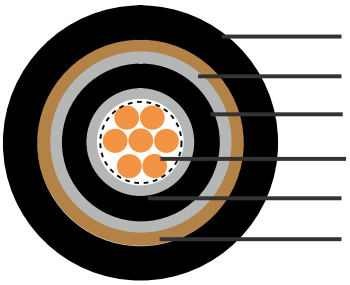
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
2	0.27	6.86	0.710	18.03	0.800	20.32	0.080	2.03	0.99	25.14	658	979	165	165	-
1	0.31	7.87	0.745	18.92	0.830	21.08	0.080	2.03	1.02	25.91	733	1090	190	185	-
1/0	0.34	8.89	0.780	19.81	0.865	21.97	0.080	2.03	1.06	26.92	825	1228	215	215	220
2/0	0.38	9.65	0.820	20.83	0.905	22.99	0.080	2.03	1.10	27.94	938	1396	255	245	250
3/0	0.43	10.92	0.865	21.97	0.955	24.26	0.080	2.03	1.14	28.95	1078	1604	290	275	290
4/0	0.48	12.19	0.920	23.37	1.005	25.53	0.080	2.03	1.21	30.73	1261	1876	330	315	335
250	0.53	13.46	0.970	24.64	1.060	26.93	0.080	2.03	1.25	31.75	1407	2093	365	345	370
350	0.62	15.75	1.070	27.18	1.155	29.34	0.080	2.03	1.35	34.29	1783	2653	440	415	460
500	0.74	18.80	1.190	30.23	1.275	32.39	0.080	2.03	1.47	37.34	2331	3468	535	500	575
750	0.91	23.11	1.370	34.80	1.460	37.08	0.080	2.03	1.65	41.91	3234	4812	655	610	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	0.110	2.79	1.86	47.24	4219	6278	755	690	890

EPR/Copper Tape Shield/CPE, Medium-Voltage Power, Shielded15KV, UL Type MV-105, 133% Ins. Level, 220 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

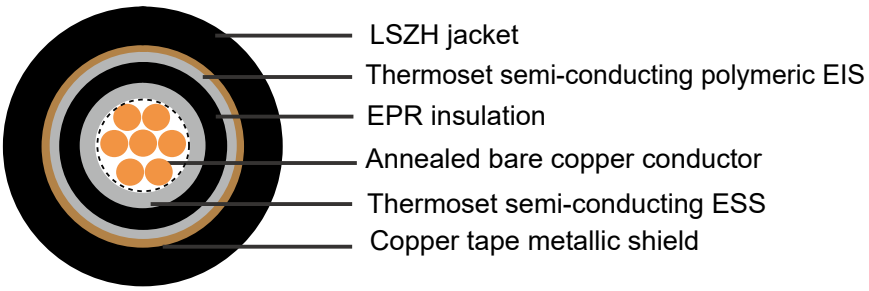
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
	Inches	mm	Min.		Max.		Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
AWG/ kcmil			Inches	mm	Inches	mm									
2	0.27	6.86	0.710	18.03	0.800	20.32	0.080	2.03	0.99	25.14	655	975	165	165	-
1	0.31	7.87	0.745	18.92	0.830	21.08	0.080	2.03	1.02	25.91	730	1086	190	185	-
1/0	0.34	8.89	0.780	19.81	0.865	21.97	0.080	2.03	1.06	26.92	820	1220	215	215	220
2/0	0.38	9.65	0.820	20.83	0.905	22.99	0.080	2.03	1.10	27.94	933	1388	255	245	250
3/0	0.43	10.92	0.865	21.97	0.955	24.26	0.080	2.03	1.14	28.95	1072	1595	290	275	290
4/0	0.48	12.19	0.920	23.37	1.005	25.53	0.080	2.03	1.21	30.73	1248	1857	330	315	335
250	0.53	13.46	0.970	24.64	1.060	26.93	0.080	2.03	1.25	31.75	1402	2086	365	345	370
350	0.62	15.75	1.070	27.18	1.155	29.34	0.080	2.03	1.35	34.29	1778	2646	440	415	460
500	0.74	18.80	1.190	30.23	1.275	32.39	0.080	2.03	1.47	37.34	2325	3460	535	500	575
750	0.91	23.11	1.370	34.80	1.460	37.08	0.080	2.03	1.65	41.91	3250	4836	655	610	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	0.110	2.79	1.86	47.24	4209	6263	755	690	890

EPR/Copper Tape Shield/LSZH, Medium-Voltage Power, Shielded Uniblend 15KV, UL Type MV-105, 133% Ins. Level, 220 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

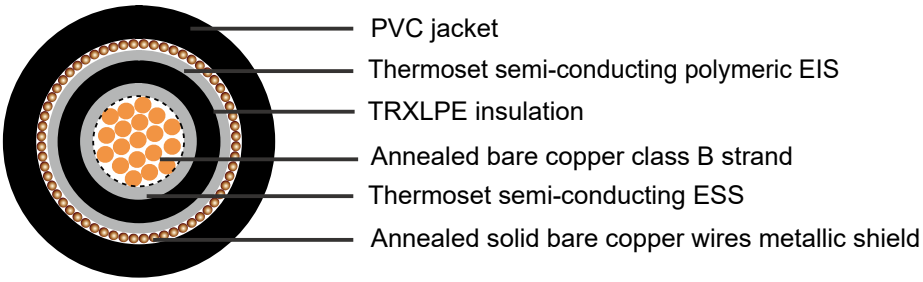
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
2	0.27	6.86	0.710	18.03	0.800	20.32	0.080	2.03	0.99	25.14	658	979	165	165	-
1	0.31	7.87	0.745	18.92	0.830	21.08	0.080	2.03	1.02	25.91	733	1090	190	185	-
1/0	0.34	8.89	0.780	19.81	0.865	21.97	0.080	2.03	1.06	26.92	825	1228	215	215	220
2/0	0.38	9.65	0.820	20.83	0.905	22.99	0.080	2.03	1.10	27.94	938	1396	255	245	250
3/0	0.43	10.92	0.865	21.97	0.955	24.26	0.080	2.03	1.14	28.95	1078	1604	290	275	290
4/0	0.48	12.19	0.920	23.37	1.005	25.53	0.080	2.03	1.21	30.73	1261	1876	330	315	335
250	0.53	13.46	0.970	24.64	1.060	26.93	0.080	2.03	1.25	31.75	1407	2093	365	345	370
350	0.62	15.75	1.070	27.18	1.155	29.34	0.080	2.03	1.35	34.29	1783	2653	440	415	460
500	0.74	18.80	1.190	30.23	1.275	32.39	0.080	2.03	1.47	37.34	2331	3468	535	500	575
750	0.91	23.11	1.370	34.80	1.460	37.08	0.080	2.03	1.65	41.91	3234	4812	655	610	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	0.110	2.79	1.86	47.24	4219	6278	755	690	890

TRXLPE/Copper Wire Shield/PVC, Medium-Voltage Power 15KV, UL Type MV-105, 133% Ins. Level, 220 Mils



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1072
Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Annealed bare copper, Class B compressed strand in accordance with ASTM B3, B8.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

Insulation: Tree Retardant Cross-Linked Polyethylene (TRXLPE).

Extruded Insulation Shield (EIS): Thermoset semi-conducting polymeric layer free

stripping from insulation.

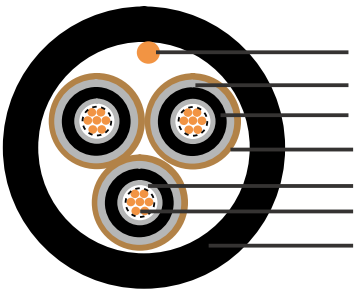
Metallic Shield: A concentric serve of 24 AWG annealed solid bare copper wires over which shall be applied a lapped non-metallic tape.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
2	0.29	7.37	0.725	18.42	0.815	20.70	0.080	2.03	1.05	26.67	600	893	165	165	-
1	0.33	8.38	0.765	19.35	0.855	21.72	0.080	2.03	1.09	27.68	671	998	190	185	-
1/0	0.37	9.40	0.805	20.45	0.895	22.73	0.080	2.03	1.13	28.27	761	1132	215	215	220
2/0	0.41	10.41	0.850	21.59	0.935	23.75	0.080	2.03	1.18	29.97	871	1296	255	245	250
4/0	0.52	13.21	0.955	24.26	1.045	26.54	0.080	2.03	1.29	32.76	1179	1754	330	315	335
250	0.56	14.22	1.010	25.65	1.100	27.94	0.080	2.03	1.34	34.03	1327	1974	365	345	370
350	0.67	17.02	1.115	28.32	1.200	30.48	0.080	2.03	1.45	36.83	1700	2529	440	415	460
500	0.80	20.32	1.240	31.50	1.330	33.78	0.080	2.03	1.57	39.87	2236	3327	535	500	575
750	0.97	24.64	1.430	36.32	1.520	38.61	0.110	2.79	1.82	46.23	3225	4798	655	610	745
1000	1.12	28.45	1.575	40.01	1.670	42.42	0.110	2.79	1.97	50.04	4090	6086	755	690	890

EPR/Copper Tape Shield with Overall PVC Jacket Medium-Voltage Power, Shielded, 15KV, UL Type MV-105 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (70,000 BTU/hr)
Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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%.

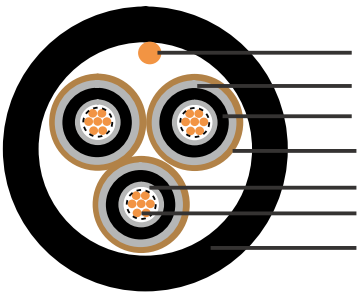
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
	Inches	mm	Min.		Max.		Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
AWG/ kcmil			Inches	mm	Inches	mm									
2	0.27	6.86	0.710	18.03	0.800	20.32	0.110	2.79	2.04	51.82	2226	3313	165	160	185
1/0	0.34	8.89	0.780	19.81	0.865	21.97	0.110	2.79	2.20	55.88	2811	4183	215	210	240
2/0	0.38	9.65	0.820	20.83	0.905	22.99	0.110	2.79	2.30	58.42	3163	4707	245	235	275
4/0	0.48	12.19	0.920	23.37	1.005	25.53	0.110	2.79	2.52	64.01	4203	6255	320	305	360
250	0.53	13.46	0.970	24.64	1.060	26.92	0.110	2.79	2.66	67.56	4775	7106	350	335	400
350	0.62	15.75	1.070	27.18	1.155	29.34	0.110	2.79	2.94	74.68	6182	9200	430	400	490
500	0.74	18.80	1.190	30.23	1.275	32.39	0.140	3.56	3.21	81.53	7686	11438	525	485	600
750	0.91	23.11	1.370	34.80	1.460	37.08	0.140	3.56	3.61	91.69	10978	16337	635	585	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	0.140	3.56	3.99	101.35	13983	20810	725	660	860

EPR/Copper Tape Shield with Overall CPE Jacket Medium-Voltage Power, Shielded, 15KV, UL Type MV-105 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (70,000 BTU/hr)

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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%.

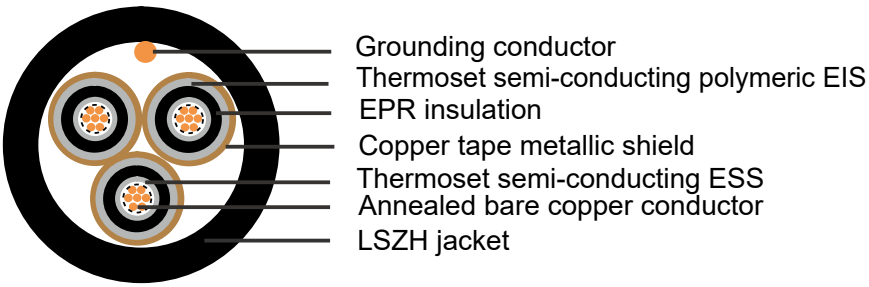
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Groud Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.											
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
2	0.27	6.86	0.710	18.03	0.800	20.32	6	0.110	2.79	2.04	51.82	2226	3313	165	160	185
1/0	0.34	8.89	0.780	19.81	0.865	21.97	4	0.110	2.79	2.20	55.88	2811	4183	215	210	240
2/0	0.38	9.65	0.820	20.83	0.905	22.99	4	0.110	2.79	2.30	58.42	3163	4707	245	235	275
4/0	0.48	12.19	0.920	23.37	1.005	25.53	3	0.110	2.79	2.52	64.01	4203	6255	320	305	360
250	0.53	13.46	0.970	24.64	1.060	26.92	2	0.110	2.79	2.66	67.56	4775	7106	350	335	400
350	0.62	15.75	1.070	27.18	1.155	29.34	2	0.110	2.79	2.94	74.68	6182	9200	430	400	490
500	0.74	18.80	1.190	30.23	1.275	32.39	1	0.140	3.56	3.21	81.53	7686	11438	525	485	600
750	0.91	23.11	1.370	34.80	1.460	37.08	1/0	0.140	3.56	3.61	91.69	10978	16337	635	585	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	2/0	0.140	3.56	3.99	101.35	13938	20810	725	660	860

EPR/Copper Tape Shield with Overall LSZH Jacket Uniblend Medium-Voltage Power, Shielded, 15KV, UL Type MV-105 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
ICEA T-33-655
AEIC CS8
UL 1685 (70,000 BTU/hr)

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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%.

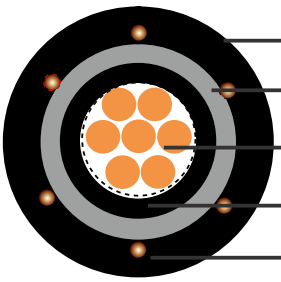
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant, moisture- and sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Groud Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.											
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
2	0.27	6.86	0.710	18.03	0.800	20.32	6	0.110	2.79	2.04	51.82	2226	3313	165	160	185
1/0	0.34	8.89	0.780	19.81	0.865	21.97	4	0.110	2.79	2.20	55.88	2811	4183	215	210	240
2/0	0.38	9.65	0.820	20.83	0.905	22.99	4	0.110	2.79	2.30	58.42	3163	4707	245	235	275
4/0	0.48	12.19	0.920	23.37	1.005	25.53	3	0.110	2.79	2.52	64.01	4203	6255	320	305	360
250	0.53	13.46	0.970	24.64	1.060	26.92	2	0.110	2.79	2.66	67.56	4775	7106	350	335	400
350	0.62	15.75	1.070	27.18	1.155	29.34	2	0.110	2.79	2.94	74.68	6182	9200	430	400	490
500	0.74	18.80	1.190	30.23	1.275	32.39	1	0.140	3.56	3.21	81.53	7686	11438	525	485	600
750	0.91	23.11	1.370	34.80	1.460	37.08	1/0	0.140	3.56	3.61	91.69	10978	16337	635	585	745
1000	1.06	26.92	1.520	38.61	1.610	40.89	2/0	0.140	3.56	3.99	101.35	13938	20810	725	660	860

EPR/Copper Wire Shield/CPE, Medium-Voltage Power, Shielded 25KV and 35KV, UL Type MV-105, 133% / 100% Ins. Levels, 345 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress-control layer over conductor.

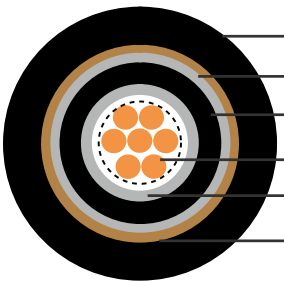
Insulation: Ethylene Propylene Rubber (EPR) insulation colored to contrast with black conducting shield layers.

Composite Insulation Shield and Jacket: Six corrugated copper drain wires embedded in composite layers of semi-conducting thermoset copolymer and semi-conducting black flame-retardant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Groud Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.											
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
1/0	0.34	8.89	1.020	25.91	1.120	28.45	17	0.080	2.03	1.29	32.77	1014	1509	215	215	295
2/0	0.38	9.65	1.060	26.92	1.160	29.46	17	0.080	2.03	1.36	34.54	1163	1731	255	245	335
3/0	0.43	10.92	1.105	28.07	1.205	30.61	17	0.080	2.03	1.41	35.81	1310	1949	290	275	380
4/0	0.48	12.19	1.160	29.46	1.260	32.00	17	0.080	2.03	1.43	36.32	1442	2146	330	315	435
250	0.53	13.46	1.210	30.73	1.315	33.40	16	0.080	2.03	1.51	38.35	1645	2448	365	345	475
350	0.62	15.75	1.310	33.27	1.410	35.81	16	0.080	2.03	1.60	40.64	2024	3012	440	415	575
500	0.74	18.80	1.430	36.32	1.530	38.86	16	0.080	2.03	1.74	44.20	2608	3881	535	500	700
750	0.91	23.11	1.610	40.89	1.710	43.43	16	0.110	2.79	1.95	49.78	3596	5351	655	610	865
1000	1.06	26.92	1.760	44.70	1.865	47.37	16	0.110	2.79	2.11	53.59	4513	6715	755	690	1005

EPR/Copper Tape Shield/PVC, Medium-Voltage Power, Shielded 25KV and 35KV, UL Type MV-105, 133% / 100% Ins. Levels, 345 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

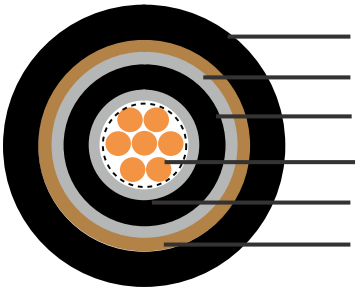
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
1/0	0.34	8.89	1.020	25.91	1.115	28.32	0.080	2.03	1.31	33.27	1090	1622	215	215	295
2/0	0.38	9.65	1.060	26.92	1.160	29.46	0.080	2.03	1.35	34.29	1211	1802	255	245	335
3/0	0.43	10.92	1.105	28.07	1.205	30.61	0.080	2.03	1.40	35.56	1360	2024	290	275	380
4/0	0.48	12.19	1.160	29.46	1.260	32.00	0.080	2.03	1.45	36.83	1547	2302	330	315	435
250	0.53	13.46	1.210	30.73	1.315	33.40	0.080	2.03	1.51	38.35	1712	2547	365	345	475
350	0.62	15.75	1.310	33.27	1.410	35.81	0.080	2.03	1.60	40.64	2108	3137	440	415	575
500	0.74	18.80	1.430	36.32	1.530	38.86	0.080	2.03	1.78	45.21	2783	4141	535	500	700
750	0.91	23.11	1.610	40.89	1.710	43.43	0.110	2.79	1.96	49.78	3733	5555	655	610	865
1000	1.06	26.92	1.760	44.70	1.865	47.37	0.110	2.79	2.10	53.59	4651	6921	755	690	1005

EPR/Copper Tape Shield/CPE, Medium-Voltage Power, Shielded 25KV and 35KV, UL Type MV-105, 133% / 100% Ins. Levels, 345 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

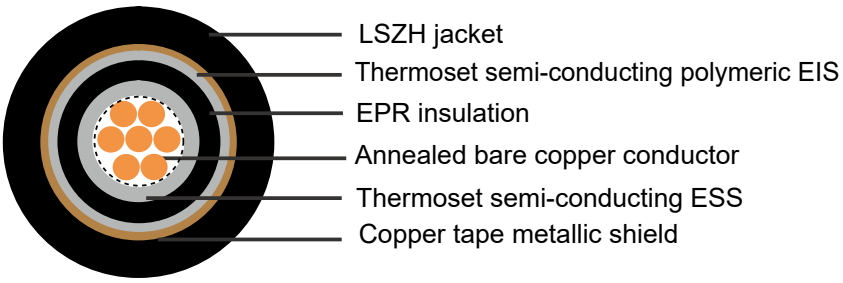
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant Chlorinated Polyethylene (CPE).

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.										
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Tray
1/0	0.34	8.89	1.020	25.91	1.115	28.32	0.080	2.03	1.31	33.27	1066	1586	215	215	295
2/0	0.38	9.65	1.060	26.92	1.160	29.46	0.080	2.03	1.35	34.29	1187	1766	255	245	335
3/0	0.43	10.92	1.105	28.07	1.205	30.61	0.080	2.03	1.40	35.56	1335	1986	290	275	380
4/0	0.48	12.19	1.160	29.46	1.260	32.00	0.080	2.03	1.45	36.83	1516	2256	330	315	435
250	0.53	13.46	1.210	30.73	1.315	33.40	0.080	2.03	1.51	38.35	1681	2501	365	345	475
350	0.63	16.00	1.310	33.27	1.410	35.81	0.080	2.03	1.60	40.64	2075	3088	440	415	575
500	0.74	18.80	1.430	36.32	1.530	38.86	0.080	2.03	1.78	45.21	2644	3934	535	500	700
750	0.91	23.11	1.610	40.89	1.710	43.43	0.110	2.79	1.96	49.78	3687	5486	655	610	865
1000	1.06	26.92	1.760	44.70	1.865	47.37	0.110	2.79	2.10	53.59	4603	6849	755	690	1005

EPR/Copper Tape Shield/LSZH, Medium-Voltage Power, Shielded 25KV and 35KV, UL Type MV-105, 133% / 100% Ins. Levels, 345 Mils



Applications:

These cables are suitable for use in wet or dry locations when installed in accordance with NEC, use in aerial, conduit, open tray and underground duct installations and use 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). Besides, they are installed in a broad range of commercial, industrial and utility projects such as pulp and paper mills, petrochemical plants, steel mills, textile mills, water and sewage treatment facilities, environmental protection systems, railroads, mines and fossil fuel utility generating stations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74
ICEA S-97-682
AEIC CS8
UL 1685 (Sizes 1/0 AWG and larger) UL Flame Exposure Test
IEEE 1202 (70,000 BTU/hr)/CSA FT4
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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.

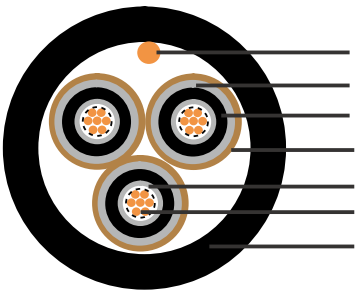
Metallic Shield: 5 mil annealed copper tape with an overlap of 25%.

Jacket: Flame-retardant, moisture- and sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

CON. Size (AWG/ kcmil)	Nominal CON. Diameter	Insulation Diameter Inches				Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
		Min.		Max.										
	Inches	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
1/0	0.34	1.020	25.91	1.115	28.32	0.080	2.03	1.31	33.27	1090	1622	215	215	295
2/0	0.38	1.060	26.92	1.160	29.46	0.080	2.03	1.35	34.29	1211	1802	255	245	335
3/0	0.43	1.105	28.07	1.205	30.61	0.080	2.03	1.40	35.56	1360	2024	290	275	380
4/0	0.48	1.160	29.46	1.260	32.00	0.080	2.03	1.45	36.83	1547	2302	330	315	435
250	0.53	1.210	30.73	1.315	33.40	0.080	2.03	1.51	38.35	1712	2547	365	345	475
350	0.62	1.310	33.27	1.410	35.81	0.080	2.03	1.60	40.64	2108	3137	440	415	575
500	0.74	1.430	36.32	1.530	38.86	0.080	2.03	1.78	45.21	2783	4141	535	500	700
750	0.91	1.610	40.89	1.710	43.95	0.110	2.79	1.96	49.78	3733	5555	655	610	865
1000	1.06	1.760	44.70	1.865	47.37	0.110	2.79	2.10	53.59	4651	6921	755	690	1005

EPR/Copper Tape Shield with Overall PVC Jacket Medium-Voltage Power, Shielded, 25KV and 35KV, UL Type MV-105 133% / 100% Ins. Levels, 345 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where reliability is the major concern, space is limited and ease of installation is critical. Besides, they are installed in wet or dry locations accordance with NEC. Also in aerial, direct burial, conduit, open tray and underground duct installations.

Standard:

National Electrical Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC74, ICEA S-97-682
AEIC CS8
UL 1685 (70,000 BTU/hr)
Meets EPA 40 CFR, Part 2671 for leachable lead content per TCLP method

Optional Flame Tests:

IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-29-520 (210,000 BTU/hr)

Construction:

Conductor: Annealed bare copper 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 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%.

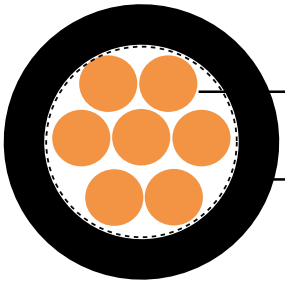
Grounding Conductor: 1 bare grounding conductor may be in contact with metallic shielding tape.

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

CON. Size	Nominal CON. Diameter		Insulation Diameter				Groud Wire	Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Ampacity		
			Min.		Max.											
AWG/ kcmil	Inches	mm	Inches	mm	Inches	mm	AWG	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air	GND.	Direct Burial
1/0	0.34	8.89	1.020	25.91	1.115	28.32	4	0.110	2.79	2.73	69.34	3672	5464	215	210	255
2/0	0.38	9.65	1.060	26.92	1.160	29.46	4	0.110	2.79	2.81	71.37	4061	6042	245	235	290
4/0	0.48	12.19	1.160	29.46	1.260	32.00	3	0.140	3.56	3.10	78.74	5313	7906	320	305	375
250	0.53	13.46	1.210	30.73	1.315	33.40	2	0.140	3.56	3.21	81.53	6214	9246	350	335	410
350	0.62	15.75	1.310	33.27	1.410	35.81	2	0.140	3.56	3.42	86.86	7138	10621	430	400	495
500	0.74	18.80	1.430	36.32	1.530	38.86	1	0.140	3.56	3.68	93.47	9012	13410	525	485	590
750	0.91	23.11	1.610	40.89	1.710	43.43	1/0	0.140	3.56	4.10	104.14	12030	17901	635	585	720

EPR/HYP, Low-Voltage Power, Unshielded 600V, UL Type RHH/RHW-2/USE-2 LS



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications where reliability is a major concern and where maximum performance will be demanded, in free air, raceways or direct burial and in aerial, conduit, open tray and underground duct.

Standard:

Industry Standard:

National Electric Code (NEC)
ICEA S-95-658 / NEMA WC70
FOR CT USE on 1/0 AWG and larger in accordance with the NEC
UL 44 Type RHH/RHW-2
UL 854 Type USE-2
Low-smoke rating per UL

Flame Tests Standard:

UL 1581 VW-1
For 1/0 AWG and larger: IEEE 383, IEEE 1202/CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

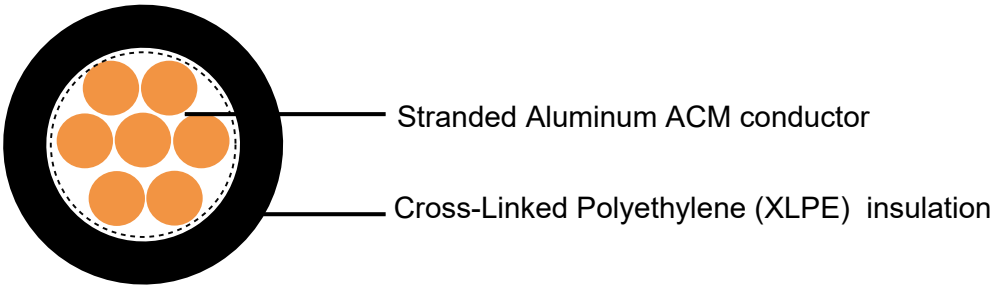
Conductor: Tin-coated copper compressed Class B stranding per ASTM B33.

Insulation: Flame-retardant Ethylene Propylene Rubber (EPR) colored for contrast with black low-lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cables Parameter

CON. Size (AWG/ kcmil)	CON. Strand	Nominal CON. Diameter		MIN. AVG. Insulation				MIN. AVG. Jacket				Appr. Cable Weight	
				Thickness		Diameter		Thickness		Diameter			
		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
14	7/0.0242	0.07	1.78	0.030	0.76	0.14	3.56	0.015	0.38	0.17	4.32	24	36
12	7/0.0305	0.09	2.29	0.030	0.76	0.16	4.06	0.015	0.38	0.19	4.83	33	49
10	7/0.0385	0.12	3.05	0.030	0.76	0.18	4.57	0.015	0.38	0.21	5.33	48	71
8	7/0.0486	0.15	3.81	0.045	1.14	0.24	6.10	0.015	0.38	0.28	7.11	77	115
6	7/0.0612	0.18	4.57	0.045	1.14	0.28	7.11	0.030	0.76	0.35	8.89	122	182
4	7/0.0772	0.23	5.84	0.045	1.14	0.33	8.38	0.030	0.76	0.39	9.91	178	265
2	7/0.0974	0.29	7.37	0.045	1.14	0.39	9.91	0.030	0.76	0.46	11.68	265	394
1/0	19/0.0740	0.37	9.40	0.055	1.40	0.48	12.19	0.045	1.14	0.58	14.73	422	628
2/0	19/0.0837	0.41	10.41	0.055	1.40	0.53	13.46	0.045	1.14	0.63	16.00	518	771
4/0	19/0.1055	0.52	13.21	0.055	1.40	0.64	16.26	0.045	1.14	0.74	18.80	785	1168
250	37/0.0822	0.56	14.22	0.065	1.65	0.70	17.78	0.065	1.65	0.85	21.59	960	1429
350	37/0.0973	0.67	17.02	0.065	1.65	0.81	20.57	0.065	1.65	0.96	24.38	1299	1933
500	37/0.1162	0.80	20.32	0.065	1.65	0.94	23.88	0.065	1.65	1.09	27.69	1803	2683
750	61/0.1109	0.98	24.89	0.080	2.03	1.15	29.21	0.065	1.65	1.31	33.27	2664	3965
1000	61/0.1280	1.13	28.70	0.080	2.03	1.31	33.27	0.065	1.65	1.46	37.08	3989	5936

XLPE, Building Wire 600V, CSA Type RW90 (-40°C), Single Conductor, Aluminum



Applications:

These cables are used in raceways (except cable trays) in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC). Also the wires are exposed to the weather (black color only). Besides, for Termination and Splicing of Aluminum Conductors, refer to CEC Rule 12-118.

Standard:

CSA standard C 22.2 No. 38
CSA Approval File Number LL7319C

Construction:

Conductor: Stranded Aluminum ACM (8000 Series).

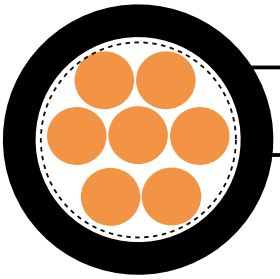
Insulation: Heat- and moisture-resistant, low-temperature Cross-Linked Polyethylene (XLPE) — Type RW90, -40°C.

Color code: 8 AWG thru 2 AWG – black, white, red, blue, green; 1 AWG and larger– black(other colors available subject to minimum order quantity).

Cables Parameter

CON. Size (AWG/ kcmil)	CON. Strand	Nominal CON. Diameter		Min. AVG. Insulation Thickness		Nominal Insulation Diameter		Appr. AL Weight		Appr. Cable Weight		Ampacity 30˚C Ambient
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	In Air
8	7/0.0486	0.13	3.30	0.045	1.14	0.24	6.0	16	23	27	40	30
6	7/0.0612	0.17	4.32	0.045	1.14	0.27	6.9	25	37	38	57	55
4	7/0.0772	0.21	5.33	0.045	1.14	0.32	8.1	39	59	56	84	65
3	7/0.0867	0.24	6.10	0.045	1.14	0.35	8.8	50	74	68	101	75
2	7/0.0974	0.27	6.86	0.045	1.14	0.38	9.6	63	93	83	123	95
1	19/0.0664	0.30	7.62	0.055	1.40	0.44	11.0	79	117	107	160	105
1/0	19/0.0745	0.34	8.64	0.055	1.40	0.48	12.1	99	148	131	195	120
2/0	19/0.0837	0.38	9.65	0.055	1.40	0.52	13.2	125	186	161	239	145
3/0	19/0.0940	0.42	10.67	0.055	1.40	0.57	14.5	158	235	198	295	165
4/0	19/0.1055	0.48	12.19	0.055	1.40	0.63	16.0	199	296	245	364	185
250	37/0.0822	0.52	13.21	0.065	1.65	0.69	17.6	235	350	292	435	215
300	37/0.0900	0.57	14.48	0.065	1.65	0.75	18.9	282	420	345	513	240
350	37/0.0973	0.62	15.75	0.065	1.65	0.80	20.2	329	490	397	590	260
400	37/0.1040	0.66	16.76	0.065	1.65	0.84	21.4	376	559	449	667	290
500	37/0.1162	0.74	18.80	0.065	1.65	0.93	23.5	471	701	551	820	330
600	61/0.0992	0.81	20.57	0.080	2.03	1.03	26.2	565	841	670	998	370
750	61/0.1109	0.91	23.11	0.080	2.03	1.14	23.8	706	1050	824	1226	405
1000	61/0.1280	1.06	26.92	0.080	2.03	1.29	32.6	941	1400	1078	1604	480

XLPE, Building Wire 1000V, CSA Type RWU90 (-40°C), Single Conductor, Copper



Applications:

For These cables are used in raceways (except cable trays) in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC) and direct burial per CEC Rule 12-012. Besides, for service entrance below ground. Also the wires are exposed to the weather (black color only).

Standard:

CSA standard C 22.2 No. 38
CSA certification (file) number: LL7319C

Construction:

Conductor: Compressed stranded plain copper.

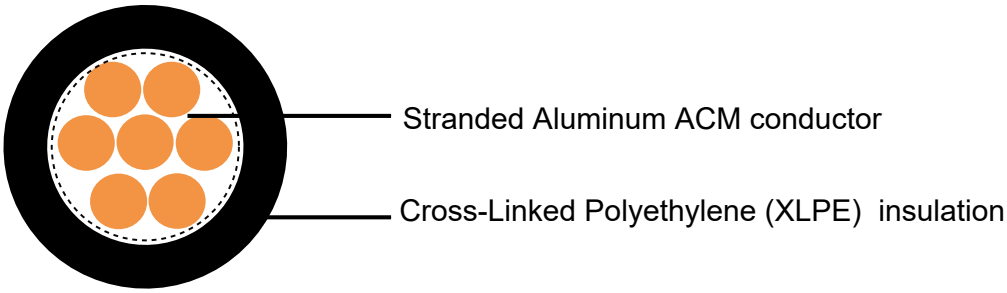
Insulation: Heat and moisture-resistant, low-temperature Cross-Linked Polyethylene (XLPE), Type RWU90, -40°C.

Color code: 8 AWG thru 2 AWG – black, white, red, blue, green; 1 AWG and larger– black (other colors available subject to minimum order quantity).

Cables Parameter

CON. Size (AWG/ kcmil)	CON. Strand	Nominal CON. Diameter		Min. AVG. Insulation Thickness		Nominal Insulation Diameter		Appr. Copper Weight		Appr. Cable Weight		Ampacity 30˚C Ambient
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	In Air
8	7/0.0486	0.14	3.56	0.080	2.03	0.31	7.80	51	76	73	109	45
6	7/0.0612	0.18	4.57	0.080	2.03	0.34	8.70	81	121	108	160	65
4	7/0.0772	0.23	5.84	0.080	2.03	0.40	9.90	129	192	161	239	85
3	7/0.0867	0.25	6.35	0.080	2.03	0.42	10.60	163	242	197	293	105
2	7/0.0974	0.28	7.11	0.080	2.03	0.45	11.40	205	305	242	361	120
1/0	19/0.0745	0.36	9.14	0.095	2.41	0.55	13.90	326	485	379	565	155
2/0	19/0.0837	0.41	10.41	0.095	2.41	0.60	15.00	411	611	469	698	185
3/0	19/0.0940	0.46	11.68	0.095	2.41	0.64	16.20	518	771	583	867	210
4/0	19/0.1055	0.51	12.95	0.095	2.41	0.70	17.70	653	972	724	1077	210
250	37/0.0822	0.56	14.22	0.110	2.79	0.78	19.90	772	1149	866	1289	235
300	37/0.0900	0.61	15.49	0.110	2.79	0.84	21.20	926	1378	926	1547	265
350	37/0.0973	0.66	16.76	0.110	2.79	0.90	22.50	1081	1609	1189	1769	325
500	37/0.1162	0.79	20.06	0.110	2.79	1.02	25.80	1544	2297	1667	2481	395
600	61/0.0992	0.87	22.10	0.110	2.79	1.12	28.50	1883	2802	2027	3016	455
750	61/0.1109	0.97	24.64	0.125	3.18	1.23	31.24	2316	3446	2505	3728	500
1000	61/0.1280	1.12	28.45	0.125	3.18	1.38	35.05	3088	4595	3323	4945	585

XLPE, Building Wire 1000V, CSA Type RWU90 (-40°C), Single Conductor, Aluminum



Applications:

These cables are used in raceways (except cable trays) in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC) and direct burial per CEC Rule 12-012. Besides, for service entrance below ground. Also the wires are exposed to the weather (black color only).

Standard:

CSA standard C 22.2 No. 38
CSA Approval File Number LL7319C

Construction:

Conductor: Stranded Aluminum ACM (8000 Series).

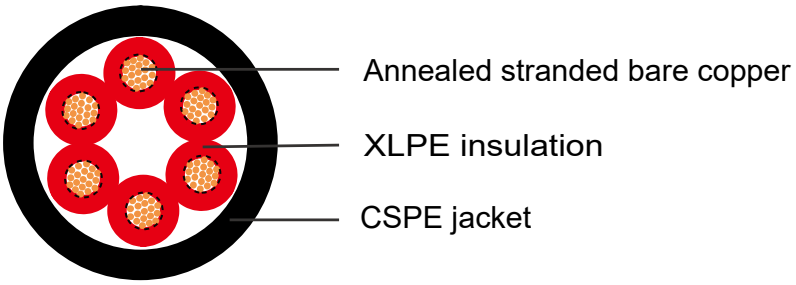
Insulation: Heat- and moisture-resistant, low-temperature Cross-Linked Polyethylene (XLPE), Type RWU90, -40°C.

Color code: 8 AWG thru 2 AWG – black, white, red, blue, green; 1 AWG and larger– black (other colors available subject to minimum order quantity).

Cables Parameter

CON. Size (AWG/ kcmil)	CON. Strand	Nominal CON. Diameter		Min. AVG. Insulation Thickness		Nominal Insulation Diameter		AL Weight		Appr. Cable Weight		Ampacity 30˚C Ambient
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	In Air
8	7/0.0486	0.13	3.30	0.080	2.03	0.31	7.70	16	23	39	58	30
6	7/0.0612	0.17	4.32	0.080	2.03	0.34	8.70	25	37	52	78	50
4	7/0.0772	0.21	5.33	0.080	2.03	0.39	9.90	39	59	72	107	65
3	7/0.0867	0.24	6.10	0.080	2.03	0.42	10.60	50	74	85	127	75
2	7/0.0974	0.27	6.86	0.080	2.03	0.45	11.40	63	93	102	151	95
1	19/0.0664	0.30	7.62	0.095	2.41	0.52	13.10	79	117	132	197	105
1/0	19/0.0745	0.34	8.64	0.095	2.41	0.56	14.10	99	148	158	235	120
2/0	19/0.0837	0.38	9.65	0.095	2.41	0.60	15.30	125	186	190	283	145
3/0	19/0.0940	0.42	10.67	0.095	2.41	0.65	16.50	158	235	229	341	165
4/0	19/0.1055	0.48	12.19	0.095	2.41	0.78	18.00	199	296	279	415	185
250	37/0.0822	0.52	13.21	0.110	2.79	0.84	19.90	235	350	335	498	215
300	37/0.0900	0.57	14.48	0.110	2.79	0.89	21.20	282	420	391	581	240
350	37/0.0973	0.62	15.75	0.110	2.79	0.89	22.60	329	490	446	663	260
400	37/0.1040	0.66	16.76	0.110	2.79	0.93	23.70	376	559	500	743	290
500	37/0.1162	0.74	18.80	0.110	2.79	1.02	25.80	471	701	608	905	330
600	61/0.0992	0.81	20.57	0.125	3.17	1.12	28.50	565	841	733	1091	370
750	61/0.1109	0.91	23.11	0.125	3.17	1.23	31.10	706	1050	893	1329	405
1000*	61/0.1280	1.06	26.92	0.125	3.17	1.38	34.90	941	1400	1155	1718	480

XLPE/NYLON/HYP, Thermoset Super Flexing Control 600V, UL Type TC/CSA CIC



Applications:

These cables are used for robots, machine tools, car body and vehicle assembly, material handling equipment and power tracks. Any continuous flexing application requiring a small diameter flexible cable.

Standard:

Industry Standard:

UL Type TC / CSA CIC

Flame Tests Standard:

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

Other Standard:

Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3.

Class M-18 AWG thru 16 AWG.

Class K-14 AWG thru 10 AWG.

Stranding per ASTM B8.

Insulation: Thermoset Cross-Linked Polyethylene (XLPE) with clear Polyamide (nylon).

Color-coded: all conductors red, except #2 is white and #3 is green, all with alpha-numeric

designations.

Jacket:

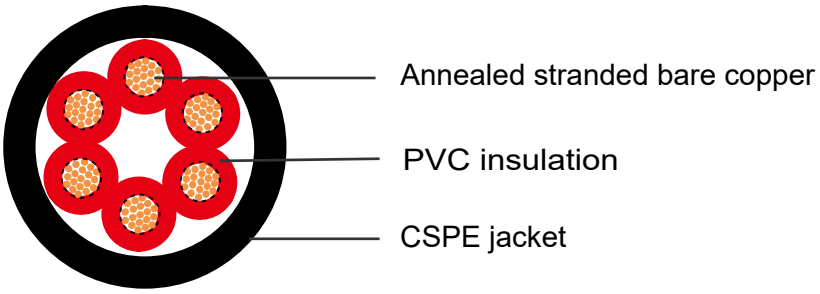
Lead-Free Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cable Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	Inches	mm
6	18	41/34	0.020	0.51	0.045	1.14	0.390	9.91	32	48	93	138	3.0	76.2
8	18	41/34	0.020	0.51	0.045	1.14	0.455	11.30	42	63	116	173	3.5	88.9
12	18	41/34	0.020	0.51	0.045	1.14	0.490	12.45	63	94	155	231	4.0	101.6
16	18	41/34	0.020	0.51	0.060	1.52	0.570	14.48	84	125	211	314	4.5	114.3
22	18	41/34	0.020	0.51	0.060	1.52	0.650	16.51	116	173	272	405	5.0	127.0
31	18	41/34	0.020	0.51	0.060	1.52	0.750	19.05	163	243	366	545	6.0	152.4
41	18	41/34	0.020	0.51	0.080	2.03	0.880	22.35	216	321	498	741	7.0	177.8
60	18	41/34	0.020	0.51	0.080	2.03	1.000	25.40	316	470	676	1006	8.0	203.2
6	16	65/34	0.020	0.51	0.045	1.14	0.430	10.92	50	74	122	182	3.5	88.9
8	16	65/34	0.020	0.51	0.045	1.14	0.490	12.45	66	98	152	226	4.0	101.6
12	16	65/34	0.020	0.51	0.060	1.52	0.575	14.61	99	147	216	321	4.5	114.3
16	16	65/34	0.020	0.51	0.060	1.52	0.630	16.00	132	196	277	412	5.0	127.0
22	16	65/34	0.020	0.51	0.060	1.52	0.725	18.42	182	271	368	548	5.5	139.7
31	16	65/34	0.020	0.51	0.060	1.52	0.835	21.21	256	381	491	731	6.5	165.1
41	16	65/34	0.020	0.51	0.080	2.03	0.985	25.02	339	504	683	1016	8.0	203.2
60	16	65/34	0.020	0.51	0.080	2.03	1.115	28.32	496	738	912	1357	9.0	228.6
6	14	41/30	0.020	0.51	0.045	1.14	0.460	11.68	80	119	159	237	3.5	88.9
8	14	41/30	0.020	0.51	0.060	1.52	0.560	14.22	107	159	219	326	4.5	114.3
12	14	41/30	0.020	0.51	0.060	1.52	0.620	15.72	160	238	295	439	5.0	127.0
16	14	41/30	0.020	0.51	0.060	1.52	0.680	17.27	213	317	375	558	5.5	139.7
22	14	41/30	0.020	0.51	0.060	1.52	0.785	19.94	293	737	495	737	6.0	152.4
6	12	65/30	0.020	0.51	0.060	1.52	0.555	14.10	129	192	238	354	4.5	114.3
8	12	65/30	0.020	0.51	0.060	1.52	0.635	16.13	172	256	300	446	5.0	127.0
12	12	65/30	0.020	0.51	0.060	1.52	0.705	17.91	258	384	433	644	5.5	139.7
16	12	65/30	0.020	0.51	0.060	1.52	0.780	19.81	344	512	535	796	6.0	152.4

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	Inches	mm
22	12	65/30	0.020	0.51	0.080	2.03	0.945	24.00	473	704	789	1174	7.5	190.5
6	10	105/30	0.026	0.66	0.060	1.52	0.655	16.64	205	305	350	521	5.0	127.0
8	10	105/30	0.026	0.66	0.060	1.52	0.755	19.18	274	408	450	670	6.0	152.4
12	10	105/30	0.026	0.66	0.080	2.03	0.885	22.48	411	612	675	1005	7.0	177.8
16	10	105/30	0.026	0.66	0.080	2.03	1.145	29.08	548	816	905	1347	9.0	228.6

PVC/NYLON/HYP, Thermoset Continuous Flexing Control 600V, UL Type TC/CSA AWM



Applications:

These cables are used for robots, machine tools, car body and vehicle assembly, material handling equipment and power tracks. Any continuous flexing application requiring a small diameter flexible cable.

Standard:

Industry Standard:
UL Type TC / CSA AWM
Flame Tests Standard:
IEEE 1202 (70,000 BTU/hr) CSA FT4
IEEE 383 (70,000 BTU/hr)
Other Standard:
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3.

Class M-18 AWG thru 16 AWG.

Class K-14 AWG thru 12 AWG.

Stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

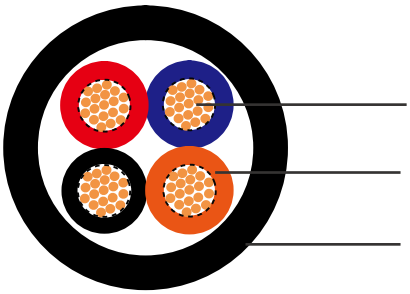
Color-coded: all conductors are red, except #2 is white and #3 is green. All with alpha-numeric designations.

Jacket: Lead-Free Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cable Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	Inches	mm
6	18	41/34	0.020	0.51	0.045	1.14	0.390	9.91	93	138	3.0	76.2
8	18	41/34	0.020	0.51	0.045	1.14	0.455	11.30	116	173	3.5	88.9
12	18	41/34	0.020	0.51	0.045	1.14	0.490	12.45	155	231	4.0	101.6
16	18	41/34	0.020	0.51	0.060	1.52	0.570	14.48	211	314	4.5	114.3
22	18	41/34	0.020	0.51	0.060	1.52	0.650	16.51	272	405	5.0	127.0
6	16	65/34	0.020	0.51	0.045	1.14	0.430	10.92	122	182	3.5	88.9
8	16	65/34	0.020	0.51	0.045	1.14	0.490	12.45	152	226	3.9	99.1
12	16	65/34	0.020	0.51	0.060	1.52	0.575	14.61	216	321	4.5	114.3
16	16	65/34	0.020	0.51	0.060	1.52	0.630	16.00	277	412	5.0	127.0
22	16	65/34	0.020	0.51	0.060	1.52	0.725	18.42	368	548	5.5	139.7
6	14	41/30	0.020	0.51	0.045	1.14	0.460	11.68	159	186	3.7	94.0
8	14	41/30	0.020	0.51	0.060	1.52	0.560	14.22	219	326	4.5	114.3
12	14	41/30	0.020	0.51	0.060	1.52	0.670	17.02	295	439	5.0	127.0
16	14	41/30	0.020	0.51	0.060	1.52	0.680	17.27	375	558	5.5	139.7
22	14	41/30	0.020	0.51	0.060	1.52	0.785	19.94	495	436	6.0	152.4
6	12	65/30	0.020	0.51	0.060	1.52	0.555	14.10	238	354	4.5	114.3
8	12	65/30	0.020	0.51	0.060	1.52	0.635	16.13	300	446	5.0	127.0
12	12	65/30	0.020	0.51	0.060	1.52	0.705	17.91	433	644	5.5	139.7
16	12	65/30	0.020	0.51	0.060	1.52	0.780	19.81	535	796	6.0	152.4
22	12	65/30	0.020	0.51	0.080	2.03	0.945	24.00	789	1174	7.5	190.5

PVC/NYLON/NEOPRENE, Thermoset Flexible Control 600V, UL Type TC



Applications:

These cables are uesd for trays, conduits and raceways, cranes and hoists, pendant stations, load lifts, platforms and moderate flex applications.

Standard:

Industry Standard:
UL Type TC - 600V

Flame Tests Standard:
IEEE 1202 (70,000 BTU/hr)
IEEE 383 (70,000 BTU/hr)

Other Standard:
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3 Class C

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon)

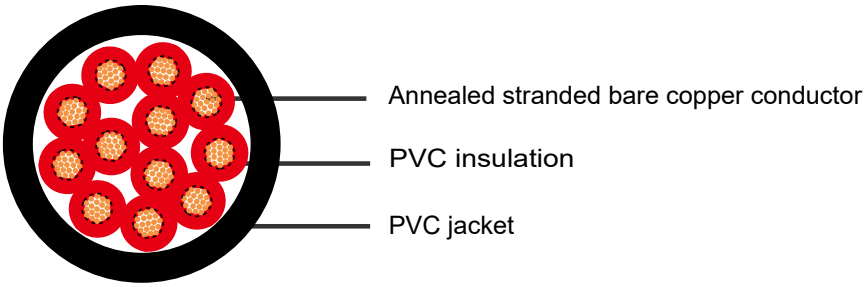
Color-coded: per ICEA method 1: Table E-2 (Does not include white or green)

Jacket: Thermosetting Neoprene

Cable Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	Inches	mm
4	18	19/0.0092	0.020	0.51	0.045	1.14	0.310	7.87	65	97	2.5	63.5
8	18	19/0.0092	0.020	0.51	0.045	1.14	0.420	10.67	116	173	3.3	83.8
10	18	19/0.0092	0.020	0.51	0.045	1.14	0.450	11.43	135	201	3.6	91.5
12	18	19/0.0092	0.020	0.51	0.045	1.14	0.465	11.81	137	204	3.7	94.0
16	18	19/0.0092	0.020	0.51	0.045	1.14	0.515	13.08	175	260	4.1	104.1
19	18	19/0.0092	0.020	0.51	0.060	1.52	0.570	14.48	192	286	4.6	116.8
24	18	19/0.0092	0.020	0.51	0.060	1.52	0.660	16.76	297	442	5.3	134.6
30	18	19/0.0092	0.020	0.51	0.060	1.52	0.695	17.65	345	513	5.6	142.2
4	16	19/0.0117	0.020	0.51	0.045	1.14	0.345	8.76	85	126	2.8	71.1
8	16	19/0.0117	0.020	0.51	0.045	1.14	0.465	11.81	153	228	3.7	94.0
10	16	19/0.0117	0.020	0.51	0.045	1.14	0.500	12.70	179	266	4.0	101.6
12	16	19/0.0117	0.020	0.51	0.045	1.14	0.520	13.21	186	277	4.2	106.7
16	16	19/0.0117	0.020	0.51	0.045	1.14	0.605	15.37	257	382	4.8	121.9
19	16	19/0.0117	0.020	0.51	0.060	1.52	0.635	16.13	320	476	5.1	129.5
24	16	19/0.0117	0.020	0.51	0.060	1.52	0.735	18.67	403	600	5.9	149.9
30	16	19/0.0117	0.020	0.51	0.060	1.52	0.775	19.69	476	708	6.2	157.5
4	14	19/0.0147	0.020	0.51	0.045	1.14	0.375	9.53	117	174	3.0	76.2
8	14	19/0.0147	0.020	0.51	0.045	1.14	0.485	12.32	181	269	3.9	99.1
10	14	19/0.0147	0.020	0.51	0.060	1.52	0.595	15.11	270	402	4.8	121.9
12	14	19/0.0147	0.020	0.51	0.060	1.52	0.615	15.62	278	414	4.9	124.5
16	14	19/0.0147	0.020	0.51	0.060	1.52	0.675	17.15	353	525	5.4	137.2
19	14	19/0.0147	0.020	0.51	0.060	1.52	0.710	18.03	449	668	5.7	144.8
24	14	19/0.0147	0.020	0.51	0.060	1.52	0.825	20.96	565	841	6.6	167.6
30	14	19/0.0147	0.020	0.51	0.080	2.03	0.920	23.37	727	1082	7.4	188.0
4	12	19/0.0185	0.020	0.51	0.045	1.14	0.420	10.67	157	234	3.4	86.4
8	12	19/0.0185	0.020	0.51	0.060	1.52	0.575	14.61	272	405	4.6	116.9
10	12	19/0.0185	0.020	0.51	0.060	1.52	0.670	17.02	369	549	5.4	137.2
12	12	19/0.0185	0.020	0.51	0.060	1.52	0.690	17.53	389	579	5.5	139.7
16	12	19/0.0185	0.020	0.51	0.060	1.52	0.765	19.43	503	749	6.1	155.0
19	12	19/0.0185	0.020	0.51	0.060	1.52	0.805	20.45	638	949	6.5	165.1
24	12	19/0.0185	0.020	0.51	0.080	2.03	0.980	24.89	841	1252	7.8	198.1
30	12	19/0.0185	0.020	0.51	0.080	2.03	1.040	26.42	1017	1513	8.3	210.8

PVC/NYLON/NITRILE/PVC, Thermoset Continuous Flexing Control 600V, UL Type TC/CSA AWM



Applications:

These cables are used for robots, machine tools, car body and vehicle assembly, material handling equipment and power tracks. Any continuous flexing application requiring a small diameter flexible cable.

Standard:

Industry Standard:

UL Type TC/CSA AWM

Flame Tests Standard:

IEEE 1202 (70,000 BTU/hr)
IEEE 383 (70,000 BTU/hr)

Other Standard:

Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3 Class M.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

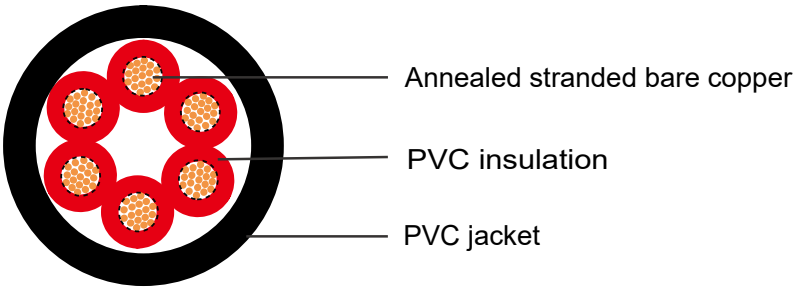
Color-coded: all conductors red, except #2 is white, the last conductor in each construction is green/yellow. All with alpha-numeric designations.

Jacket: Thermosetting Nitrile/Polyvinyl Chloride (PVC).

Cable Prameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	Inches	mm
11	16	65/34	0.020	0.51	0.060	1.52	0.580	14.73	190	283	4.50	114.3
12	16	65/34	0.020	0.51	0.060	1.52	0.580	14.73	195	290	4.50	114.3
16	16	65/34	0.020	0.51	0.060	1.52	0.635	16.13	251	374	5.00	127.0
17	16	65/34	0.020	0.51	0.060	1.52	0.670	17.02	275	409	5.25	133.4
19	16	65/34	0.020	0.51	0.060	1.52	0.705	17.91	304	452	5.50	139.7
21	16	65/34	0.020	0.51	0.060	1.52	0.770	19.56	339	504	6.00	152.4
22	16	65/34	0.020	0.51	0.060	1.52	0.770	19.56	346	515	6.00	152.4
25	16	65/34	0.020	0.51	0.060	1.52	0.815	22.70	401	597	6.50	165.1
31	16	65/34	0.020	0.51	0.080	2.03	0.890	22.61	483	719	7.00	177.8
33	16	65/34	0.020	0.51	0.080	2.03	0.890	22.61	506	753	7.00	177.8
41	16	65/34	0.020	0.51	0.080	2.03	0.975	24.77	622	922	7.75	196.8
42	16	65/34	0.020	0.51	0.080	2.03	0.975	24.77	629	932	7.75	196.8
47	16	65/34	0.020	0.51	0.080	2.03	1.025	26.04	684	1018	8.25	209.6
49	16	65/34	0.020	0.51	0.080	2.03	1.055	26.80	724	1077	8.50	215.9
60	16	65/34	0.020	0.51	0.080	2.03	1.125	28.58	851	1266	9.00	228.6
65	16	65/34	0.020	0.51	0.080	2.03	1.180	29.97	927	1380	9.50	241.3

PVC/NYLON/PVC, Thermoplastic Flexible Control 600V, UL Type MTW/CSA AWM



Applications:

These cables are used for robots, machine tools, car body and vehicle assembly, material handling equipment and power tracks. Any continuous flexing application requiring a small diameter flexible cable.

Standard:

Industry Standard:

UL Type MTW/CSA AWM

Other Standard:

Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method
RoHS compliant

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3.

Class M-18 AWG thru 16 AWG.

Class K-14 AWG thru 10 AWG.

Stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

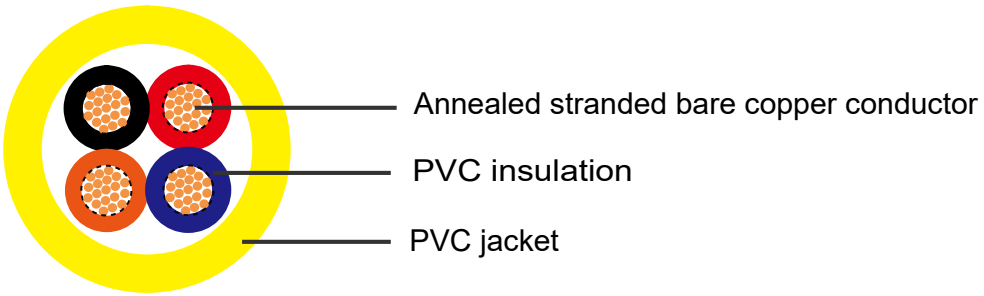
Color-coded: all conductors red, except #2 is white and #3 is green. All with alpha-numeric designations.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight		Min. Bend LBS/ Radius	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	Inches	mm
6	18	41/34	0.020	0.51	0.045	1.14	0.400	10.16	88	131	3.0	76.2
8	18	41/34	0.020	0.51	0.045	1.14	0.455	11.56	108	161	3.5	88.9
12	18	41/34	0.020	0.51	0.045	1.14	0.500	12.70	144	214	4.0	101.6
16	18	41/34	0.020	0.51	0.060	1.52	0.580	14.73	196	292	4.5	114.3
22	18	41/34	0.020	0.51	0.060	1.52	0.660	16.76	252	375	5.0	127.0
31	18	41/34	0.020	0.51	0.060	1.52	0.760	19.30	325	484	6.0	152.4
41	18	41/34	0.020	0.51	0.080	2.03	0.890	22.61	460	685	7.0	177.8
60	18	41/34	0.020	0.51	0.080	2.03	1.010	25.65	617	918	8.0	203.2
6	16	65/34	0.020	0.51	0.045	1.14	0.440	11.18	113	168	3.5	88.9
8	16	65/34	0.020	0.51	0.045	1.14	0.500	12.70	141	210	4.0	101.6
12	16	65/34	0.020	0.51	0.060	1.52	0.585	14.86	214	318	4.5	114.3
16	16	65/34	0.020	0.51	0.060	1.52	0.640	16.26	263	391	5.0	127.0
22	16	65/34	0.020	0.51	0.060	1.52	0.735	18.67	377	561	5.5	139.7
31	16	65/34	0.020	0.51	0.060	1.52	0.845	21.46	518	771	6.5	165.1
41	16	65/34	0.020	0.51	0.080	2.03	0.995	25.27	652	970	8.0	203.2
60	16	65/34	0.020	0.51	0.080	2.03	1.125	28.58	909	1353	9.0	228.2
6	14	41/30	0.020	0.51	0.045	1.14	0.470	11.94	149	222	3.5	88.9
8	14	41/30	0.020	0.51	0.060	1.52	0.570	14.48	204	304	4.5	114.3
12	14	41/30	0.020	0.51	0.060	1.52	0.630	16.00	279	415	5.0	127.0
16	14	41/30	0.020	0.51	0.060	1.52	0.690	17.53	354	527	5.5	139.7
22	14	41/30	0.020	0.51	0.060	1.52	0.795	20.19	467	695	6.0	152.4
6	12	65/30	0.020	0.51	0.060	1.52	0.565	14.35	226	336	4.5	114.3
8	12	65/30	0.020	0.51	0.060	1.52	0.645	16.38	289	430	5.0	127.0
12	12	65/30	0.020	0.51	0.060	1.52	0.715	18.16	398	592	5.5	139.7
6	10	105/30	0.026	0.66	0.060	1.52	0.665	16.89	329	490	5.0	127.0
8	10	105/30	0.026	0.66	0.060	1.52	0.765	19.43	424	631	6.0	152.4
12	10	105/30	0.026	0.66	0.080	2.03	0.895	22.73	604	899	7.0	177.8
16	10	105/30	0.026	0.66	0.080	2.03	1.155	29.34	852	1268	9.0	228.6

PVC/PVC, Thermoplastic Extreme Flexing Festoon Control and Power 600V, UL/CSA Type Festoon



Applications:

These cables are used for robots, cranes and hoists, festooning systems, conveyors, telescoping jetways, tracks systems. Any continuous flexing application requiring a small diameter flexible cable.

Standard:

Industry Standard:
UL listed/CSA certified flat festoon cable
Flame Tests Standard:
UL VW-1/CSA FT1
Other Standard:
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3.

Class M - 16 AWG.

Class K - 14 AWG thru 2 AWG.

Stranding per ASTM B8.

Insulation: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Table E-2 (does not include white or green). All with

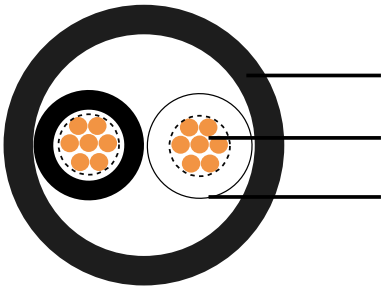
alpha-numeric designations.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option -yellow or black.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km
4	16	65/34	0.030	0.76	0.035	0.89	0.200 x 0.580	5.1 x 14.73	31.92	47.05	91	135
8	16	65/34	0.030	0.76	0.035	0.89	0.200 x 1.110	5.1 x 28.20	63.84	95.00	173	257
12	16	65/34	0.030	0.76	0.035	0.89	0.200 x 1.605	5.1 x 40.77	95.76	142.50	253	377
4	14	41/30	0.030	0.76	0.035	0.89	0.210 x 0.710	5.33 x 18.54	51.52	76.67	116	173
8	14	41/30	0.030	0.76	0.035	0.89	0.210 x 1.175	5.33 x 29.85	103.04	153.33	224	333
12	14	41/30	0.030	0.76	0.035	0.89	0.210x1.700	5.33 x 43.18	154.56	230.00	330	491
4	12	65/30	0.030	0.76	0.035	0.89	0.230 x 0.710	5.84 x 18.54	83.04	123.57	160	238
5	12	65/30	0.030	0.76	0.035	0.89	0.230 x 0.865	5.84 x 21.97	103.80	154.47	195	290
7	12	65/30	0.030	0.76	0.035	0.89	0.230 x 1.340	5.84 x 34.04	145.32	216.25	271	403
8	12	65/30	0.030	0.76	0.035	0.89	0.230 x 1.650	5.84 x 41.91	166.08	247.14	307	457
4	10	105/30	0.030	0.76	0.045	1.14	0.270 x 0.880	6.86 x 22.35	132.32	196.91	241	359
4	8	168/30	0.045	1.14	0.045	1.14	0.365 x 1.190	9.27 x 30.23	212.40	316.07	405	603
4	6	266/30	0.060	1.52	0.045	1.14	0.430 x 1.450	10.92 x 36.83	332.88	495.36	612	911
5	6	266/30	0.060	1.52	0.045	1.14	0.430 x 1.735	10.92 x 44.07	416.10	619.20	747	1112
4	2	665/30	0.060	1.52	0.045	1.14	0.560 x 1.955	14.23 x 49.66	852.00	1267.86	1273	1894

XLPE/HYP, Control, Unshielded 600V, UL Type TC—E-1/ E-2 Color Code



Applications:

These cables are used in free air, raceways or direct burial, wet or dry locations. Also permitted for use in Class I, Div. 2 industrial hazardous locations per NEC Article 501 and Class 1 circuits per NEC.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC
UL 1581
ICEA S-73-532
ICEA S-95-658/NEMA WC70

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded tinned copper per ASTM B33 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per ICEA Method 1; Table E-2/ Table E-1 .

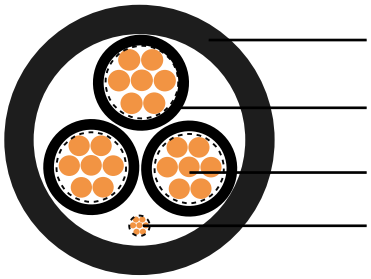
Jacket: Low-lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	14	7/0.0242	0.030	0.76	0.045	1.14	0.230 x 0.365	5.84 x 9.27	68	101
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.370	9.40	75	112
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	95	141
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	118	176
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.465	11.81	143	213
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.505	12.83	179	266
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	249	371
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.700	17.78	317	472
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.815	20.70	467	695
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.130	28.70	899	1338
2 Flat	12	7/0.0305	0.030	0.76	0.045	1.14	0.250 x 0.400	6.35 x 10.16	85	126
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	98	146
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.435	11.05	127	189
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.475	12.07	160	238
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.520	13.21	194	289
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	264	393
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	345	513
12	12	7/0.0305	0.030	0.76	0.080	2.03	0.780	19.81	435	647
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.955	24.26	690	1027

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.265	32.13	1393	2073
2 Flat	10	7/0.0385	0.030	0.76	0.045	1.14	0.270 x 0.445	6.86 x 11.30	117	174
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.455	5.26	126	188
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	176	262
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.560	14.22	240	357
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.62	291	433
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.02	376	560
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.765	19.43	456	679
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.905	22.99	636	946

XLPE/HYP, Low-Voltage Power, Unshielded 600V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are permitted for Exposed Run 'ER' use in accordance with NEC for 2 AWG and larger.

Standard:

Industry Standard:

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

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

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.

Ground: Uninsulated tinned annealed copper per ASTM B3 class B.

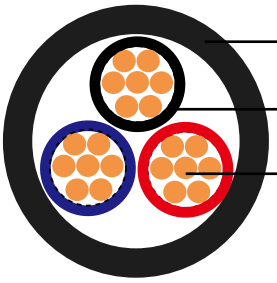
Jacket: Low-lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.030	0.76	0.045	1.14	0.425	10.80	118	176
3	12	7/0.0305	12	0.030	0.76	0.060	1.52	0.475	12.07	160	238
3	10	7/0.0385	10	0.030	0.76	0.060	1.52	0.526	14.22	240	357
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.660	16.76	223	332
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.725	18.42	421	627
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.745	18.92	481	716
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.820	20.83	600	893
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.890	22.61	702	1045
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.975	24.77	882	1313
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.020	25.91	1024	1524
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.120	28.45	1295	1927
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1199	1784
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1704	2536
3	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.240	31.50	1505	2240
4	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.330	33.78	1830	2723
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.340	34.04	1810	2694
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.480	37.59	2326	3462
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2437	3627
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	3123	4648
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.575	40.01	2725	4055
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.765	44.83	3909	5817
3	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.755	44.58	3605	5365
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.935	49.15	4571	6803
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.010	51.05	4423	6582
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.180	55.37	6068	9030

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.305	58.55	6097	9074
4	500	37/0.1162	2	0.065	1.65	0.130	3.55	2.555	64.90	7905	11764

FR-EPR/HYP, Control, Unshielded 600V, UL Type TC (18 AWG-10 AWG)—E-2 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are used at temperature as low as -35°C.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-73-532
ICEA S-95-658/NEMA WC70

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II.

Color-coded: per ICEA Method 1; Table E-2 (does not include white or green).

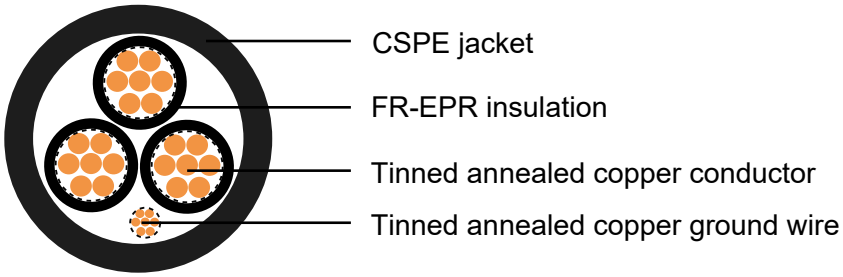
Jacket: Low-lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	18	7/0.0152	0.025	0.64	0.045	1.14	0.192 x 0.290	4.88 x 7.37	37	55
2	18	7/0.0152	0.025	0.64	0.045	1.14	0.295	7.49	45	67
3	18	7/0.0152	0.025	0.64	0.045	1.14	0.310	7.88	55	82
4	18	7/0.0152	0.025	0.64	0.045	1.14	0.340	8.64	67	100
5	18	7/0.0152	0.025	0.64	0.045	1.14	0.365	9.27	79	118
7	18	7/0.0152	0.025	0.64	0.045	1.14	0.395	10.03	97	144
9	18	7/0.0152	0.025	0.64	0.045	1.14	0.455	11.56	123	183
10	18	7/0.0152	0.025	0.64	0.045	1.14	0.485	12.32	137	204
12	18	7/0.0152	0.025	0.64	0.045	1.14	0.510	12.95	153	228
15	18	7/0.0152	0.025	0.64	0.060	1.52	0.580	14.73	202	301
19	18	7/0.0152	0.025	0.64	0.060	1.52	0.625	15.88	243	362
25	18	7/0.0152	0.025	0.64	0.060	1.52	0.720	18.29	301	448
30	18	7/0.0152	0.025	0.64	0.060	1.52	0.770	19.56	345	513
37	18	7/0.0152	0.025	0.64	0.060	1.52	0.830	21.08	414	616
2 Flat	16	7/0.0192	0.025	0.64	0.045	1.14	0.204 x 0.314	5.18 x 7.98	46	68
2	16	7/0.0192	0.025	0.64	0.045	1.14	0.320	8.13	55	82
3	16	7/0.0192	0.025	0.64	0.045	1.14	0.340	8.67	69	130
4	16	7/0.0192	0.025	0.64	0.045	1.14	0.365	9.27	85	126
5	16	7/0.0192	0.025	0.64	0.045	1.14	0.400	10.20	102	152
7	16	7/0.0192	0.025	0.64	0.045	1.14	0.430	10.90	127	189
9	16	7/0.0192	0.025	0.64	0.045	1.14	0.500	12.70	162	241
10	16	7/0.0192	0.025	0.64	0.060	1.52	0.565	14.40	197	293
12	16	7/0.0192	0.025	0.64	0.060	1.52	0.590	14.97	221	329
15	16	7/0.0192	0.025	0.64	0.060	1.52	0.640	16.26	270	402
19	16	7/0.0192	0.025	0.64	0.060	1.52	0.690	17.53	327	487
25	16	7/0.0192	0.025	0.64	0.060	1.52	0.795	20.19	424	631
30	16	7/0.0192	0.025	0.64	0.080	2.03	0.890	22.61	508	756
37	16	7/0.0192	0.025	0.64	0.080	2.03	0.955	24.26	609	906

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	14	7/0.0242	0.030	0.76	0.045	1.14	0.230 x0 .365	5.84 x 9.27	68	101
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.370	9.40	76	113
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	97	144
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	120	179
5	14	7/0.0242	0.030	0.76	0.045	1.14	0.465	11.81	145	216
7	14	7/0.0242	0.030	0.76	0.045	1.14	0.505	12.83	183	272
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	254	378
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.700	17.78	323	481
19	14	7/0.0242	0.030	0.76	0.060	1.52	0.815	20.71	477	710
25	14	7/0.0242	0.030	0.76	0.080	2.03	1.000	25.40	645	960
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.050	26.70	746	1110
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.130	28.71	919	1368
2 Flat	12	7/0.0305	0.030	0.76	0.045	1.14	0.250 x0 .400	6.35 x 10.16	88	131
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	99	147
3	12	7/0.0305	0.030	0.76	0.045	1.14	0.435	11.05	129	192
4	12	7/0.0305	0.030	0.76	0.045	1.14	0.475	12.07	163	243
5	12	7/0.0305	0.030	0.76	0.045	1.14	0.520	13.21	198	295
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	269	400
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	351	522
12	12	7/0.0305	0.030	0.76	0.060	1.52	0.780	19.81	443	659
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.955	24.26	703	1046
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.115	28.32	875	1302
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.150	29.21	1017	1513
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.240	31.50	1421	2115
2 Flat	10	7/0.0385	0.030	0.76	0.045	1.14	0.270 x0 .445	6.86 x 11.30	119	177
2	10	7/0.0385	0.030	0.76	0.045	1.14	0.455	11.6	134	199
3	10	7/0.0385	0.030	0.76	0.045	1.14	0.485	12.3	178	265
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.560	14.2	243	362
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.6	295	439
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.0	382	568
9	10	7/0.0385	0.030	0.76	0.060	1.52	0.765	19.4	492	732
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.905	23.0	662	985

FR-EPR/HYP, Low-Voltage Power, Unshielded 600V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are permitted for Exposed Run 'ER' use in accordance with NEC for 2 AWG and larger.

Standard:

Industry Standard:

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

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductors: Tinned, annealed copper per ASTM B33 class B.

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.

Ground: Uninsulated tinned annealed copper per ASTM B33 class B.

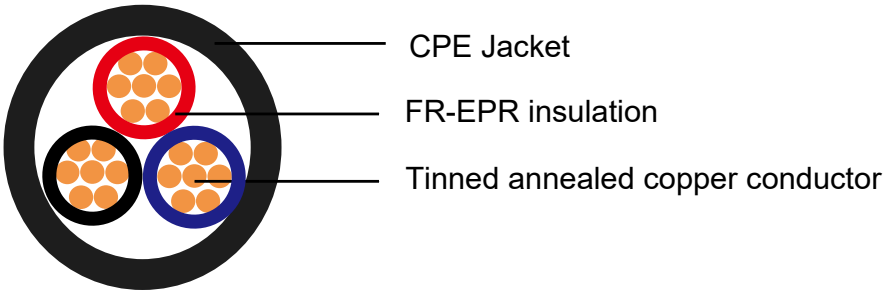
Jacket: Low-lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.030	0.76	0.045	1.14	0.425	10.80	118	176
3	12	7/0.0305	12	0.030	0.76	0.060	1.52	0.475	12.07	160	238
3	10	7/0.0385	10	0.030	0.76	0.060	1.52	0.526	14.22	240	357
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.660	16.76	223	332
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.725	18.42	421	627
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.745	18.92	481	716
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.820	20.83	600	893
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.890	22.61	702	1045
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.975	24.77	882	1313
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.020	25.91	1024	1524
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.120	28.45	1295	1927
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1199	1784
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1704	2536
3	1/0	19/0.0740	6	0.055	1.40	0.080	2.03	1.240	31.50	1505	2240
4	1/0	19/0.0740	6	0.055	1.40	0.080	2.03	1.330	33.78	1830	2723
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.340	34.04	1810	2694
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.480	37.59	2326	3462
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2437	3627
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	3123	4648
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.03	1.575	40.01	2725	4055
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.765	44.83	3909	5817
3	25	37/0.0822	4	0.065	1.65	0.110	2.79	1.755	44.58	3605	5365
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.935	49.15	4571	6803
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.010	51.05	4423	6582
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.180	55.37	6068	9030

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.305	58.55	6097	9074
4	500	37/0.1162	2	0.065	1.65	0.130	3.56	2.555	64.90	7905	11764

FR-EPR/CPE, Control, Unshielded 600V, UL Type TC-ER—E-1/E-2 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are permitted for Exposed Run 'ER' use in accordance with NEC for 2 AWG and larger.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
ICEA S-73-532

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded tinned copper per ASTM B33 class B.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II.

Color-coded: per ICEA Method 1; Table E-1,Table E-2.

Jacket: Flame-retardant thermoplastic Chlorinated Polyethylene (CPE).

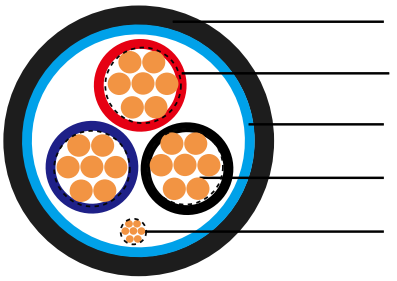
Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km
2 Flat	14	7/0.0242	0.030	0.76	0.045	1.14	0.365 x 0.230	9.30 x 5.80	26	38	61	91
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.370	9.40	26	39	71	106
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	39	59	92	137
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	53	78	115	171
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.465	11.81	66	98	139	207
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.505	12.83	92	137	173	257
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	118	176	240	357
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.700	17.78	158	235	301	448
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.815	20.70	250	372	468	696
25	14	7/0.0242	0.030	0.76	0.080	2.03	0.935	23.75	323	481	624	929
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.030	26.16	387	576	747	1112
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.110	28.19	466	694	875	1302
2 Flat	12	7/0.0305	0.030	0.76	0.045	1.14	0.400 x 0.245	10.20 x 6.20	40	60	82	122
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	41	61	94	140
3+ Grnd	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	85	127	148	220
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.435	11.05	64	95	124	185
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.475	12.07	85	127	157	234
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.520	13.21	106	158	191	284
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	149	221	268	399
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	191	285	337	502
12	12	7/0.0305	0.030	0.76	0.080	2.03	0.765	19.43	247	368	428	637
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.940	23.88	391	582	688	1024
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.095	27.81	515	767	854	1271
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.150	29.21	618	920	1002	1491
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.240	31.50	762	1134	1240	1845
2 Flat	10	7/0.0385	0.030	0.76	0.060	1.52	0.445 x0.270	11.30 x 6.90	64	95	113	168
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.455	11.56	65	97	128	190

Multi Conductor Control & Power Cables

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km
3+ Grnd	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	134	199	225	335
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	100	150	172	256
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.560	14.22	134	199	234	348
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.62	167	249	284	423
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.02	234	349	381	567
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.760	19.30	295	440	464	691
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.905	22.99	402	598	651	696

FR-EPR/CPE, Control, Shielded 600V, UL Type TC-ER, Overall Shielded—E-2 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are permitted for Exposed Run 'ER' use in accordance with NEC.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
ICEA S-73-532

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded tinned copper per ASTM B33 class B.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II.

Color-coded: per ICEA Method 1; Table E-2 (Does not include white or green).

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

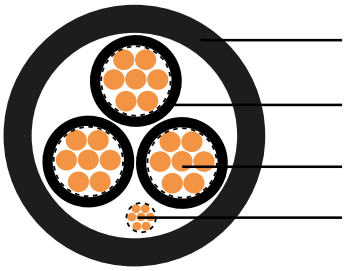
Jacket: Flame-retardant Thermoplastic Chlorinated Polyethylene (CPE).

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.375	9.53	29	43	74	110
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.395	10.03	42	63	95	141
4	14	7/0.0242	0.030	0.76	0.060	1.52	0.430	10.92	55	82	118	176
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.470	11.94	68	101	142	211
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.510	12.95	94	140	176	262
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.625	15.88	121	180	243	362
12	14	7/0.0242	0.030	0.76	0.080	2.03	0.705	17.91	160	238	304	452
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.820	20.83	252	375	471	701
25	14	7/0.0242	0.030	0.76	0.080	2.03	0.940	25.53	325	484	627	933
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.035	26.29	389	579	750	1116
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.115	28.32	468	696	878	1307
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.415	10.45	43	64	97	144
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.440	11.18	66	98	127	189
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.480	12.19	87	129	160	238
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.525	13.34	108	162	194	289
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.600	15.24	151	225	271	403
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.700	17.78	193	287	340	506
12	12	7/0.0305	0.030	0.76	0.080	2.03	0.770	19.56	249	371	431	641
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.945	24.00	393	585	691	1028
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.100	27.94	517	769	857	1275
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.155	29.80	620	923	1005	1496
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.245	31.62	764	1137	1243	1850
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.460	11.68	68	101	131	195
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.490	12.45	103	155	175	260
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.565	14.35	136	202	237	353

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Copper Weight		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.620	15.75	170	253	287	427
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.675	17.15	237	353	384	571
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.765	19.43	298	443	467	695
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.910	23.11	404	601	654	973

FR-EPR/CPE, Low-Voltage Power, Unshielded 600V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are uesd in free air, raceways or direct burial, wet or dry locations and Class I Division 2 industrial hazardous locations per NEC. They are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors.

Standard:

Industry Standard:

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

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

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.

Ground: Uninsulated tinned annealed copper per ASTM B3 class B.

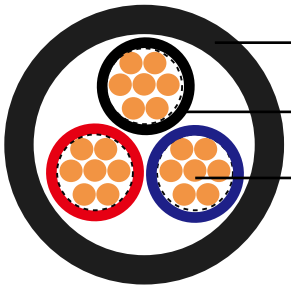
Jacket: Flame-retardant thermoplastic Chlorinated Polyethylene (CPE).

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.030	0.76	0.060	1.52	0.430	10.92	118	176
3	12	7/0.0305	12	0.030	0.76	0.060	1.52	0.480	12.19	160	238
3	10	7/0.0385	10	0.030	0.76	0.060	1.52	0.565	14.35	237	353
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.655	16.64	314	467
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.720	18.29	393	585
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.740	18.80	456	679
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.790	20.07	561	835
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.880	22.35	642	955
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.950	24.13	822	1223
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.010	25.65	979	1457
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.090	27.69	1235	1838
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1021	1594
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1521	2264
3	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.225	31.12	1439	2142
4	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.330	33.78	1820	2709
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.300	33.02	1720	2560
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.440	36.58	2208	3286
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2176	3238
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	2788	3405
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.540	39.12	2614	3890
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.790	45.47	3495	5201
3	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.760	44.70	3184	4738
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.915	48.64	4019	5981
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	1.960	49.78	4187	6231
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.165	5499	5436	8090

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.245	57.02	5847	8702
4	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.475	62.87	7607	11321
3	750	61/0.1109	1	0.080	2.03	0.130	3.55	2.810	71.37	9145	13610
4	750	61/0.1109	1	0.080	2.03	0.130	3.55	3.115	79.12	11805	17569

XLPE/ARCTIC-PVC, Control, Unshielded 600V, UL Type TC-ER, CSA Type RW90 XLPE, CSA TYPE TC



Applications:

These cables are used in industrial lighting, control and signaling circuits. and approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC for UL Type TC cables. In Canada, protection may be required by inspection authority per Canadian electrical code. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors. Approved for cable in tray, industrial hazardous locations, Class I, Zone 2, and Class II, Division 2 per CEC rules 18-156 and 18-252 when used with certified HL glands.

Standard:

Industry Standard:

ICEA S-73-532
ICEA S-95-658/NEMA WC70
UL 44 Type XHHW-2
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
CSA C22.2 No. 38 XLPE RW90
CSA C22.2 No. 230 Type TC

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per CSA Standard C22.2 No. 38 as follows:

Number of color coding of circuit conductors.

NO. of CON. Color Code

2 blk, wht

3 blk, red, blu

4 blk, red, blu, wht

≥5 all black

All conductors for all Constructions are alphanumeric printed

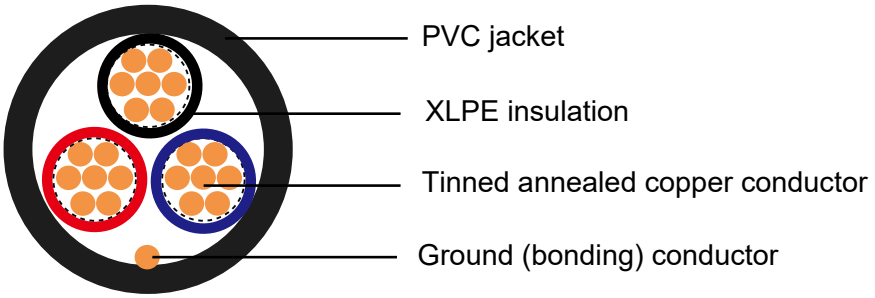
Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.405	10.29	71	106
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	90	134
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	113	168
5	14	7/0.0242	0.030	0.76	0.045	1.14	0.465	11.81	140	208
7	14	7/0.0242	0.030	0.76	0.045	1.14	0.590	14.99	176	262
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	245	365
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.680	17.27	302	449
19	14	7/0.0242	0.030	0.76	0.060	1.52	0.800	20.32	460	685
25	14	7/0.0242	0.030	0.76	0.060	1.52	0.985	25.02	641	954
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.050	26.67	740	1101
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.130	28.70	888	1322
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	96	143
3	12	7/0.0305	0.030	0.76	0.045	1.14	0.435	11.05	125	186

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
4	12	7/0.0305	0.030	0.76	0.045	1.14	0.475	12.07	157	234
5	12	7/0.0305	0.030	0.76	0.045	1.14	0.520	13.21	191	284
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	260	387
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	340	506
12	12	7/0.0305	0.030	0.76	0.060	1.52	0.780	19.81	429	638
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.930	23.62	681	1013
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.095	27.81	885	1317
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.150	29.21	1005	1496
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.240	31.50	1185	1764
2	10	7/0.0385	0.030	0.76	0.045	1.14	0.455	11.56	130	193
3	10	7/0.0385	0.030	0.76	0.045	1.14	0.485	12.32	168	250
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.515	13.08	229	341
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.62	281	418
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.02	377	561
9	10	7/0.0385	0.030	0.76	0.060	1.52	0.785	19.94	479	713
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.895	22.73	644	958

XLPE/ARCTIC-PVC, Low-Voltage Power, Unshielded 600V, UL Type TC-ER, CSA Type RW90 XLPE, CSA TYPE TC



Applications:

These cables are used in industrial lighting, control and signaling circuits. and approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC for UL Type TC cables. In Canada, protection may be required by inspection authority per Canadian electrical code. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors. Approved for cable in tray, industrial hazardous locations, Class I, Zone 2, and Class II, Division 2 per CEC rules 18-156 and 18-252 when used with certified HL glands.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
ICEA S-95-658/NEMA WC70
CSA C22.2 No. 38 RW90 XLPE
CSA C22.2 No. 230 Type TC

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded per CSA Standard C22.2 No. 38 as follows:
Number of color coding of circuit conductors

NO. of CON. Color Code

2 blk, wht

3 blk, red, blu

4 blk, red, blu, wht

≥5 all black

All conductors for all Construction:s are alphanumeric printed.

Ground (Bonding) Conductor: Uninsulated bare annealed copper per ASTM B3 class B.

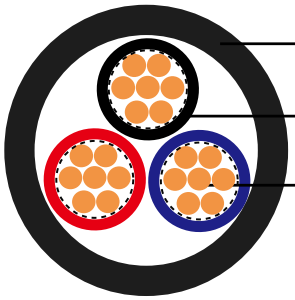
Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.640	16.26	314	467
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.705	17.91	385	573
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.720	18.29	445	662
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.790	20.07	558	830
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.875	22.23	653	972
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.950	24.13	820	1220
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.000	25.40	964	1435
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.095	27.81	1214	1807
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1199	1784
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1704	2536
3	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.215	30.86	1414	2104
4	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.340	34.04	1825	2716

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.310	33.27	1706	2539
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.450	36.83	2223	3308
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2437	3627
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	3123	4648
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.540	39.12	2600	3869
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.765	44.83	3444	5125
3	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.750	44.45	3142	4676
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.930	49.02	4048	6024
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	1.970	50.04	4230	6295
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.180	55.37	5470	8140
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.250	57.15	5829	8675

XLPE/PVC, Control, Unshielded 600V, UL Type TC-ER—E-2 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
ICEA S-73-532
ICEA S-95-658/NEMA WC 70

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per ICEA Method 1; Table E-2 (Does not include white or green).

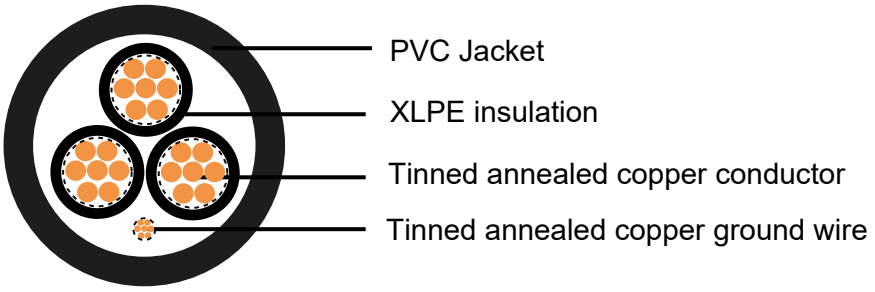
Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	14	7/0.0242	0.030	0.76	0.045	1.14	0.235 x 0.370	5.97 x 9.40	62	92
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.365	9.27	73	109
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	93	138
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	116	173
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.465	11.81	140	208
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.590	14.99	176	262
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	245	365
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.680	17.27	302	449
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.800	20.32	460	685
25	14	7/0.0242	0.030	0.76	0.080	2.03	0.985	25.02	641	954
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.050	26.67	740	1101
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.130	28.70	888	1322
2 Flat	12	7/0.0305	0.030	0.76	0.045	1.14	0.245 x0 .400	6.22 x 10.16	86	128
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	96	143
3+ Grnd	12	7/0.0305	0.030	0.76	0.060	1.52	0.435	11.05	143	213
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.435	11.05	125	186
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.475	12.07	157	234
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.515	13.08	191	284
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	260	387
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	340	506
12	12	7/0.0305	0.030	0.76	0.060	1.52	0.780	19.81	429	638
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.930	23.62	681	1013
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.095	27.81	885	1317
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.150	29.21	1005	1496
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.240	31.50	1185	1764
2 Flat	10	7/0.0385	0.030	0.76	0.045	1.14	0.290 x 0.480	7.37 x 12.19	114	170
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.455	11.56	130	193

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3+ Grnd	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	201	299
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	173	257
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.515	13.08	236	351
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.62	287	427
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.02	371	552
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.785	19.94	479	713
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.895	22.73	644	958

XLPE/PVC, Low-Voltage Power, Unshielded 600V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC.

Standard:

Industry Standard:

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

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

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.

Ground: Uninsulated bare annealed copper per ASTM B33 class B.

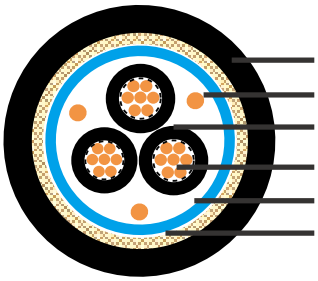
Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.030	0.76	0.045	1.14	0.425	10.80	116	173
3	12	7/0.0305	12	0.030	0.76	0.060	1.52	0.475	12.07	157	234
3	10	7/0.0385	10	0.030	0.76	0.060	1.52	0.515	13.08	236	351
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.640	16.26	314	467
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.705	17.91	385	573
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.720	18.29	445	662
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.790	20.07	558	830
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.875	22.23	653	972
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.950	24.13	820	1220
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.000	25.40	964	1435
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.095	27.81	1214	1807
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1199	1784
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1704	2536
3	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.215	30.86	1414	2104
4	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.340	34.04	1825	2716
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.310	33.27	1706	2539
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.450	36.83	2223	3308
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2437	3627
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	3123	4648
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.540	39.12	2600	3869
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.765	44.83	3444	5125
3	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.750	44.45	3142	4676
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.930	49.02	4048	6024
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	1.970	50.04	4230	6295
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.180	55.37	5470	8140
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.250	57.15	5829	8675

NO. of CON.	CON. Size (AWG)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
4	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.475	62.87	7579	11279
3	750	61/0.1109	1	0.080	2.03	0.130	3.55	2.810	71.37	9101	13544
4	750	61/0.1109	1	0.080	2.03	0.130	3.55	3.115	79.12	11746	17480

XLPE/PVC, Power, Shielded 2000V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are used for AC motors controlled by Pulse Width Modulated Inverter in VFD applications rated up to 2000 volts. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction and raceways, cable trays or direct burial. Also they are applied in wet or dry locations, permitted for use in Class 1, Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC-ER
UL Type RHH or RHW-2 conductors per UL 44

Flame Test Standard:

IEEE 383
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed tinned stranded copper class B stranding per ASTM B8.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE)—90°C, VW-1.

Color-coded: per ICEA Method 4; Individual conductors colored black with conductor number surface printed in contrasting ink.

Ground: 3 symmetrically placed annealed tinned copper conductors in direct contact with shield, class B stranding per ASTM B8.

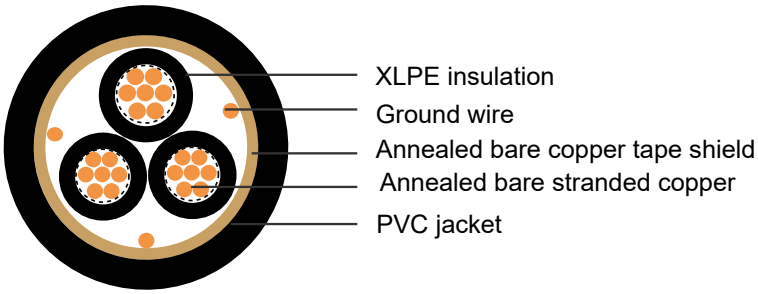
Dual Shield: Overall tinned copper braided shield in conjunction with an aluminum/ polymer tape shield.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	18	0.060	1.52	0.060	1.52	0.565	14.35	190	283
3	12	7/0.0305	16	0.060	1.52	0.060	1.52	0.605	15.37	236	351
3	10	7/0.0385	14	0.060	1.52	0.060	1.52	0.665	16.89	313	466
3	8	7/0.0486	14	0.070	1.78	0.080	2.03	0.785	19.94	420	625
3	6	7/0.0612	12	0.070	1.78	0.080	2.03	0.910	23.11	605	900
3	4	7/0.0772	12	0.070	1.78	0.080	2.03	1.010	25.65	800	1191
3	2	7/0.0974	10	0.070	1.78	0.080	2.03	1.315	28.83	1126	1676
3	1/0	19/0.0745	6	0.090	2.29	0.080	2.03	1.390	35.31	1832	2726
3	2/0	19/0.0837	6	0.090	2.29	0.080	2.03	1.490	37.85	2134	3175
3	3/0	19/0.0940	5	0.090	2.29	0.080	2.79	1.595	40.51	2553	3799
3	4/0	19/0.1055	4	0.090	2.29	0.110	2.79	1.775	45.09	3254	4842
3	250	37/0.0822	4	0.105	2.67	0.110	2.79	1.940	49.28	3726	5544
3	350	37/0.0973	2	0.105	2.67	0.110	2.79	2.160	54.86	5040	7500
3	500	37/0.1162	1	0.105	2.67	0.110	2.79	2.440	61.98	6809	10132

XLPE/PVC, Power, Copper Tape Shielded 2000V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are used for AC motors controlled by Pulse Width Modulated Inverter in VFD applications rated up to 2000V. These motor drive systems require cables that are designed to prevent radio frequency interference (RFI) which can lead to malfunction . Also they are applied in raceways, cable trays or direct burial, wet or dry locations, permitted for use in Class 1, Division 2 industrial hazardous locations.

Standard:

Industry Standard:
UL 1277 Type TC-ER, 2000V
UL Type RHH or RHW-2 conductors per UL 44
Flame Test Standard:
IEEE 383
IEEE 1202
Other Standard:
EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed bare stranded copper, class B stranding per ASTM B8.
Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE)—90°C, VW-1.
Color-coded: per ICEA Method 4; Individual conductors colored black with conductor

number surface printed in contrasting ink.

Ground: 3 symmetrically placed annealed bare copper conductors in direct contact with shield, class B stranding per ASTM B8.

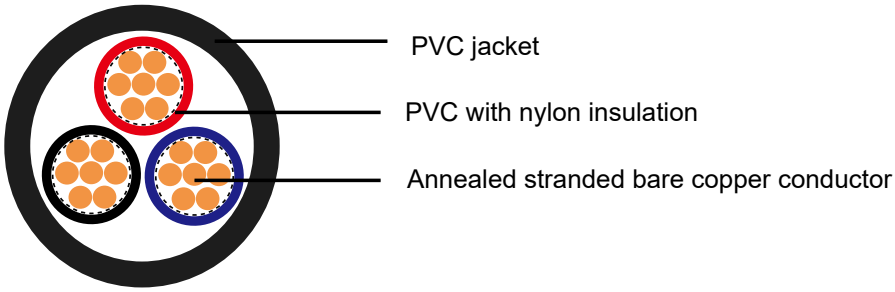
Metallic Shield: Overall 5 mil annealed bare copper tape shield with 50% overlap.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	18	0.060	1.52	0.060	1.52	0.580	14.73	212	315
3	12	7/0.0305	16	0.060	1.52	0.060	1.52	0.615	15.37	260	387
3	10	7/0.0385	14	0.060	1.52	0.060	1.52	0.670	17.02	329	490
3	8	7/0.0486	14	0.070	1.78	0.080	2.03	0.770	19.56	441	656
3	6	7/0.0612	12	0.070	1.78	0.080	2.03	0.895	22.73	618	920
3	4	7/0.0772	12	0.070	1.78	0.080	2.03	0.995	25.27	830	1235
3	2	7/0.0974	10	0.070	1.78	0.080	2.03	1.125	28.58	1152	1714
3	1/0	19/0.0745	6	0.090	2.29	0.080	2.03	1.385	35.18	1853	2757
3	2/0	19/0.0837	6	0.090	2.29	0.080	2.03	1.480	37.59	2169	3227
3	3/0	19/0.0940	5	0.090	2.29	0.110	2.79	1.590	40.39	2619	3897
3	4/0	19/0.1055	4	0.090	2.29	0.110	2.79	1.780	45.21	3241	4823
3	250	37/0.0822	4	0.105	2.67	0.110	2.79	1.940	49.28	3763	5599
3	350	37/0.0973	2	0.105	2.67	0.110	2.79	2.160	54.86	5109	7602
3	500	37/0.1162	1	0.105	2.67	0.110	2.79	2.455	62.36	6933	10316

PVC/NYLON/PVC, Control, Unshielded 600V, UL Type TC-ER (18 AWG/10 AWG)—E-2 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC.

Standard:

Industry Standard:

UL 66 NEC Type TFN conductor (18through 16 AWG)
UL 83 NEC Type THHN/THWN conductors (14 through 10 AWG)
UL 1277 Type TC-ER for 3 or more conductors
UL 1581
ICEA S-95-658

Flame Tests Standard:

UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded bare copper to ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

Color-coded: per ICEA Method 1; Table E-2 plus alpha-numeric printed numbers (Does not include white or green).

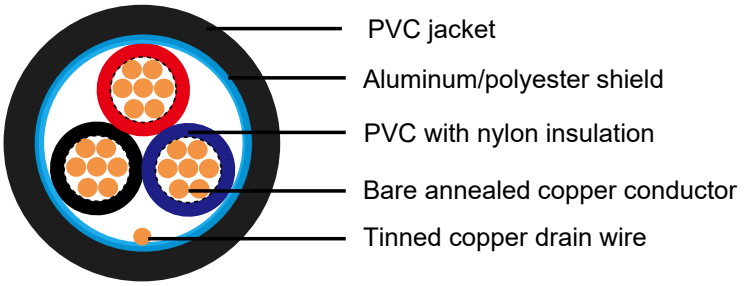
Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	18	7/0.0152	0.015	0.38	0.045	1.14	0.190 x 0.285	4.80 x 7.20	36	54
2	18	7/0.0152	0.015	0.38	0.045	1.14	0.270	6.86	38	57
3	18	7/0.0152	0.015	0.38	0.045	1.14	0.285	7.24	46	68
4	18	7/0.0152	0.015	0.38	0.045	1.14	0.310	7.87	56	83
5	18	7/0.0152	0.015	0.38	0.045	1.14	0.335	8.51	65	97
7	18	7/0.0152	0.015	0.38	0.045	1.14	0.360	9.14	82	122
9	18	7/0.0152	0.015	0.38	0.045	1.14	0.420	10.67	105	156
10	18	7/0.0152	0.015	0.38	0.045	1.14	0.425	10.80	114	170
12	18	7/0.0152	0.015	0.38	0.045	1.14	0.445	11.30	131	195
15	18	7/0.0152	0.015	0.38	0.045	1.14	0.485	12.32	162	241
19	18	7/0.0152	0.015	0.38	0.060	1.52	0.570	14.48	209	311
25	18	7/0.0152	0.015	0.38	0.060	1.52	0.655	16.64	266	396
30	18	7/0.0152	0.015	0.38	0.060	1.52	0.695	17.65	310	461
37	18	7/0.0152	0.015	0.38	0.060	1.52	0.745	18.92	371	552
2 Flat	16	7/0.0192	0.015	0.38	0.045	1.14	0.200 x 0.310	5.08 x 7.87	42	71
2	16	7/0.0192	0.015	0.38	0.045	1.14	0.300	7.62	50	74
3	16	7/0.0192	0.015	0.38	0.045	1.14	0.315	8.00	60	89
4	16	7/0.0192	0.015	0.38	0.045	1.14	0.340	8.64	74	110
5	16	7/0.0192	0.015	0.38	0.045	1.14	0.370	9.40	97	144
7	16	7/0.0192	0.015	0.38	0.045	1.14	0.400	10.16	111	165
9	16	7/0.0192	0.015	0.38	0.045	1.14	0.460	11.68	141	210
10	16	7/0.0192	0.015	0.38	0.045	1.14	0.495	12.57	154	229
12	16	7/0.0192	0.015	0.38	0.045	1.14	0.505	12.83	178	265
15	16	7/0.0192	0.015	0.38	0.060	1.52	0.605	15.37	239	356
19	16	7/0.0192	0.015	0.38	0.060	1.52	0.635	16.13	284	423
25	16	7/0.0192	0.015	0.38	0.060	1.52	0.705	17.91	364	542
30	16	7/0.0192	0.015	0.38	0.060	1.52	0.760	19.30	426	634

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
37	16	7/0.0192	0.015	0.38	0.080	2.03	0.880	22.35	552	821
2 Flat	14	7/0.0242	0.015	0.38	0.045	1.14	0.210 x 0.320	5.33 x 8.13	54	80
2	14	7/0.0242	0.015	0.38	0.045	1.14	0.320	8.13	64	95
3	14	7/0.0242	0.015	0.38	0.045	1.14	0.345	8.76	80	119
4	14	7/0.0242	0.015	0.38	0.045	1.14	0.365	9.27	100	149
5	14	7/0.0242	0.015	0.38	0.045	1.14	0.410	10.41	118	176
7	14	7/0.0242	0.015	0.38	0.045	1.14	0.445	11.30	153	228
9	14	7/0.0242	0.015	0.38	0.060	1.52	0.505	12.83	213	317
12	14	7/0.0242	0.015	0.38	0.060	1.52	0.595	15.11	267	397
19	14	7/0.0242	0.015	0.38	0.060	1.52	0.695	17.65	396	589
25	14	7/0.0242	0.015	0.38	0.060	1.52	0.785	19.94	507	755
30	14	7/0.0242	0.015	0.38	0.080	2.03	0.895	22.73	637	948
37	14	7/0.0242	0.015	0.38	0.080	2.03	0.970	24.64	766	1140
2 Flat	12	7/0.0305	0.015	0.38	0.045	1.14	0.225 x 0.360	5.72 x 9.14	74	110
2	12	7/0.0305	0.015	0.38	0.045	1.14	0.355	9.02	85	127
3	12	7/0.0305	0.015	0.38	0.045	1.14	0.385	9.78	131	195
3+Grnd	12	7/0.0305	0.015	0.38	0.045	1.14	0.385	9.78	131	195
4	12	7/0.0305	0.015	0.38	0.045	1.14	0.420	10.67	138	205
5	12	7/0.0305	0.015	0.38	0.045	1.14	0.445	11.30	165	246
7	12	7/0.0305	0.015	0.38	0.045	1.14	0.490	12.45	217	323
9	12	7/0.0305	0.015	0.38	0.060	1.52	0.605	15.37	297	442
12	12	7/0.0305	0.015	0.38	0.060	1.52	0.675	17.15	377	561
19	12	7/0.0305	0.015	0.38	0.060	1.52	0.785	19.94	568	845
25	12	7/0.0305	0.015	0.38	0.080	2.03	0.940	23.88	775	1153
30	12	7/0.0305	0.015	0.38	0.080	2.03	1.030	26.16	919	1368
37	12	7/0.0305	0.015	0.38	0.080	2.03	1.105	28.07	1100	1637
2 Flat	10	7/0.0385	0.020	0.51	0.045	1.14	0.260 x 0.425	6.60 x 10.80	108	161
2	10	7/0.0385	0.020	0.51	0.045	1.14	0.420	10.67	115	171
3	10	7/0.0385	0.020	0.51	0.045	1.14	0.450	11.43	191	284
3+Grnd	10	7/0.0385	0.020	0.51	0.045	1.14	0.450	11.43	191	284
4	10	7/0.0385	0.020	0.51	0.045	1.14	0.505	12.83	209	311
5	10	7/0.0385	0.020	0.51	0.060	1.52	0.570	14.48	268	399
7	10	7/0.0385	0.020	0.51	0.060	1.52	0.620	15.75	350	521
9	10	7/0.0385	0.020	0.51	0.060	1.52	0.725	18.42	440	655
12	10	7/0.0385	0.020	0.51	0.060	1.52	0.815	20.70	584	869

PVC/NYLON/PVC, Control, Shielded 600V, UL Type TC-ER, Overall Shielded—E-2 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC.

Standard:

Industry Standard:

UL 1277 Type TC-ER for 3 or more conductors
UL 1581
UL 66 NEC Type TFN conductors (16 & 18 AWG)
UL 83 NEC Type THHN/THWN conductors (14 through 10 AWG)
ICEA S-95-658

Flame Tests Standard:

UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded bare copper per ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

Color-coded: per ICEA Method 1; Table E-2 plus alpha-numeric printed numbers (Does not include white or green).

Shield: Overall shield is aluminum/polyester, in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

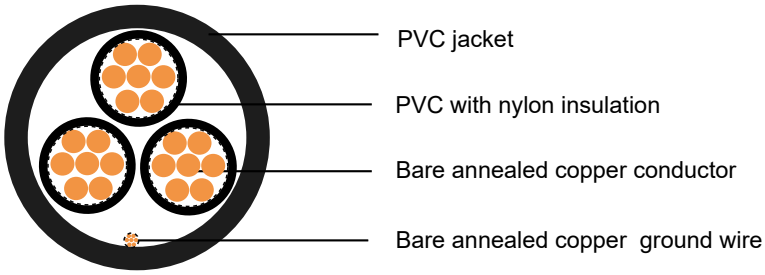
Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	18	7/0.0152	0.020	0.51	0.045	1.14	0.190 x 0.285	4.80 x 7.20	36	54
2	18	7/0.0152	0.020	0.51	0.045	1.14	0.270	6.86	38	57
3	18	7/0.0152	0.020	0.51	0.045	1.14	0.285	7.24	46	68
4	18	7/0.0152	0.020	0.51	0.045	1.14	0.310	7.87	56	83
5	18	7/0.0152	0.020	0.51	0.045	1.14	0.335	8.51	65	97
7	18	7/0.0152	0.020	0.51	0.045	1.14	0.360	9.14	82	122
9	18	7/0.0152	0.020	0.51	0.045	1.14	0.420	10.67	105	156
10	18	7/0.0152	0.020	0.51	0.045	1.14	0.425	10.80	114	170
12	18	7/0.0152	0.020	0.51	0.045	1.14	0.445	11.30	131	195
15	18	7/0.0152	0.020	0.51	0.045	1.14	0.485	12.32	162	241
19	18	7/0.0152	0.020	0.51	0.060	1.52	0.570	14.48	209	311
25	18	7/0.0152	0.020	0.51	0.060	1.52	0.655	16.64	266	396
30	18	7/0.0152	0.020	0.51	0.060	1.52	0.695	17.65	310	461
37	18	7/0.0152	0.020	0.51	0.060	1.52	0.745	18.92	371	552
2 Flat	16	7/0.0192	0.020	0.51	0.045	1.14	0.200 x 0.310	5.08 x 7.87	42	71
2	16	7/0.0192	0.020	0.51	0.045	1.14	0.300	7.62	50	74
3	16	7/0.0192	0.020	0.51	0.045	1.14	0.315	8.00	60	89
4	16	7/0.0192	0.020	0.51	0.045	1.14	0.340	8.64	74	110
5	16	7/0.0192	0.020	0.51	0.045	1.14	0.370	9.40	97	144
7	16	7/0.0192	0.020	0.51	0.045	1.14	0.400	10.16	111	165
9	16	7/0.0192	0.020	0.51	0.045	1.14	0.460	11.68	141	210
10	16	7/0.0192	0.020	0.51	0.045	1.14	0.495	12.57	154	229
12	16	7/0.0192	0.020	0.51	0.045	1.14	0.505	12.83	178	265
15	16	7/0.0192	0.020	0.51	0.060	1.52	0.605	15.37	239	356
19	16	7/0.0192	0.020	0.51	0.060	1.52	0.635	16.13	284	423
25	16	7/0.0192	0.020	0.51	0.060	1.52	0.705	17.91	364	542
30	16	7/0.0192	0.020	0.51	0.060	1.52	0.760	19.30	426	634
37	16	7/0.0192	0.020	0.51	0.080	2.03	0.880	22.35	552	821
2 Flat	14	7/0.0242	0.020	0.51	0.045	1.14	0.210 x 0.320	5.33 x 8.13	54	80

Multi Conductor Control & Power Cables

NO. of CON.	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	14	7/0.0242	0.020	0.51	0.045	1.14	0.320	8.13	64	95
2	18	7/0.0152	0.020	0.51	0.045	1.14	0.280	7.11	40	60
3	18	7/0.0152	0.020	0.51	0.045	1.14	0.290	7.37	49	73
4	18	7/0.0152	0.020	0.51	0.045	1.14	0.310	7.87	58	86
5	18	7/0.0152	0.020	0.51	0.045	1.14	0.340	8.64	70	104
7	18	7/0.0152	0.020	0.51	0.045	1.14	0.370	9.40	89	132
2	16	7/0.0192	0.020	0.51	0.045	1.14	0.300	7.62	52	77
3	16	7/0.0192	0.020	0.51	0.045	1.14	0.320	8.13	63	94
4	16	7/0.0192	0.020	0.51	0.045	1.14	0.350	8.89	77	115
5	16	7/0.0192	0.020	0.51	0.045	1.14	0.370	9.40	91	135
7	16	7/0.0192	0.020	0.51	0.045	1.14	0.410	10.41	119	177
9	16	7/0.0192	0.020	0.51	0.045	1.14	0.470	11.97	150	223
12	16	7/0.0192	0.020	0.51	0.045	1.14	0.510	12.95	185	275
2	14	7/0.0242	0.015	0.38	0.045	1.14	0.330	8.38	67	100
3	14	7/0.0242	0.015	0.38	0.045	1.14	0.350	8.89	84	125
4	14	7/0.0242	0.015	0.38	0.045	1.14	0.380	9.65	104	155
5	14	7/0.0242	0.015	0.38	0.045	1.14	0.400	10.16	123	183
7	14	7/0.0242	0.015	0.38	0.060	1.52	0.440	11.18	161	240
2	12	7/0.0305	0.015	0.38	0.045	1.14	0.370	9.40	83	124
3	12	7/0.0305	0.015	0.38	0.045	1.14	0.390	9.91	111	165
4	12	7/0.0305	0.015	0.38	0.045	1.14	0.420	10.67	139	207
2	10	7/0.0385	0.020	0.51	0.060	1.52	0.430	10.92	119	177
3	10	7/0.0385	0.020	0.51	0.060	1.52	0.460	11.68	162	241

PVC/NYLON/PVC, Low-Voltage Power, Unshielded 600V, UL Type TC-ER—Method 4 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC.

Standard:

Industry Standard:

NEC Type THHN/THWN conductors
UL 1277 Type TC-ER
UL 1581

Flame Tests Standard:

UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polymide (nylon).

Color-coded: per ICEA Method 4; Individual conductors colored black with conductor number surface printed in contrasting ink.

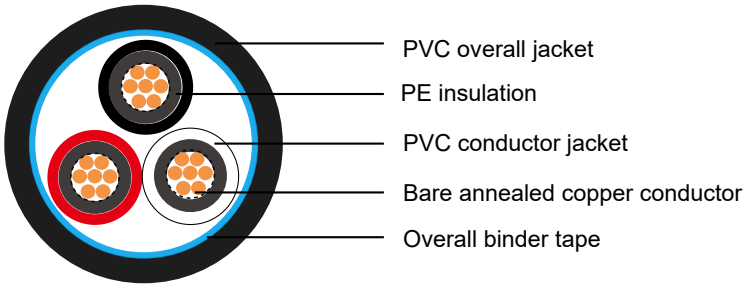
Ground: Uninsulated bare annealed copper per ASTM B3 class B.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.020	0.51	0.045	1.14	0.365	9.27	100	149
3	12	7/0.0305	12	0.020	0.51	0.045	1.14	0.420	10.67	138	205
3	10	7/0.0385	10	0.020	0.51	0.045	1.14	0.505	12.83	209	311
3	8	7/0.0486	10	0.036	0.91	0.060	1.52	0.600	15.24	308	458
4	8	7/0.0486	10	0.036	0.91	0.060	1.52	0.655	16.64	373	555
3	6	7/0.0612	8	0.036	0.91	0.060	1.52	0.690	17.53	434	646
4	6	7/0.0612	8	0.036	0.91	0.060	1.52	0.760	19.30	533	793
3	4	7/0.0772	8	0.048	1.22	0.080	2.03	0.875	22.28	650	967
4	4	7/0.0772	8	0.048	1.22	0.080	2.03	0.970	24.64	824	1226
3	2	7/0.0974	6	0.048	1.22	0.080	2.03	1.000	25.40	964	1435
4	2	7/0.0974	6	0.048	1.22	0.080	2.03	1.100	27.94	1227	1826
3	1/0	19/0.0745	6	0.059	1.50	0.080	2.03	1.225	31.12	1447	2153
4	1/0	19/0.0745	6	0.059	1.50	0.080	2.03	1.360	34.54	1830	2723
3	2/0	19/0.0837	6	0.059	1.50	0.080	2.03	1.320	33.53	1754	2610
4	2/0	19/0.0837	6	0.059	1.50	0.080	2.03	1.455	36.96	2252	3351
3	4/0	19/0.1055	4	0.059	1.50	0.080	2.03	1.545	39.24	2630	3914
4	4/0	19/0.1055	4	0.059	1.50	0.110	2.79	1.770	44.96	3502	5212
3	250	37/0.0822	4	0.070	1.78	0.110	2.79	1.740	44.20	3177	4728
4	250	37/0.0822	4	0.070	1.78	0.110	2.79	1.945	49.40	4107	6112
3	350	37/0.0973	3	0.070	1.78	0.110	2.79	1.990	50.55	4263	6344
4	350	37/0.0973	3	0.070	1.78	0.110	2.79	2.190	55.63	5585	8312
3	500	37/0.1162	2	0.070	1.78	0.110	2.79	2.270	57.66	5890	8765
4	500	37/0.1162	2	0.070	1.78	0.110	2.79	2.505	63.63	7694	11450

PE/PVC/PVC, Control, Unshielded 600V (18 AWG-10 AWG)—E-1 Color Code



Applications:

Thes cables are for applications where environmental factors require cable characteristics including flame retardance , resistance to chemicals, abrasion and resistance to the harmful effects of sunlight and weather, which may be installed in ducts, cable trays, conduit, Class I Division 2 industrial hazardous locations or continuous rigid cable supports.

Standard:

Industry Standard:

ICEA S-73-532

Other Standard:

Meets EPA 10 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Clear Polyethylene (PE).

Conductor Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Table E-1 (includes white and green).

Cable Core: Conductors are cabled with non-hygroscopic fillers as necessary, and an overall binder tape.

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon

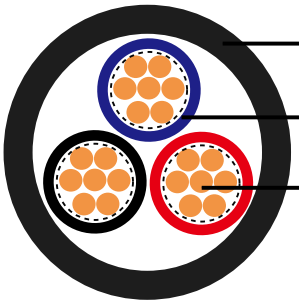
resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	18	0.025	0.64	0.045	1.14	0.200 x 0.300	5.10 x 7.50	39	58
2	18	0.025	0.64	0.045	1.14	0.30	7.6	41	61
3	18	0.025	0.64	0.045	1.14	0.31	7.9	49	73
4	18	0.025	0.64	0.045	1.14	0.34	8.6	60	89
5	18	0.025	0.64	0.045	1.14	0.37	9.4	71	106
7	18	0.025	0.64	0.045	1.14	0.40	10.2	90	134
9	18	0.025	0.64	0.045	1.14	0.46	11.7	113	168
12	18	0.025	0.64	0.045	1.14	0.51	13.0	145	216
19	18	0.025	0.64	0.060	1.52	0.63	16.0	229	341
2 Flat	16	0.025	0.64	0.045	1.14	0.210 x 0.320	5.30 x 8.10	43	84
2	16	0.025	0.64	0.045	1.14	0.32	8.1	49	73
3	16	0.025	0.64	0.045	1.14	0.34	8.6	62	92
4	16	0.025	0.64	0.045	1.14	0.37	9.4	77	115
5	16	0.025	0.64	0.045	1.14	0.40	10.2	92	137
7	16	0.025	0.64	0.045	1.14	0.43	10.9	118	176
9	16	0.025	0.64	0.045	1.14	0.50	12.7	148	220
12	16	0.025	0.64	0.060	1.52	0.59	15.0	209	311
19	16	0.025	0.64	0.060	1.52	0.69	17.5	304	452
2 Flat	14	0.030	0.76	0.045	1.14	0.230 x 0.370	5.30 x 9.30	57	85
2	14	0.030	0.76	0.045	1.14	0.37	9.4	66	98
3	14	0.030	0.76	0.045	1.14	0.39	9.9	87	130
4	14	0.030	0.76	0.045	1.14	0.42	10.7	108	161
5	14	0.030	0.76	0.045	1.14	0.46	11.7	130	194
7	14	0.030	0.76	0.045	1.14	0.50	12.7	173	258
9	14	0.030	0.76	0.060	1.52	0.62	15.8	236	351
12	14	0.030	0.76	0.060	1.52	0.69	17.5	300	447
19	14	0.030	0.76	0.060	1.52	0.80	20.3	443	659
2 Flat	12	0.030	0.76	0.045	1.14	0.250 x 0.400	6.40 x 10.30	82	122
2	12	0.030	0.76	0.045	1.14	0.40	10.2	87	130
3	12	0.030	0.76	0.045	1.14	0.43	10.9	116	173
4	12	0.030	0.76	0.045	1.14	0.47	11.9	147	219
5	12	0.030	0.76	0.045	1.14	0.52	13.2	180	268
7	12	0.030	0.76	0.060	1.52	0.59	15.0	255	380
9	12	0.030	0.76	0.060	1.52	0.68	17.3	321	478
12	12	0.030	0.76	0.060	1.52	0.77	19.6	412	613
19	12	0.030	0.76	0.080	2.03	0.94	23.9	654	973
2 Flat	10	0.030	0.76	0.045	1.14	0.270 x 0.450	6.90 x 11.40	110	164
2	10	0.030	0.76	0.045	1.14	0.45	11.4	130	194
3	10	0.030	0.76	0.045	1.14	0.48	12.2	170	253
4	10	0.030	0.76	0.060	1.52	0.52	13.2	235	350
5	10	0.030	0.76	0.060	1.52	0.60	15.2	286	426

NO. of CON.	CON. Size (AWG/ kcmil)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
7	10	0.030	0.76	0.060	1.52	0.66	16.8	365	543
9	10	0.030	0.76	0.060	1.52	0.76	19.3	466	694
12	10	0.030	0.76	0.080	2.03	0.90	22.9	626	932
19	10	0.030	0.76	0.080	2.03	1.05	26.7	930	1384

XLPO/LSZH, Control 600V, UL Type TC-LS-ER—E-2 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-LS-ER
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded tinned copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 1; Table E-2 (Does not include white or green).

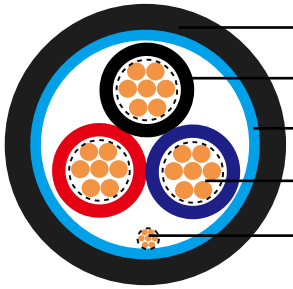
Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Flat	14	7/0.0242	0.030	0.76	0.045	1.14	0.365 x 0.230	9.30 x 5.80	61	91
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.370	9.40	71	106
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.390	9.91	92	137
4	14	7/0.0242	0.030	0.76	0.045	1.14	0.425	10.80	115	171
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.465	11.81	139	207
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.505	12.83	173	257
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.620	15.75	240	357
12	14	7/0.0242	0.030	0.76	0.060	1.52	0.700	17.78	301	448
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.815	20.70	468	696
25	14	7/0.0242	0.030	0.76	0.080	2.03	0.935	23.75	624	929
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.030	26.16	747	1112
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.110	28.19	875	1302
2 Flat	12	7/0.0305	0.030	0.76	0.045	1.14	0.400 x 0.245	10.20 x 6.20	82	122
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	94	140
3+ Grnd	12	7/0.0305	0.030	0.76	0.045	1.14	0.410	10.41	148	220
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.435	11.05	124	185
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.475	12.07	157	234
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.520	13.21	191	284
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.595	15.11	268	399
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.695	17.65	337	502
12	12	7/0.0305	0.030	0.76	0.080	2.03	0.765	19.43	428	637
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.940	23.88	688	1024
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.095	27.81	854	1271
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.150	29.21	1002	1491
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.240	31.50	1240	1845
2 Flat	10	7/0.0385	0.030	0.76	0.045	1.14	0.445 x 0.270	11.30 x 6.90	113	168
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.455	11.56	128	190
3+ Grnd	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	225	335
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.485	12.32	172	256
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.560	14.22	234	348
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.615	15.62	284	423

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.670	17.02	381	567
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.760	19.30	464	691
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.905	22.99	651	696

XLPO/LSZH, Control, Shielded 600V, UL Type TC-LS-ER, Overall Shielded—E-2 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC. Besides, they are permitted for Exposed Run 'ER' use in accordance with NEC for 3 or more conductors.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-LS-ER
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Fully annealed stranded tinned copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 1; Table E-2 (Does not include white or green).

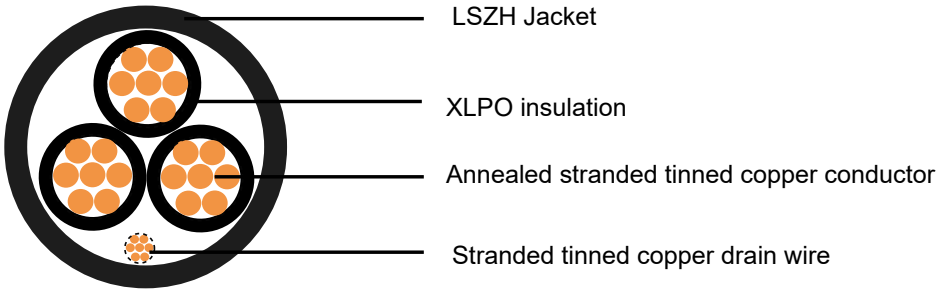
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	14	7/0.0242	0.030	0.76	0.045	1.14	0.375	9.53	74	110
3	14	7/0.0242	0.030	0.76	0.045	1.14	0.395	10.03	95	141
4	14	7/0.0242	0.030	0.76	0.060	1.52	0.430	10.92	118	176
5	14	7/0.0242	0.030	0.76	0.060	1.52	0.470	11.94	142	211
7	14	7/0.0242	0.030	0.76	0.060	1.52	0.510	12.95	176	262
9	14	7/0.0242	0.030	0.76	0.060	1.52	0.625	15.88	243	362
12	14	7/0.0242	0.030	0.76	0.080	2.03	0.705	17.91	304	452
19	14	7/0.0242	0.030	0.76	0.080	2.03	0.820	20.83	471	701
25	14	7/0.0242	0.030	0.76	0.080	2.03	0.940	25.53	627	933
30	14	7/0.0242	0.030	0.76	0.080	2.03	1.035	26.29	750	1116
37	14	7/0.0242	0.030	0.76	0.080	2.03	1.115	28.32	878	1307
2	12	7/0.0305	0.030	0.76	0.045	1.14	0.415	10.45	97	144
3	12	7/0.0305	0.030	0.76	0.060	1.52	0.440	11.18	127	189
4	12	7/0.0305	0.030	0.76	0.060	1.52	0.480	12.19	160	238
5	12	7/0.0305	0.030	0.76	0.060	1.52	0.525	13.34	194	289
7	12	7/0.0305	0.030	0.76	0.060	1.52	0.600	15.24	271	403
9	12	7/0.0305	0.030	0.76	0.060	1.52	0.700	17.78	340	506
12	12	7/0.0305	0.030	0.76	0.080	2.03	0.770	19.56	431	641
19	12	7/0.0305	0.030	0.76	0.080	2.03	0.945	24.00	691	1028
25	12	7/0.0305	0.030	0.76	0.080	2.03	1.100	27.94	857	1275
30	12	7/0.0305	0.030	0.76	0.080	2.03	1.155	29.80	1005	1496
37	12	7/0.0305	0.030	0.76	0.080	2.03	1.245	31.62	1243	1850
2	10	7/0.0385	0.030	0.76	0.060	1.52	0.460	11.68	131	195
3	10	7/0.0385	0.030	0.76	0.060	1.52	0.490	12.45	175	260
4	10	7/0.0385	0.030	0.76	0.060	1.52	0.565	14.35	237	353
5	10	7/0.0385	0.030	0.76	0.060	1.52	0.620	15.75	287	427
7	10	7/0.0385	0.030	0.76	0.060	1.52	0.675	17.15	384	571
9	10	7/0.0385	0.030	0.76	0.080	2.03	0.765	19.43	467	695
12	10	7/0.0385	0.030	0.76	0.080	2.03	0.910	23.11	654	973

XLPO/LSZH, Low-Voltage Power, Unshielded 600V, UL Type TC-LS—Method 4 Color Code



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 44 Type XHHW-2
UL 1277 Type TC-LS
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 4; Individual conductors colored black with conductor number surface printed in contrasting ink.

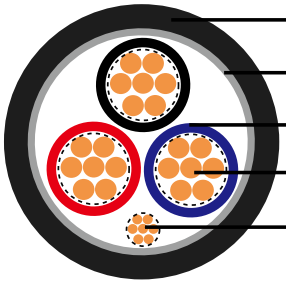
Ground: Uninsulated tinned annealed copper per ASTM B3 class B.

Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke,Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	CON. Strand	Ground Wire Size (AWG)	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	14	7/0.0242	14	0.030	0.76	0.060	1.52	0.430	10.92	118	176
3	12	7/0.0305	12	0.030	0.76	0.060	1.52	0.480	12.19	160	238
3	10	7/0.0385	10	0.030	0.76	0.060	1.52	0.565	14.35	237	353
3	8	7/0.0486	10	0.045	1.14	0.060	1.52	0.655	16.64	314	467
4	8	7/0.0486	10	0.045	1.14	0.080	2.03	0.720	18.29	393	585
3	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.740	18.80	456	679
4	6	7/0.0612	8	0.045	1.14	0.080	2.03	0.790	20.07	561	835
3	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.880	22.35	642	955
4	4	7/0.0772	8	0.045	1.14	0.080	2.03	0.950	24.13	822	1223
3	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.010	25.65	979	1457
4	2	7/0.0974	6	0.045	1.14	0.080	2.03	1.090	27.69	1235	1838
3	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.120	28.45	1021	1594
4	1	19/0.0664	6	0.055	1.40	0.080	2.03	1.235	31.37	1521	2264
3	1/0	19/0.0745	6	0.055	1.40	0.080	2.03	1.225	31.12	1439	2142
4	1/10	19/0.0745	6	0.055	1.40	0.080	2.03	1.330	33.78	1820	2709
3	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.300	33.02	1720	2560
4	2/0	19/0.0837	6	0.055	1.40	0.080	2.03	1.440	36.58	2208	3286
3	3/0	19/0.0940	4	0.055	1.40	0.080	2.03	1.420	36.07	2176	3238
4	3/0	19/0.0940	4	0.055	1.40	0.110	2.79	1.570	39.88	2788	3405
3	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.540	39.12	2614	3890
4	4/0	19/0.1055	4	0.055	1.40	0.110	2.79	1.790	45.47	3495	5201
3	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.760	44.70	3184	4738
4	250	37/0.0822	4	0.065	1.65	0.110	2.79	1.915	48.64	4019	5981
3	350	37/0.0973	3	0.065	1.65	0.110	2.79	1.960	49.78	4187	6231
4	350	37/0.0973	3	0.065	1.65	0.110	2.79	2.165	54.99	5436	8090
3	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.245	57.02	5847	8702
4	500	37/0.1162	2	0.065	1.65	0.110	2.79	2.475	62.87	7607	11321
3	750	61/0.1109	1	0.080	2.03	0.130	3.55	2.810	71.37	9145	13610
4	750	61/0.1109	1	0.080	2.03	0.130	3.55	3.115	79.12	11805	17569

XLPE/AIA/PVC, Control, Armored 600V, UL Type MC, Multi Conductor



Applications:

These cables are used in free air, raceways, direct burial and wet or dry locations. Approved for direct burial, Class I, Div. 2 industrial hazardous locations per NEC.

Standard:

UL 1569
UL 44
ICEA S-95-658/NEMA WC 70
UL Type MC- 600 volts
NEC Type XHHW-2 conductors
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)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare, compressed 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.

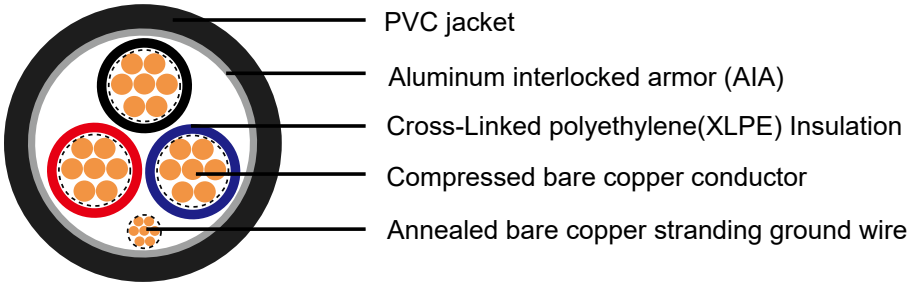
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	Min. Insulation Thickness		GRND. Wire size	Appr.Armor O.D.		Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
		Inches	mm	AWG	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	14	0.030	0.76	14	0.49	12.5	0.050	1.27	0.60	15.3	175	261
3	14	0.030	0.76	14	0.52	13.2	0.050	1.27	0.63	16.0	183	273
4	14	0.030	0.76	14	0.55	14.0	0.050	1.27	0.66	16.8	233	347
5	14	0.030	0.76	14	0.59	15.0	0.050	1.27	0.69	17.6	246	367
7	14	0.030	0.76	14	0.64	16.3	0.050	1.27	0.74	18.8	297	443
9	14	0.030	0.76	14	0.72	18.3	0.050	1.27	0.83	21.1	379	564
12	14	0.030	0.76	14	0.80	20.3	0.050	1.27	0.90	22.9	460	685
19	14	0.030	0.76	14	0.99	25.2	0.050	1.27	1.02	25.9	621	924
25	14	0.030	0.76	14	1.07	27.2	0.050	1.27	1.17	29.7	776	1155
37	14	0.030	0.76	14	1.19	30.3	0.050	1.27	1.29	32.8	1043	1533
2	12	0.030	0.76	12	0.53	13.5	0.050	1.27	0.64	16.3	218	324
3	12	0.030	0.76	12	0.56	14.3	0.050	1.27	0.66	16.8	227	338
4	12	0.030	0.76	12	0.60	15.3	0.050	1.27	0.71	18.1	272	405
5	12	0.030	0.76	12	0.64	16.3	0.050	1.27	0.75	19.1	336	500
7	12	0.030	0.76	12	0.70	17.8	0.050	1.27	0.81	20.6	380	566
9	12	0.030	0.76	12	0.78	19.8	0.050	1.27	0.89	22.6	479	713
12	12	0.030	0.76	12	0.86	21.9	0.050	1.27	0.97	24.7	596	887
19	12	0.030	0.76	12	0.99	25.2	0.050	1.27	1.10	28.0	830	1235
25	12	0.030	0.76	12	1.18	30.0	0.050	1.27	1.28	32.5	1058	1575
37	12	0.030	0.76	12	1.31	33.3	0.050	1.27	1.41	35.8	1403	2088
3	10	0.030	0.76	10	0.61	15.5	0.050	1.27	0.72	18.3	301	448
4	10	0.030	0.76	10	0.66	16.8	0.050	1.27	0.77	19.6	355	529

XLPE/AIA/PVC, Power, Armored 600V, UL Type MC, Three and Four Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1569
UL 44
ICEA S-95-658/NEMA WC 70
UL Type MC- 600 volts
NEC Type XHHW-2 conductors
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)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare copper compressed 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.

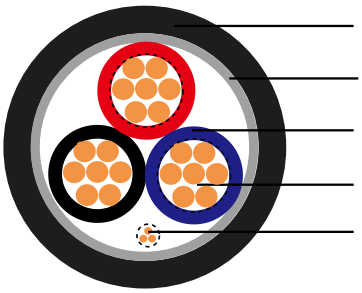
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG)	GRND. Wire Size (AWG)	Min. Insulation Thickness		Appr. Armor O.D.		Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	8	10	0.045	1.14	0.74	18.8	0.050	1.27	0.84	21.4	420	625
4	8	10	0.045	1.14	0.80	20.3	0.050	1.27	0.90	22.9	507	755
3	6	8	0.045	1.14	0.84	21.4	0.050	1.27	0.95	24.2	567	844
4	6	8	0.045	1.14	0.91	23.1	0.050	1.27	1.01	25.6	670	997
3	4	8	0.045	1.14	0.94	23.9	0.050	1.27	1.05	26.7	757	1127
4	4	8	0.045	1.14	1.03	26.2	0.050	1.27	1.13	28.7	912	1357
3	2	6	0.045	1.14	1.07	27.2	0.050	1.27	1.18	30.0	1075	1600
4	2	6	0.045	1.14	1.18	30.0	0.050	1.27	1.28	32.5	1295	1927
3	1	6	0.055	1.40	1.19	30.3	0.050	1.27	1.29	32.8	1269	1889
4	1	6	0.055	1.40	1.31	33.3	0.050	1.27	1.41	35.9	1596	2375
3	1/0	6	0.055	1.40	1.27	32.3	0.050	1.27	1.38	35.1	1528	2274
4	1/0	6	0.055	1.40	1.40	35.6	0.050	1.27	1.50	38.1	1913	2847
3	2/0	6	0.055	1.40	1.37	34.8	0.050	1.27	1.48	37.6	1860	2768
4	2/0	6	0.055	1.40	1.51	38.2	0.060	1.52	1.61	40.9	2345	3490
3	3/0	4	0.055	1.40	1.48	37.6	0.060	1.52	1.59	40.4	2259	3362
4	3/0	4	0.055	1.40	1.66	42.2	0.050	1.27	1.78	45.3	2878	4283
3	4/0	4	0.055	1.40	1.66	42.2	0.060	1.52	1.79	45.5	2840	4226
4	4/0	4	0.055	1.40	1.78	45.2	0.060	1.52	1.90	48.3	3586	5336
3	250	4	0.065	1.65	1.81	46.0	0.060	1.52	1.94	49.3	3295	4903
4	250	4	0.065	1.65	1.95	49.5	0.060	1.52	2.07	52.6	4174	6211
3	350	3	0.065	1.65	2.03	51.6	0.060	1.52	2.16	54.9	4400	6548
4	350	3	0.065	1.65	2.20	55.9	0.060	1.52	2.32	59.0	5608	8345
3	500	2	0.065	1.65	2.30	58.5	0.075	1.91	2.46	62.5	6126	9116
4	500	2	0.065	1.65	2.51	63.8	0.075	1.91	2.66	67.6	7825	11644
3	750	1	0.080	2.03	2.74	69.6	0.075	1.91	2.89	73.4	8806	13104
4	750	1	0.080	2.03	3.04	77.2	0.075	1.91	3.21	81.6	11494	17104
3	1000	1/0	0.080	2.03	3.07	78.0	0.075	1.91	3.24	82.3	11476	17077
4	1000	1/0	0.080	2.03	3.41	86.6	0.075	1.91	3.58	91.0	14931	22218

XLPE/AIA/PVC, Power, Armored, with Enhanced Ground Wires (50%) 600V, UL Type MC, Three Conductor (1/0 AWG—1000 kcmil)



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1569
UL 44
ICEA S-95-658/NEMA WC 70
UL Type MC- 600V
NEC Type XHHW-2 conductors
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)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare copper compressed 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.

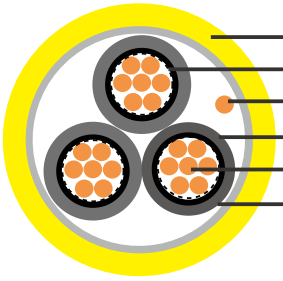
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG)	GRND. Wire Size (AWG)	Min. Insulation Thickness		Appr.Armor O.D.		Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
3	1/0	3x6	0.055	1.40	1.27	32.3	0.050	1.27	1.38	35.1	1694	2524
3	2/0	3x6	0.055	1.40	1.37	34.8	0.050	1.27	1.48	37.6	2026	3019
3	3/0	3x5	0.055	1.40	1.48	37.6	0.060	1.52	1.59	40.4	2481	3697
3	4/0	3x4	0.055	1.40	1.66	42.2	0.060	1.52	1.79	45.5	3105	4626
3	250	3x4	0.065	1.65	1.81	46.0	0.060	1.52	1.94	49.3	3560	5304
3	350	3x2	0.065	1.65	2.03	51.6	0.060	1.52	2.16	54.9	4870	7256
3	500	3x1	0.065	1.65	2.30	58.5	0.075	1.91	2.46	62.5	6665	9931
3	750	3x2/0	0.080	2.03	2.74	69.6	0.075	1.91	2.89	73.4	9477	14121
3	1000	3x3/0	0.080	2.03	3.07	78.0	0.075	1.91	3.24	82.3	12322	18360

EPR/AIA/PVC, Power, Non-Shielded, Armored 2400V, UL Type MV-90 or MC, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
ICEA S-96-659/NEMA WC-71
UL Listed as Type MV or Type MC
UL 1072
UL 1569
IEEE 1202 (70,000 BTU/hr)
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare copper, Class B strand.

Extruded Strand Shield (ESS): Extruded thermoset semi-conducting stress control layer over conductor.

Insulation: Ethylene Propylene Rubber (EPR) colored to contrast with black conducting shield layer.

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

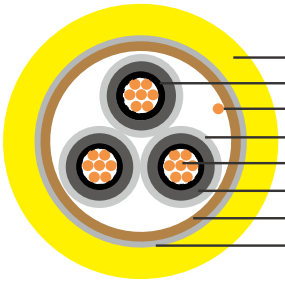
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Yellow.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	GRND. Wire Size (AWG)	Min. Insulation Thickness		Appr.Armor O.D.		Nominal Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
				Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/km
3	6	0.17	6	0.115	2.92	1.16	29.4	0.050	1.27	1.27	32.2	854	1272
3	4	0.21	6	0.115	2.92	1.26	31.9	0.050	1.27	1.37	34.7	1056	1572
3	2	0.27	6	0.115	2.92	1.37	34.8	0.050	1.27	1.48	37.6	1363	2030
3	1/0	0.34	4	0.115	2.92	1.61	41.0	0.060	1.52	1.74	44.3	2003	2982
3	2/0	0.38	4	0.115	2.92	1.71	43.3	0.060	1.52	1.84	46.6	2326	3463
3	4/0	0.48	3	0.115	2.92	1.92	48.7	0.060	1.52	2.05	52.0	3256	4848
3	250	0.52	3	0.115	2.92	2.00	50.7	0.060	1.52	2.13	54.1	3689	5493
3	350	0.62	2	0.115	2.92	2.21	56.0	0.060	1.52	2.34	59.3	4825	7184
3	500	0.74	1	0.115	2.92	2.46	62.6	0.075	1.91	2.63	66.7	6567	9778
3	750	0.91	1/0	0.115	2.92	2.83	72.0	0.075	1.91	3.00	76.1	9320	13877
3	1000	1.07	1/0	0.115	2.92	3.16	80.3	0.085	2.16	3.35	85.0	12023	17902

EPR/AIA/PVC, Power, Shielded, Armored 5KV/8KV, UL Type MV-105 or MC, 133% / 100% Ins. Levels, 115 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC-74
AEIC CS8
UL listed as Type MV-105
IEEE 1202 (70,000 BTU/hr)/CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare, copper Class B strand.

Extruded Strand Shield (ESS): Thermoset semi-conducting extruded 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.

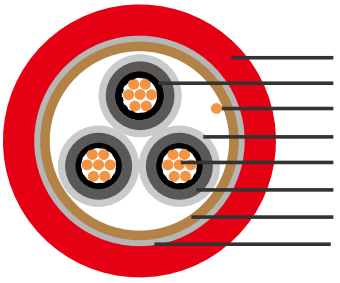
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Yellow.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	Insulation Diameter				GRND. Wire Size (AWG)	Appr.Armor O.D.		Nominal Jacket Thickness		Nominal Cable O.D.		Appr. Weight W/AL Armor	
			Min.		Max.										
			Inches	mm	Inches	mm		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/ km
3	6	0.17	0.42	10.5	0.49	12.5	6	1.33	33.8	0.050	1.27	1.44	36.6	1133	1687
3	4	0.21	0.46	11.6	0.54	13.7	6	1.43	36.2	0.060	1.52	1.54	39.1	1354	2016
3	2	0.27	0.51	13.0	0.59	14.9	6	1.64	41.6	0.060	1.52	1.77	44.9	1819	2708
3	1/0	0.34	0.58	14.7	0.66	16.7	4	1.79	45.3	0.060	1.52	1.92	48.6	2364	3520
3	2/0	0.38	0.62	15.7	0.70	17.7	4	1.87	47.5	0.060	1.52	2.00	50.8	2696	4014
3	4/0	0.48	0.72	18.3	0.80	20.3	3	2.09	53.2	0.060	1.52	2.22	56.5	3687	5490
3	250	0.52	0.77	19.6	0.85	21.5	3	2.21	56.0	0.075	1.90	2.34	59.3	4165	6202
3	350	0.62	0.87	22.1	0.95	24.1	2	2.41	61.3	0.075	1.91	2.57	65.4	5436	8094
3	500	0.74	0.99	25.1	1.07	27.1	1	2.64	67.0	0.075	1.91	2.84	72.0	7170	10676
3	750	0.91	1.17	29.7	1.25	31.8	1/0	3.06	77.8	0.085	2.16	3.25	82.4	10084	15015
3	1000	1.07	1.33	33.8	1.40	35.6	1/0	3.39	86.1	0.085	2.16	3.57	90.8	12793	19049

EPR/AIA/PVC, Power, Shielded, Armored 15KV, UL Type MV-105 or MC, 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC-74
AEIC CS8
UL listed as Type MV-105
IEEE 1202 (70,000 BTU/hr)/CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare, copper Class B strand.

Extruded Strand Shield (ESS): Thermoset semi-conducting extruded 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.

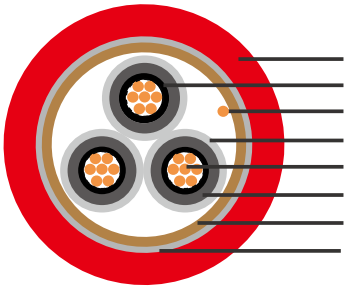
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	Insulation Diameter				GRND. Wire Size (AWG)	Appr.Armor O.D.		Nominal Jacket Thickness		Nominal Cable O.D.		Appr. Weight W/AL Armor	
			Min.		Max.										
			Inches	mm	Inches	mm		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/ km
3	2	0.27	0.71	18.0	0.80	20.3	6	2.08	52.8	0.060	1.52	2.21	56.1	2416	3597
3	1/0	0.34	0.78	19.8	0.87	22.0	4	2.22	56.5	0.060	1.52	2.35	59.8	2997	4463
3	2/0	0.38	0.82	20.8	0.91	24.3	4	2.31	58.7	0.060	1.52	2.44	62.0	3371	5019
3	4/0	0.48	0.92	23.4	1.01	25.6	3	2.53	64.3	0.075	1.91	2.70	68.5	4502	6703
3	250	0.53	0.97	24.6	1.06	26.9	3	2.65	67.2	0.075	1.91	2.81	71.3	5005	7452
3	350	0.62	1.07	27.2	1.16	29.4	2	2.85	72.4	0.075	1.91	3.01	76.6	6252	9309
3	500	0.74	1.19	30.2	1.28	32.4	1	3.11	79.0	0.085	2.16	3.30	83.7	8091	12047
3	750	0.91	1.37	34.8	1.46	37.1	1/0	3.50	89.0	0.085	2.16	3.69	93.6	11086	16507
3	1000	1.06	1.52	38.6	1.61	40.9	1/0	3.83	97.3	0.085	2.16	4.01	101.9	13870	20652

EPR/AIA/PVC, Power, Shielded, Armored, with Enhanced Ground Wires (50%) 15KV, UL Type MV-105 or MC, 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC-74
AEIC CS8
UL listed as Type MV-105
IEEE 1202 (70,000 BTU/hr)/CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare, copper Class B strand.

Extruded Strand Shield (ESS): Thermoset semi-conducting extruded 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.

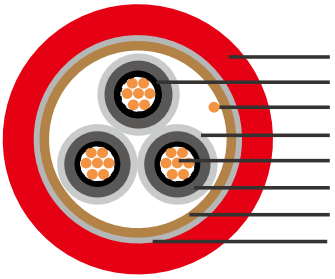
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	Insulation Diameter				GRND. Wire Size (AWG)	Appr.Armor O.D.		Nominal Jacket Thickness		Nominal Cable O.D.		Appr. Weight W/AL Armor	
			Min.		Max.										
			Inches	mm	Inches	mm		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/ km
3	1/0	0.34	0.78	19.8	0.87	22.0	3x6	2.22	56.5	0.060	1.52	2.35	59.8	3119	4644
3	2/0	0.38	0.82	20.8	0.91	24.3	3x6	2.31	58.7	0.060	1.52	2.44	62.0	3499	5210
3	4/0	0.48	0.92	23.4	1.01	25.6	3x4	2.53	64.3	0.075	1.91	2.70	68.5	4752	7076
3	250	0.53	0.97	24.6	1.06	26.9	3x4	2.65	67.2	0.075	1.91	2.81	71.3	5265	7840
3	350	0.62	1.07	27.2	1.16	29.4	3x2	2.85	72.4	0.075	1.91	3.01	76.6	6674	9938
3	500	0.74	1.19	30.2	1.28	32.4	3x1	3.11	79.0	0.085	2.16	3.30	83.7	8550	12731
3	750	0.91	1.37	34.8	1.46	37.1	3x2/0	3.50	89.0	0.085	2.16	3.69	93.6	11932	17767
3	1000	1.06	1.52	38.6	1.61	40.9	3x3/0	3.83	97.3	0.085	2.16	4.01	101.9	14957	22271

EPR/AIA/PVC, Power, Shielded, Armored 25KV, UL Type MV-105 or MC, 100% Ins. Level, 260 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC-74
AEIC CS8
UL listed as Type MV-105
IEEE 1202 (70,000 BTU/hr)/CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare, copper Class B strand.

Extruded Strand Shield (ESS): Thermoset semi-conducting extruded 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.

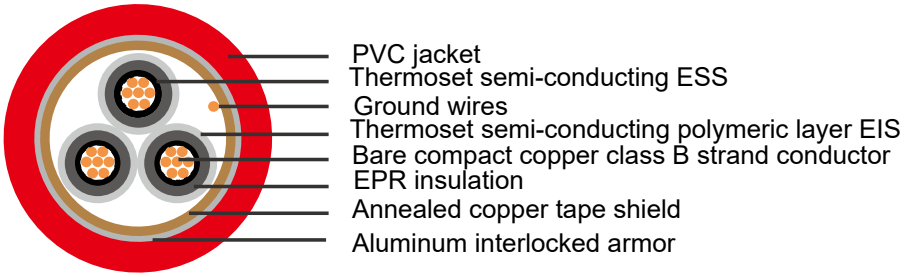
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	Insulation Diameter				GRND. Wire Size (AWG)	Appr.Armor O.D.		Nominal Jacket Thickness		Nominal Cable O.D.		Appr. Weight W/AL Armor	
			Min.		Max.										
			Inches	mm	Inches	mm		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/ km
3	1/0	0.34	0.85	21.6	0.94	23.9	4	2.39	60.8	0.075	1.91	2.56	64.9	3358	5000
3	2/0	0.38	0.89	22.6	0.98	24.9	4	2.48	63.0	0.075	1.91	2.64	67.1	3743	5573
3	4/0	0.48	0.99	25.1	1.08	27.4	3	2.70	68.6	0.075	1.91	2.86	72.7	4807	7158
3	250	0.53	1.04	26.4	1.14	28.8	3	2.81	71.5	0.075	1.91	2.98	75.6	5307	7902
3	350	0.62	1.14	29.0	1.23	31.2	2	3.02	76.7	0.075	1.91	3.18	80.8	6595	9820
3	500	0.74	1.26	32.0	1.35	34.3	1	3.28	83.3	0.085	2.16	3.46	88.0	8485	12634
3	750	0.91	1.44	36.6	1.54	39.0	1/0	3.67	93.2	0.085	2.16	3.85	97.9	11491	17110
3	1000	1.06	1.59	40.4	1.69	42.8	1/0	4.00	101.5	0.085	2.16	4.18	106.2	14303	21297

EPR/AIA/PVC, Power, Shielded, Armored 35KV, UL Type MV-105 or MC, 100% Ins. Level, 345 Mils, Three Conductor



Applications:

These cables are suited for use in a broad range of commercial, industrial and utility applications, where maximum performance is demanded, ease of installation desired and fire resistance is critical. Also they are permitted for use in Class I, Class II, Division 2, Class III Division 1 and 2 hazardous locations per the NEC, which are installed in both exposed or concealed work, wet or dry locations, indoors or outdoors and cable trays.

Standard:

National Electric Code (NEC)
UL 1072
ICEA S-93-639/NEMA WC-74
AEIC CS8
UL listed as Type MV-105
IEEE 1202 (70,000 BTU/hr)/CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare, copper Class B strand.

Extruded Strand Shield (ESS): Thermoset semi-conducting extruded 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.

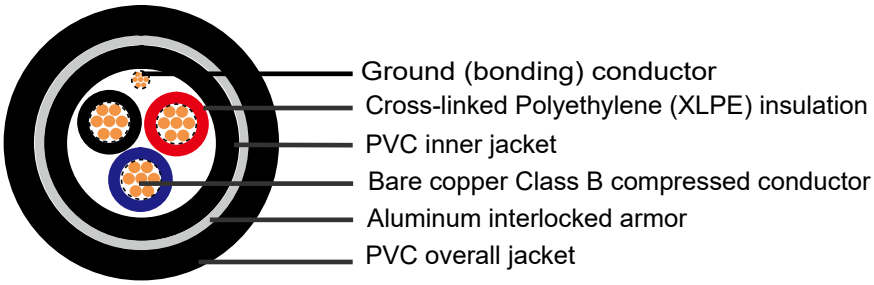
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG)	CON. Diameter Inches	Insulation Diameter				GRND. Wire Size (AWG)	Appr.Armor O.D.		Nominal Jacket Thickness		Nominal Cable O.D.		Appr. Weight W/ AL Armor	
			Min.		Max.										
			Inches	mm	Inches	mm		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000FT	kg/ km
3	1/0	0.34	1.02	25.9	1.12	28.4	4	2.77	70.4	0.075	1.91	2.93	74.5	4063	6050
3	2/0	0.38	1.06	26.9	1.16	29.5	4	2.86	72.6	0.075	1.91	3.02	76.7	4441	6613
3	4/0	0.48	1.16	29.5	1.26	32.0	3	3.08	78.2	0.075	1.91	3.24	82.3	5572	8297
3	250	0.53	1.21	30.7	1.32	33.4	3	3.19	81.1	0.085	2.16	3.38	85.7	6165	9180
3	350	0.62	1.31	33.3	1.41	35.8	2	3.40	86.3	0.085	2.16	3.58	91.0	7499	11166
3	500	0.74	1.43	36.3	1.53	38.9	1	3.66	93.0	0.085	2.16	3.83	97.3	9400	13997
3	750	0.91	1.61	40.9	1.71	43.4	1/0	4.05	102.9	0.085	2.16	4.23	107.5	12843	19123

XLPE/PVC/AIA/PVC, Control, Armored 600V, CSA TECK90, Multi Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 131 and No. 174
CSA Approval number: LR1781
CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous Location Rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductors: Bare copper Class B compressed concentric round to ASTM B8.

Insulation: Cross-linked Polyethylene (XLPE) Type RW90.

Color-coded: 1 to 4 conductors— Black, Red, Blue and White; Over 4 conductors—per

ICEA Method 4 individual conductors colored Black with conductor number surface printed in contrasting ink.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

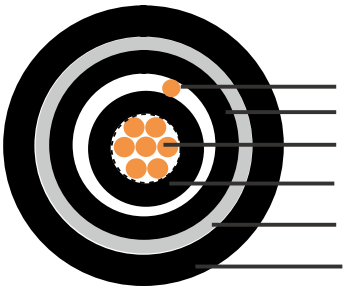
Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	Ground Wire Size AWG	Nominal Diameter (over)						Appr. Cable Weight W/AL Armor				Ampacity (30°C Ambient)
			Insulation		Armor		CABLE		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	
2	14	14	0.13	3.4	0.58	14.8	0.67	16.9	195	310	290	462	15
3	14	14	0.13	3.4	0.60	15.4	0.69	17.4	226	346	336	515	15
4	14	14	0.13	3.4	0.64	16.2	0.72	18.3	256	385	381	573	15
5	14	14	0.13	3.4	0.68	17.3	0.76	19.3	290	430	432	640	12
6	14	14	0.13	3.4	0.72	18.3	0.80	20.3	316	464	471	691	12
7	14	14	0.13	3.4	0.74	18.8	0.82	20.8	338	490	503	730	10.5
8	14	14	0.13	3.4	0.79	20.1	0.87	22.2	373	537	555	799	10.5
10	14	14	0.13	3.4	0.88	22.3	0.96	24.3	451	637	671	948	10.5
12	14	14	0.13	3.4	0.90	23.0	0.99	25.0	511	702	761	1045	10.5
15	14	14	0.13	3.4	0.96	24.3	1.04	26.3	586	791	872	1177	10.5
20	14	14	0.13	3.4	1.13	28.7	1.21	30.8	789	1117	1174	1662	10.5
25	14	14	0.13	3.4	1.22	30.9	1.30	33.0	958	1315	1426	1957	9
30	14	14	0.13	3.4	1.28	32.5	1.36	34.6	1015	1390	1511	2069	9
40	14	14	0.13	3.4	1.40	35.6	1.48	37.7	1234	1649	1837	2454	9
50	14	14	0.13	3.4	1.52	38.5	1.60	40.6	1463	1916	2178	2851	7.5
2	12	14	0.15	3.9	0.62	15.8	0.70	17.9	228	352	340	524	20
3	12	14	0.15	3.9	0.65	16.4	0.73	18.5	254	386	378	575	20
4	12	14	0.15	3.9	0.69	17.4	0.77	19.5	293	434	436	646	20
5	12	14	0.15	3.9	0.73	18.5	0.81	20.6	350	501	521	746	16
6	12	14	0.15	3.9	0.81	20.5	0.89	22.5	416	585	619	871	16

TECK90 Amrored Control & Power Cables

NO. of CON.	CON. Size (AWG/ kcmil)	Ground Wire Size AWG	Nominal Diameter (over)						Appr. Cable Weight W/AL Armor				Ampacity (30°C Ambient)
			Insulation		Armor		CABLE		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	
7	12	14	0.15	3.9	0.83	21.0	0.91	23.1	443	616	660	917	14
8	12	14	0.15	3.9	0.86	21.7	0.94	23.8	492	673	732	1002	14
10	12	14	0.15	3.9	0.95	24.2	1.04	26.2	555	757	826	1127	14
12	12	14	0.15	3.9	1.01	25.7	1.10	27.8	653	942	972	1402	14
15	12	14	0.15	3.9	1.07	27.2	1.16	29.3	757	1065	1127	1585	14
20	12	14	0.15	3.9	1.23	31.3	1.32	33.4	986	1346	1468	2003	14
25	12	14	0.15	3.9	1.33	33.8	1.42	35.9	1210	1602	1801	2384	12
30	12	14	0.15	3.9	1.40	35.6	1.49	37.7	1320	1735	1965	2582	12
40	12	14	0.15	3.9	1.54	39.1	1.64	41.6	1725	2185	2567	3252	12
50	12	14	0.15	3.9	1.67	42.4	1.77	44.9	2055	2556	3058	3804	10
2	10	12	0.18	4.5	0.67	17.0	0.75	19.0	275	411	410	612	30
3	10	12	0.18	4.5	0.70	17.7	0.78	19.7	327	470	487	700	30
4	10	12	0.18	4.5	0.74	18.8	0.83	20.9	413	565	615	841	30
5	10	12	0.18	4.5	0.82	20.9	0.91	22.9	473	644	704	959	24
6	10	12	0.18	4.5	0.88	22.2	0.96	24.3	515	717	766	1066	24
7	10	12	0.18	4.5	0.90	22.9	0.99	25.0	552	754	821	1122	21
8	10	12	0.18	4.5	0.93	23.6	1.02	25.7	613	830	912	1235	21
10	10	12	0.18	4.5	1.08	27.3	1.16	29.4	828	1181	1232	1757	21
12	10	12	0.18	4.5	1.15	29.2	1.23	31.3	916	1276	1363	1899	21
15	10	12	0.18	4.5	1.22	30.9	1.30	33.0	1084	1481	1613	2203	21
20	10	12	0.18	4.5	1.36	34.4	1.44	36.5	1316	1750	1958	2604	21
25	10	12	0.18	4.5	1.47	37.3	1.55	39.4	1612	2099	2399	3124	18
30	10	12	0.18	4.5	1.55	39.4	1.65	41.8	1821	2323	2709	3457	18
40	10	12	0.18	4.5	1.71	43.4	1.81	45.9	2278	2837	3390	4222	18
50	10	12	0.18	4.5	1.87	47.5	1.97	49.9	2820	3557	4196	5293	15

XLPE/PVC/AIA/PVC, Power, Armored 1000V, CSA TECK90, Single Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 131 and No. 174
CSA Approval number: LR1781
CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous Location Rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Insulation: Cross-linked Polyethylene (XLPE) Type RW90.

Color-coded: Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid bare copper wires applied over the Insulation.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

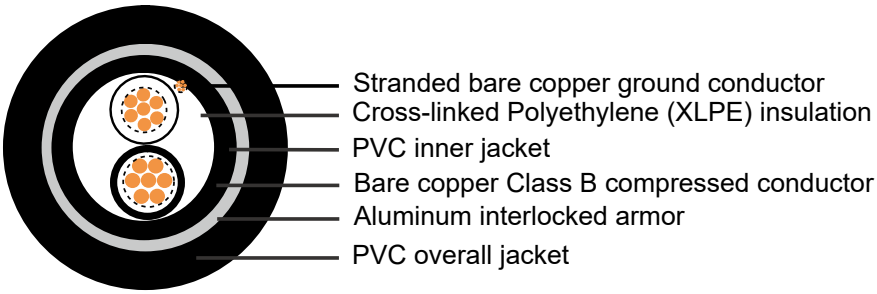
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	Ground Wire Size AWG	Min. AVG Insulation Thickness		Nominal Diameter (over)						Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)
					Insulation		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	
1	6	8	0.060	1.52	0.31	7.8	0.68	17.3	0.77	19.6	320	470	100
1	4	6	0.060	1.52	0.35	8.8	0.73	18.6	0.81	20.6	410	610	135
1	3	6	0.060	1.52	0.38	9.8	0.76	19.3	0.84	21.4	450	680	155
1	2	6	0.060	1.52	0.42	10.5	0.78	19.8	0.87	22.1	510	760	180
1	1	4	0.080	2.03	0.49	12.5	0.88	22.4	0.96	24.4	680	1010	210
1	1/0	4	0.080	2.03	0.53	13.5	0.91	23.2	1.00	25.4	760	1130	245
1	2/0	4	0.080	2.03	0.58	14.7	0.95	24.1	1.04	26.4	860	1280	285
1	3/0	3	0.080	2.03	0.63	15.9	1.03	26.2	1.12	28.5	1080	1610	330
1	4/0	3	0.080	2.03	0.69	17.5	1.08	27.5	1.17	29.7	1270	1890	385
1	250	2	0.090	2.29	0.75	19.2	1.21	30.8	1.29	32.8	1490	2210	425
1	350	1	0.090	2.29	0.86	21.7	1.30	33.0	1.39	35.3	1910	2840	530
1	500	1/0	0.090	2.29	0.99	25.0	1.42	36.1	1.51	38.4	2510	3740	660
1	750	2/0	0.090	2.29	1.16	29.4	1.59	40.4	1.69	43.0	3510	5230	845
1	1000	2/0	0.090	2.29	1.31	33.2	1.81	46.0	1.90	48.3	4430	6590	1000

XLPE/PVC/AIA/PVC, Control and Power, Armored 1000V, CSA TECK90



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 131 and No. 174
CSA Approval numbers: LR1781
CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr), UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous Location Rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper compressed concentric round to ASTM B8 Class B.

Insulation: Cross-linked Polyethylene (XLPE) Type RW90.

Color-coded: 14 AWG to 2 AWG—black and White; 1 AWG to 1000 kcmil—printed numbers

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare

copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

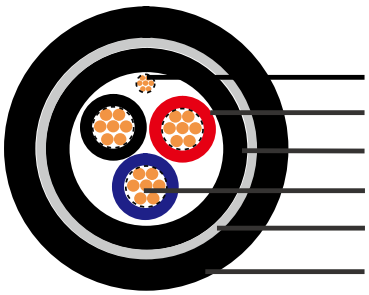
Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Min. AVG Insulation Thickness		Nominal Diameter (over)						Appr. Cable Weight W/AL Armor				Ampacity (30°C Ambient)
					Insulation		Armor		Cable		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	
2	14	14	0.045	1.14	0.17	4.2	0.65	16.5	0.73	18.5	219	350	326	521	15
2	12	14	0.045	1.14	0.18	4.6	0.69	17.6	0.77	19.6	255	412	380	613	20
2	10	12	0.045	1.14	0.21	5.3	0.73	18.5	0.81	20.6	291	441	433	657	30
2	8	10	0.045	1.14	0.24	6.1	0.82	20.8	0.90	22.9	392	564	584	840	45
2	6	8	0.060	1.52	0.31	7.8	0.94	23.9	1.02	25.9	556	758	827	1128	65
2	4	8	0.060	1.52	0.35	8.8	1.07	27.2	1.16	29.5	744	1052	1107	1565	85
2	3	6	0.060	1.52	0.38	9.8	1.15	29.2	1.23	31.3	905	1239	1347	1844	105
2	2	6	0.060	1.52	0.42	10.5	1.20	30.5	1.28	32.5	1030	1380	1533	2054	120
2	1	6	0.080	2.03	0.49	12.5	1.34	34.0	1.42	36.1	1235	1630	1838	2425	140
2	1/0	6	0.080	2.03	0.53	13.5	1.45	36.8	1.53	38.9	1425	1854	2120	2759	155
2	2/0	6	0.080	2.03	0.58	14.8	1.50	38.1	1.58	40.1	1660	2107	2470	3135	185
2	3/0	4	0.080	2.03	0.63	15.9	1.59	40.4	1.69	42.9	1995	2471	2969	3677	210
2	4/0	4	0.080	2.03	0.69	17.5	1.70	43.2	1.79	45.5	2350	2862	3497	4259	235
2	250	4	0.090	2.29	0.75	19.2	1.84	46.8	1.93	49.0	2779	3332	4135	4958	265
2	350	3	0.090	2.29	0.86	21.7	2.09	53.1	2.18	55.4	3650	4285	5431	6376	325
2	500	3	0.090	2.29	0.99	25.0	2.33	59.2	2.45	62.2	4895	5607	7284	8343	395
2	750	2	0.090	2.29	1.16	29.4	2.67	67.8	2.79	70.9	6872	7695	10226	11450	500
2	1000	1	0.090	2.29	1.31	33.2	2.98	75.7	3.10	78.8	8993	10376	13382	15439	585
3	14	14	0.045	1.14	0.17	4.2	0.67	17.0	0.76	19.3	261	398	388	592	15
3	12	14	0.045	1.14	0.18	4.6	0.72	18.3	0.80	20.3	299	445	445	662	20
3	10	12	0.045	1.14	0.21	5.3	0.79	20.1	0.88	22.4	374	539	557	802	30
3	8	10	0.045	1.14	0.24	6.1	0.86	21.9	0.94	23.9	486	666	723	991	45
3	6	8	0.060	1.52	0.31	7.8	1.03	26.2	1.13	28.7	724	836	1078	1244	65
3	4	8	0.060	1.52	0.35	8.8	1.16	29.5	1.25	31.8	970	1327	1444	1975	85

TECK90 Amrored Control & Power Cables

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Min. AVG Insulation Thickness		Nominal Diameter (over)						Appr. Cable Weight W/AL Armor				Ampacity (30°C Ambient)
					Insulation		Armor		Cable		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	
3	3	6	0.060	1.52	0.38	9.8	1.22	31.0	1.30	33.0	1136	1509	1691	2246	105
3	2	6	0.060	1.52	0.42	10.5	1.28	32.5	1.37	34.8	1311	1702	1951	2533	120
3	1	6	0.080	2.03	0.49	12.5	1.44	36.6	1.54	39.1	1593	2045	2371	3043	140
3	1/0	6	0.080	2.03	0.53	13.5	1.56	39.6	1.68	42.7	1906	2389	2837	3555	155
3	2/0	6	0.080	2.03	0.58	14.8	1.65	41.9	1.77	45.0	2225	2732	3311	4066	185
3	3/0	4	0.080	2.03	0.63	15.9	1.75	44.5	1.87	47.5	2666	3261	3967	4853	210
3	4/0	4	0.080	2.03	0.69	17.5	1.86	47.2	1.98	50.3	3207	3806	4772	5664	235
3	250	4	0.090	2.29	0.75	19.2	2.05	52.1	2.17	55.1	3800	4513	5655	6716	265
3	350	3	0.090	2.29	0.86	21.7	2.26	57.4	2.40	61.0	4979	5906	7409	8789	325
3	500	3	0.090	2.29	0.99	25.0	2.52	64.0	2.66	67.6	6586	7627	9798	11349	395
3	750	2	0.090	2.29	1.16	29.4	2.89	73.4	3.03	77.0	9267	10470	13790	15580	500
3	1000	1	0.090	2.29	1.31	33.2	3.28	83.3	3.44	87.4	12184	13566	18130	20187	585
4	14	14	0.045	1.14	0.17	4.2	0.72	18.3	0.80	20.3	290	440	430	660	15
4	12	14	0.045	1.14	0.18	4.6	0.79	20.1	0.88	22.4	357	521	531	776	20
4	10	12	0.045	1.14	0.21	5.3	0.85	21.6	0.93	23.6	455	632	677	941	30
4	8	10	0.045	1.14	0.24	6.1	0.92	23.4	1.00	25.4	548	736	816	1096	45
4	6	8	0.060	1.52	0.31	7.8	1.15	29.2	1.25	31.8	907	1261	1350	1877	65
4	4	8	0.060	1.52	0.35	8.8	1.26	32.0	1.35	34.3	1168	1558	1738	2319	85
4	3	6	0.060	1.52	0.38	9.8	1.31	33.3	1.40	35.6	1373	1782	2043	2652	105
4	2	6	0.060	1.52	0.42	10.5	1.37	34.8	1.46	37.1	1583	2013	2356	2996	120
4	1	6	0.080	2.03	0.49	12.5	1.60	40.6	1.72	43.7	2032	2551	3024	3796	140
4	1/0	6	0.080	2.03	0.53	13.5	1.69	42.9	1.81	46.0	2365	2914	3520	4336	155
4	2/0	6	0.080	2.03	0.58	14.8	1.79	45.5	1.91	48.5	2745	3331	4085	4957	185
4	3/0	4	0.080	2.03	0.63	15.9	1.91	48.5	2.03	51.6	3398	4135	5057	6153	210
4	4/0	4	0.080	2.03	0.69	17.5	2.09	53.1	2.21	56.1	4170	4983	6205	7415	235
4	250	4	0.090	2.29	0.75	19.2	2.23	56.7	2.35	59.7	4789	5661	7126	8424	265
4	350	3	0.090	2.29	0.86	21.7	2.46	62.5	2.60	66.0	6307	7264	9385	10809	325
4	500	3	0.090	2.29	0.99	25.0	2.76	70.1	2.90	73.7	8438	9515	12556	14159	395
4	750	2	0.090	2.29	1.16	29.4	3.24	82.3	3.42	86.9	12411	13683	18468	20360	500
4	1000	1	0.090	2.29	1.31	33.2	3.65	92.7	3.84	97.6	15800	23510	23500	34968	585

XLPE/PVC/AIA/PVC, Power/Control Composite 600V, CSA TECK90, Three Power and Three 14 AWG Control Conductors



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 131 and No. 174
CSA Approval numbers: LR1781
CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous Location Rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper compressed concentric round to ASTM B8 Class B.

Insulation: Cross-Linked Polyethylene (XLPE) Type RW90.

Color-coded: 14 AWG to 2 AWG—Black, Red and Blue; 1 AWG to 4/0 AWG—printed numbers.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

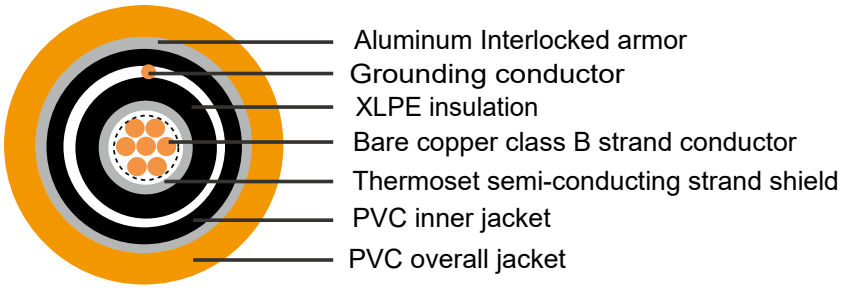
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Min. AVG Insulation Thickness		Nominal Diameter (over)						Appr. Cable Weight W/AL Armor				Ampacity (30°C Ambient)
					Insulation		Armor		Cable		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	
3	12	14	0.030	0.76	0.15	3.9	0.78	19.8	0.86	21.8	356	519	530	789	20
3	10	12	0.030	0.76	0.18	4.5	0.81	20.6	0.89	22.6	416	586	619	921	30
3	8	10	0.045	1.14	0.24	6.1	0.95	24.0	1.00	25.4	541	729	805	1198	45
3	6	8	0.045	1.14	0.28	7.0	0.99	25.0	1.20	30.5	696	896	1035	1540	65
3	4	8	0.045	1.14	0.32	8.2	1.14	28.8	1.25	31.8	972	1293	1446	2151	85
3	2	6	0.045	1.14	0.38	9.7	1.27	32.3	1.39	35.2	1295	1662	1927	2868	120
3	1	6	0.055	1.40	0.44	11.1	1.39	35.2	1.50	38.1	1539	1941	2290	3408	140
3	1/0	6	0.055	1.40	0.48	12.2	1.47	37.3	1.59	40.3	1798	2227	2676	3982	155
3	2/0	6	0.055	1.40	0.53	13.3	1.57	39.8	1.71	43.3	2150	2609	3199	4760	185
3	3/0	4	0.055	1.40	0.58	17.1	1.68	42.5	1.82	46.1	2592	3087	3857	5740	210
3	4/0	4	0.055	1.40	0.63	16.0	1.80	45.7	1.94	49.1	3080	3615	4583	6820	235

XLPE/PVC/AIA/PVC, Power, Unshielded, Armored 5KV, CSA TECK90



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 131 and No. 174
CSA Approval numbers: LR1781
CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4,
ICEA T-30-520 (70,000 BTU/hr)
Hazardous Location Rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand shield: A thermoset semi-conducting shield is extruded over the conductor.

Insulation: Cross-Linked Polyethylene (XLPE) Type RW90—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid bare copper wires applied over the insulation.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

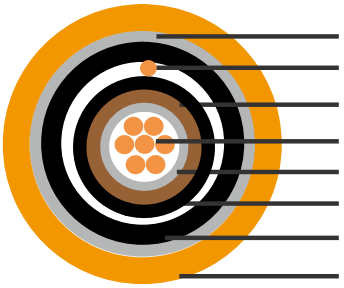
Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)						Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)
			Insulation		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
1	6	8	0.39	10.0	0.76	19.3	0.85	21.6	370	550	100
1	4	6	0.43	10.5	0.84	21.4	0.93	23.7	490	730	135
1	3	6	0.46	11.7	0.86	21.9	0.95	24.2	540	800	155
1	2	6	0.49	12.5	0.89	22.6	0.98	24.9	590	890	180
1	1	4	0.52	13.3	0.93	23.6	1.02	25.9	720	1060	210
1	1/0	4	0.56	14.2	0.96	24.4	1.06	26.9	800	1190	245
1	2/0	4	0.60	15.2	1.03	26.2	1.13	28.7	900	1350	285
1	3/0	3	0.64	16.3	1.08	27.5	1.18	30.0	1130	1680	330
1	4/0	3	0.70	17.8	1.16	29.5	1.26	32.0	1330	1970	385
1	250	2	0.75	19.1	1.24	31.5	1.34	34.1	1530	2280	425
1	350	1	0.85	21.5	1.34	34.0	1.44	36.6	1960	2910	530
1	500	1/0	0.97	24.6	1.49	37.9	1.59	40.4	2570	3830	660
1	750	2/0	1.15	29.2	1.68	42.7	1.78	45.2	3900	5800	845
1	1000	2/0	1.30	33.0	1.86	47.3	1.96	49.8	4930	7340	1000
3	6	8	0.39	10.0	1.27	32.3	1.37	34.8	927	1380	65
3	4	8	0.43	10.5	1.37	34.8	1.47	37.4	1138	1694	85
3	3	6	0.46	11.7	1.42	36.1	1.52	38.6	1310	1950	105
3	2	6	0.49	12.5	1.49	37.9	1.59	40.4	1476	2197	120
3	1	6	0.52	13.3	1.59	40.4	1.69	43.0	1752	2607	140
3	1/0	6	0.56	14.2	1.67	42.4	1.77	45.0	2012	2994	155
3	2/0	6	0.60	15.2	1.76	44.7	1.86	47.3	2334	3473	185

TECK90 Amrored Control & Power Cables

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)						Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)
			Insulation		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
3	3/0	4	0.64	16.3	1.87	47.5	1.97	50.1	2835	4219	210
3	4/0	4	0.70	17.8	1.98	50.3	2.08	52.9	3328	4952	235
3	250	4	0.75	19.1	2.15	54.6	2.25	57.2	3910	5819	265
3	350	3	0.85	21.5	2.36	60.0	2.49	63.3	5102	7592	325
3	500	3	0.97	24.6	2.62	66.6	2.75	69.9	6721	10001	395
3	750	2	1.15	29.2	3.01	76.5	3.14	79.8	9469	14090	500
3	1000	1	1.30	33.0	3.39	86.1	3.54	89.9	13790	20520	585

TRXLPE/Wire Shield/PVC/AIA/PVC, Power, Shielded, Armored 5KV, CSA HVTECK, 100% / 133% Ins. Levels, 90 Mils, Single Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr), UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3, CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusive process, plus a concentric serving of solid copper wires acting as both a drain wire shield and as a grounding (bonding) conductor—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid copper wires applied over the thermosetting insulation shield.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

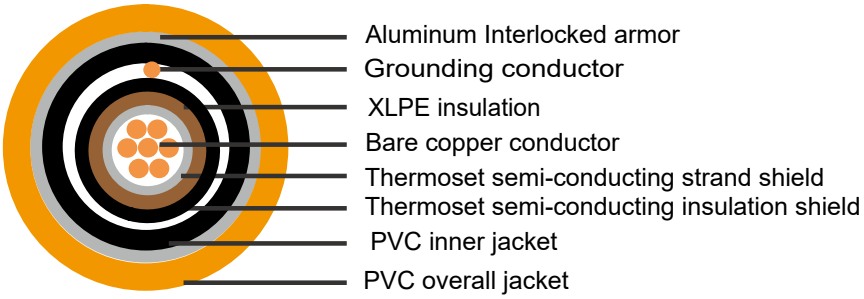
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor		Ampacity (40°C Ambient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
1	6	8	0.39	10.0	0.47	11.9	0.68	17.3	0.90	22.9	0.99	25.2	510	770	112
1	4	6	0.43	10.5	0.51	13.0	0.72	18.3	0.94	23.9	1.03	26.2	590	880	148
1	2	6	0.49	12.5	0.57	14.5	0.78	19.8	1.03	26.2	1.12	28.5	750	1120	195
1	1	4	0.52	13.3	0.60	15.3	0.81	20.6	1.06	27.0	1.15	29.2	870	1300	225
1	1/0	4	0.56	14.2	0.63	16.0	0.88	22.4	1.13	28.7	1.22	31.0	1010	1500	260
1	2/0	4	0.60	15.2	0.67	17.0	0.92	23.4	1.17	29.7	1.26	32.0	1120	1670	299
1	3/0	3	0.64	16.3	0.71	18.1	0.97	24.7	1.22	31.0	1.31	33.3	1300	1930	345
1	4/0	3	0.70	17.8	0.76	19.3	1.02	25.9	1.27	32.3	1.36	34.6	1470	2180	400
1	250	2	0.75	19.1	0.82	20.8	1.10	28.0	1.38	35.1	1.48	37.6	1680	2500	444
1	350	1	0.85	21.5	0.96	24.4	1.24	31.5	1.52	38.6	1.62	41.2	2120	3150	549
1	500	1/0	0.97	24.6	1.04	26.4	1.34	34.0	1.62	41.2	1.72	43.7	2770	4130	688
1	750	2/0	1.15	29.2	1.24	31.5	1.54	39.1	1.83	46.5	1.93	49.0	3780	5760	889
1	1000	2/0	1.30	33.0	1.39	35.3	1.76	44.7	2.05	52.1	2.15	54.6	5010	7460	1061

TRXLPE/Wire Shield/PVC/AIA/PVC, Power, Shielded, Armored 5KV, CSA HVTECK, 133% Ins. Level, 115 Mils, Single Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr), UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3, C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusion process, plus a concentric serving of solid copper wires acting as both a drain wire shield and as a grounding (bonding) conductor—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid copper wires applied over the thermosetting insulation shield.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

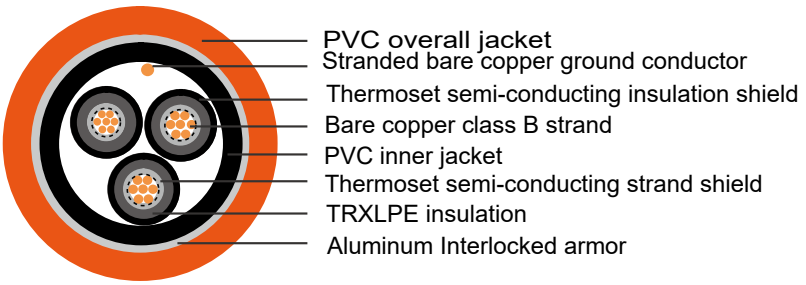
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor		Ampacity (40°C Ambient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
1	6	8	0.44	11.2	0.51	13.0	0.73	18.6	0.95	24.2	1.04	26.4	550	820	112
1	4	6	0.48	12.3	0.55	13.9	0.77	19.6	0.99	25.2	1.08	27.5	680	1010	148
1	2	6	0.54	13.7	0.61	15.5	0.83	21.1	1.08	27.5	1.17	29.7	840	1250	195
1	1	4	0.57	14.5	0.64	16.3	0.91	23.0	1.16	29.5	1.25	31.8	960	1430	225
1	1/0	4	0.61	15.4	0.68	17.3	0.94	23.9	1.19	30.3	1.28	32.5	1060	1570	260
1	2/0	4	0.65	16.4	0.72	18.3	0.98	25.0	1.23	31.3	1.32	33.6	1170	1740	299
1	3/0	3	0.70	17.7	0.76	19.3	1.03	26.3	1.31	33.3	1.40	35.6	563	2000	345
1	4/0	3	0.75	18.9	0.81	20.6	1.08	27.5	1.36	34.6	1.45	36.9	710	2260	400
1	250	2	0.80	20.3	0.87	22.1	1.16	29.6	1.44	36.6	1.53	38.9	849	2580	444
1	350	1	0.94	23.9	1.01	25.7	1.29	32.8	1.57	39.9	1.67	42.4	1169	3230	549
1	500	1/0	1.02	26.0	1.11	28.2	1.41	35.8	1.69	43.0	1.79	45.6	1390	4260	688
1	750	2/0	1.20	30.6	1.29	32.8	1.60	40.7	1.89	48.0	1.99	50.6	2821	5860	889
1	1000	2/0	1.35	34.3	1.44	36.6	1.81	46.0	2.10	53.4	2.20	55.9	3608	7570	1061

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 5KV, CSA HVTECK, 100% / 133% Ins. Levels, 90 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

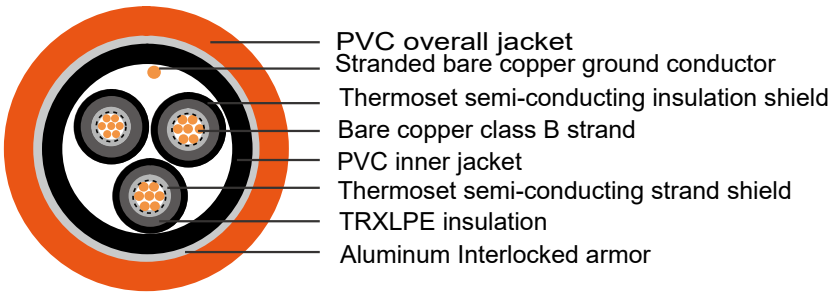
Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Amp-acity (40°C Amb-ient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
3	6	8	0.39	9.91	0.47	11.94	1.17	29.7	1.45	36.9	1.54	39.2	1120	1590	1670	2360	93
3	4	8	0.43	10.92	0.51	12.95	1.26	32.0	1.54	39.1	1.63	41.4	1350	1850	1670	2760	122
3	2	6	0.49	12.45	0.57	14.48	1.39	35.3	1.67	42.4	1.77	45.0	1740	2290	2590	3410	159
3	1	6	0.52	13.21	0.60	15.24	1.45	36.9	1.73	43.9	1.83	46.5	1960	2540	2920	3780	184
3	1/0	6	0.56	14.22	0.63	16.00	1.53	38.9	1.81	46.0	1.91	48.5	2290	3010	3410	4490	211
3	2/0	6	0.60	15.24	0.67	17.02	1.62	41.2	1.91	48.5	2.01	51.1	2620	3380	3900	5030	243
3	3/0	4	0.64	16.26	0.71	18.03	1.78	45.2	2.07	52.6	2.17	55.1	3210	4040	4780	6020	279
3	4/0	4	0.70	17.78	0.76	19.30	1.90	48.3	2.19	55.6	2.29	58.2	3720	4600	5530	6840	321
3	250	4	0.75	19.05	0.82	20.83	2.01	51.1	2.30	58.4	2.43	61.8	4300	5240	6400	7800	355
3	350	3	0.85	21.59	0.96	24.38	2.32	58.9	2.61	66.3	2.74	69.6	5480	6520	8160	9700	435

TECK90 Amrored Control & Power Cables

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Amp-acity (40°C Amb-ient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000 FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
3	500	3	0.97	24.64	1.04	26.42	2.48	63.0	2.77	70.4	2.90	73.7	7130	8280	10610	12320	536
3	750	2	1.15	29.21	1.24	31.50	2.98	75.7	3.27	83.1	3.42	86.9	10330	11700	15370	17410	668
3	1000	1	1.30	33.02	1.39	35.31	3.31	84.1	3.60	91.5	3.75	95.3	13080	14600	19460	21730	768

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 5KV, CSA HVTECK, 133% Ins. Level, 115 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

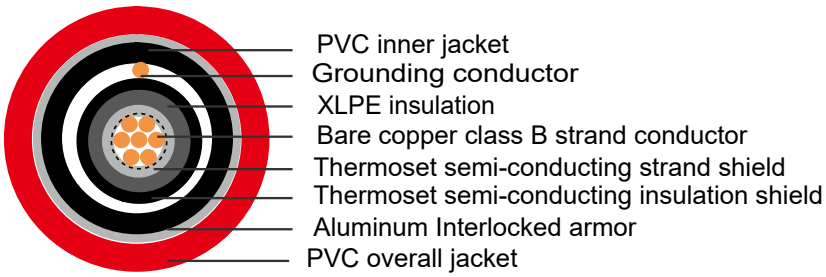
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

Cables Parameter

CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (Over)										Appr. Cable Weight W/AL Armor				Ampacity (40°C Ambient)
		Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000 FT		kg/km		
		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
6	8	0.39	9.91	0.47	11.94	1.17	29.7	1.45	36.9	1.54	39.2	1120	1590	1670	2360	93
4	8	0.43	10.92	0.51	12.95	1.26	32.0	1.54	39.1	1.63	41.4	1350	1850	1670	2760	122
2	6	0.49	12.45	0.57	14.48	1.39	35.3	1.67	42.4	1.77	45.0	1740	2290	2590	3410	159
1	6	0.52	13.21	0.60	15.24	1.45	36.9	1.73	43.9	1.83	46.5	1960	2540	2920	3780	184
1/0	6	0.56	14.22	0.63	16.00	1.53	38.9	1.81	46.0	1.91	48.5	2290	3010	3410	4490	211
2/0	6	0.60	15.24	0.67	17.02	1.62	41.2	1.91	48.5	2.01	51.1	2620	3380	3900	5030	243
3/0	4	0.64	16.26	0.71	18.03	1.78	45.2	2.07	52.6	2.17	55.1	3210	4040	4780	6020	279
4/0	4	0.70	17.78	0.76	19.30	1.90	48.3	2.19	55.6	2.29	58.2	3720	4600	5530	6840	321
250	4	0.75	19.05	0.82	20.83	2.01	51.1	2.30	58.4	2.43	61.8	4300	5240	6400	7800	355
350	3	0.85	21.59	0.96	24.38	2.32	58.9	2.61	66.3	2.74	69.6	5480	6520	8160	9700	435
500	3	0.97	24.64	1.04	26.42	2.48	63.0	2.77	70.4	2.90	73.7	7130	8280	10610	12320	536
750	2	1.15	29.21	1.24	31.50	2.98	75.7	3.27	83.1	3.42	86.9	10330	11700	15370	17410	668
1000	1	1.30	33.02	1.39	35.31	3.31	84.1	3.60	91.5	3.75	95.3	13080	14600	19460	21730	768

TRXLPE/Wire Shield/PVC/AIA/PVC, Power, Shielded, Armored 15KV, CSA HVTECK, 100% Ins. Level, 175 Mils, Single Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusion process, plus a concentric serving of solid copper wires acting as both a drain wire shield and as a grounding (bonding) conductor—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid copper wires applied over the thermosetting insulation shield.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

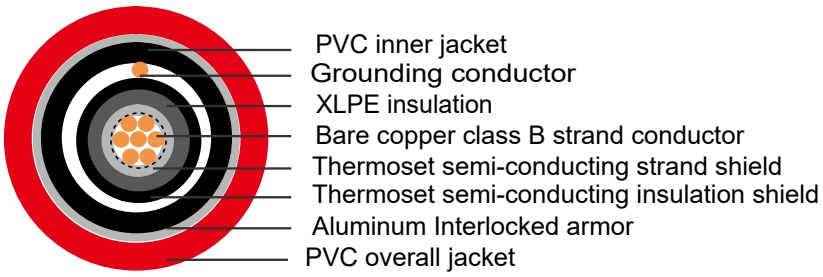
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor		Ampacity (40°C Ambient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
1	2	6	0.66	16.7	0.73	18.6	0.99	25.3	1.24	31.5	1.33	33.8	950	1420	195
1	1	4	0.69	17.5	0.76	19.3	1.03	26.1	1.28	32.5	1.37	34.8	1080	1600	225
1	1/0	4	0.73	18.5	0.80	20.3	1.06	27.0	1.31	33.3	1.40	35.6	1170	1750	259
1	2/0	4	0.77	19.5	0.84	21.3	1.10	27.9	1.35	34.3	1.44	36.6	1290	1920	298
1	3/0	3	0.82	20.8	0.88	22.4	1.15	29.2	1.40	35.6	1.49	37.9	1470	2190	343
1	4/0	3	0.87	22.0	0.94	23.9	1.21	30.6	1.46	37.1	1.55	39.4	1640	2450	397
1	250	2	0.93	23.5	0.99	25.2	1.28	32.5	1.53	38.9	1.63	41.4	1900	2830	440
1	350	1	1.07	27.2	1.15	29.2	1.43	36.3	1.71	43.5	1.81	46.0	2370	3530	543
1	500	1/0	1.14	29.0	1.23	31.2	1.54	39.1	1.83	46.5	1.93	49.1	3080	4590	678
1	750	2/0	1.32	33.6	1.41	35.9	1.78	45.2	2.07	52.6	2.17	55.2	4240	6320	872
1	1000	2/0	1.48	37.6	1.57	39.9	1.93	49.0	2.22	56.4	2.32	59.0	5280	7860	1040

TRXLPE/Wire Shield/PVC/AIA/PVC, Power, Shielded, Armored 15KV, CSA HVTECK, 133% Ins. Level, 220 Mils, Single Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: A semi-conducting thermosetting layer, applied in a triple extrusion process, plus a concentric serving of solid copper wires acting as both a drain wire shield and as a grounding (bonding) conductor—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid copper wires applied over the thermosetting insulation shield.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

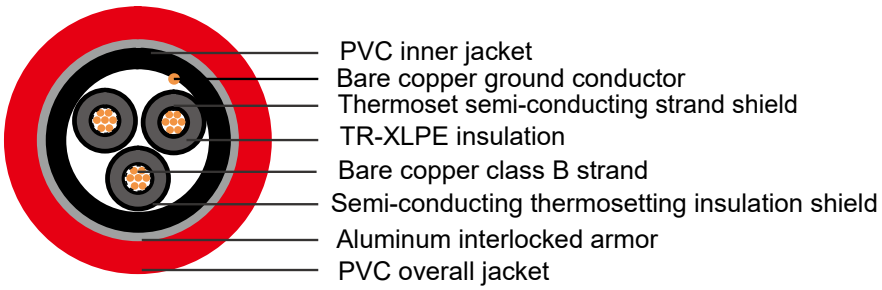
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor		Ampacity (40°C Ambient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
1	2	6	0.66	16.7	0.73	18.6	0.99	25.3	1.24	31.5	1.33	33.8	950	1420	195
1	1	4	0.69	17.5	0.76	19.3	1.03	26.1	1.28	32.5	1.37	34.8	1080	1600	225
1	1/0	4	0.73	18.5	0.80	20.3	1.06	27.0	1.31	33.3	1.40	35.6	1170	1750	259
1	2/0	4	0.77	19.5	0.84	21.3	1.10	27.9	1.35	34.3	1.44	36.6	1290	1920	298
1	3/0	3	0.82	20.8	0.88	22.4	1.15	29.2	1.40	35.6	1.49	37.9	1470	2190	343
1	4/0	3	0.87	22.0	0.94	23.9	1.21	30.6	1.46	37.1	1.55	39.4	1640	2450	397
1	250	2	0.93	23.5	0.99	25.2	1.28	32.5	1.53	38.9	1.63	41.4	1900	2830	440
1	350	1	1.07	27.2	1.15	29.2	1.43	36.3	1.71	43.5	1.81	46.0	2370	3530	543
1	500	1/0	1.14	29.0	1.23	31.2	1.54	39.1	1.83	46.5	1.93	49.1	3080	4590	678
1	750	2/0	1.32	33.6	1.41	35.9	1.78	45.2	2.07	52.6	2.17	55.2	4240	6320	872
1	1000	2/0	1.48	37.6	1.57	39.9	1.93	49.0	2.22	56.4	2.32	59.0	5280	7860	1040

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 15KV, CSA HVTECK, 100% Ins. Level, 175 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

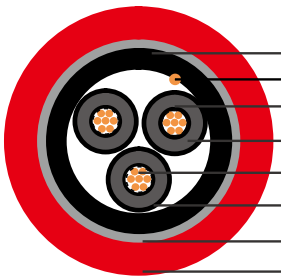
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Ampa-city (40°C Am-bient)
		Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000FT		kg/km		
		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
2	6	0.66	16.76	0.73	18.54	1.82	46.3	2.11	53.6	2.21	56.2	2370	3220	3530	4790	164
1	6	0.69	17.53	0.76	19.30	1.89	48.0	2.18	55.4	2.27	57.7	2620	3490	3890	5190	187
1/0	6	0.73	18.54	0.79	20.07	1.97	50.0	2.26	57.4	2.35	59.7	2900	3810	4320	5670	215
2/0	6	0.77	19.56	0.84	21.33	2.06	52.3	2.34	59.5	2.46	62.5	3330	4280	4960	6370	246
3/0	4	0.82	20.83	0.88	22.35	2.16	54.9	2.44	62.0	2.57	65.3	3840	4840	5720	7200	283
4/0	4	0.87	22.10	0.93	23.62	2.27	57.7	2.56	65.1	2.68	68.1	4360	5410	6490	8050	325
250	4	0.93	23.62	0.99	25.15	2.38	60.5	2.68	68.1	2.79	70.9	4880	5990	7260	8910	359
350	3	1.06	26.92	1.15	29.21	2.73	69.4	3.02	76.7	3.14	79.8	6210	7430	9240	11060	438
500	3	1.14	28.96	1.23	31.24	2.97	75.5	3.26	82.8	3.40	86.4	8549	9550	12721	14200	536
750	2	1.32	33.53	1.41	35.81	3.35	85.1	3.64	92.5	3.77	95.8	11100	12640	16520	18810	669
1000	1	1.47	37.34	1.56	39.62	3.72	94.5	3.97	100.8	4.17	105.9	13890	15580	20670	23180	770

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 15KV, CSA HVTECK, 133% Ins. Level, 220 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr), ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

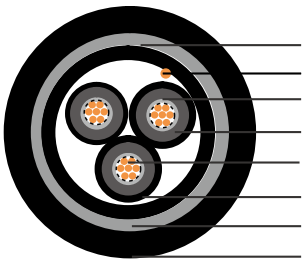
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Ampa-city (40°C Am-bient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
3	2	6	0.66	16.76	0.73	18.54	1.82	46.3	2.11	53.6	2.21	56.2	2370	3220	3530	4790	164
3	1	6	0.69	17.53	0.76	19.30	1.89	48.0	2.18	55.4	2.27	57.7	2620	3490	3890	5190	187
3	1/0	6	0.73	18.54	0.79	20.07	1.97	50.0	2.26	57.4	2.35	59.7	2900	3810	4320	5670	215
3	2/0	6	0.77	19.56	0.84	21.33	2.06	52.3	2.34	59.5	2.46	62.5	3330	4280	4960	6370	246
3	3/0	4	0.82	20.83	0.88	22.35	2.16	54.9	2.44	62.0	2.57	65.3	3840	4840	5720	7200	283
3	4/0	4	0.87	22.10	0.93	23.62	2.27	57.7	2.56	65.1	2.68	68.1	4360	5410	6490	8050	325
3	250	4	0.93	23.62	0.99	25.15	2.38	60.5	2.68	68.1	2.79	70.9	4880	5990	7260	8910	359
3	350	3	1.06	26.92	1.15	29.21	2.73	69.4	3.02	76.7	3.14	79.8	6210	7430	9240	11060	438
3	500	3	1.14	28.96	1.23	31.24	2.97	75.5	3.26	82.8	3.40	86.4	8549	9550	12721	14200	536
3	750	2	1.32	33.53	1.41	35.81	3.35	85.1	3.64	92.5	3.77	95.8	11100	12640	16520	18810	669

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 25KV, CSA HVTECK, 100% Ins. Level, 260 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

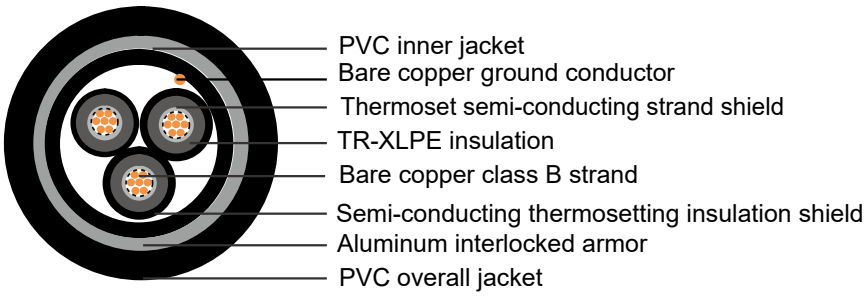
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black or as requested.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Amp-acity (40°C Am-bient)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
3	1	6	0.87	22.10	0.94	23.88	2.26	57.5	2.55	64.8	2.67	67.8	3250	4300	4840	6390	187
3	1/0	6	0.91	23.11	0.97	24.64	2.34	59.5	2.63	66.8	2.74	69.6	3550	4630	5290	6890	215
3	2/0	6	0.95	24.13	1.01	25.65	2.43	61.7	2.72	69.1	2.84	72.2	3930	5040	5850	7500	246
3	3/0	4	0.99	25.15	1.06	26.92	2.54	64.5	2.82	71.6	2.94	74.7	4440	5600	6610	8340	283
3	4/0	4	1.04	26.42	1.13	28.70	2.70	68.5	2.98	75.7	3.10	78.8	5090	6320	7580	9410	325
3	250	4	1.10	27.94	1.18	29.97	2.87	72.9	3.16	80.3	3.29	83.6	5900	7220	8790	10750	359
3	350	3	1.24	31.50	1.33	33.78	3.17	80.5	3.46	87.9	3.60	91.5	7180	8590	10680	12780	438
3	500	3	1.32	33.53	1.41	35.81	3.34	84.9	3.63	92.2	3.76	95.5	8950	10480	13320	15590	536

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 25KV, CSA HVTECK, 133% Ins. Level, 320 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

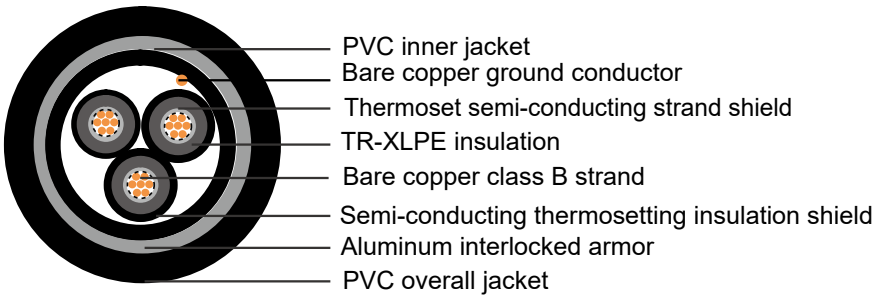
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black or as requested.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GR-ND. Wire Size AWG	Nominal Diameter (over)										Appr. Cable Weight W/AL Armor				Ampa-city (40°C Ambi-ent)
			Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000FT		kg/km		
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
3	1	6	0.99	25.15	1.06	26.92	2.53	64.2	2.82	71.6	2.94	74.7	3690	4850	5490	7210	187
3	1/0	6	1.03	26.16	1.12	28.45	2.65	67.3	2.94	74.7	3.06	77.7	4110	5330	6120	7930	215
3	2/0	6	1.07	27.18	1.16	29.46	2.74	69.6	3.03	77.0	3.15	80.0	4490	5740	6680	8540	246
3	3/0	4	1.12	28.45	1.21	30.73	2.91	73.9	3.19	81.1	3.33	84.6	5270	6600	7840	9820	283
3	4/0	4	1.17	29.72	1.26	32.00	3.02	76.7	3.31	84.1	3.44	87.4	5840	7220	8700	10740	325
3	250	4	1.22	30.99	1.31	33.27	3.15	80.0	3.43	87.1	3.58	90.9	6440	7880	9590	11720	359
3	350	3	1.37	34.80	1.45	36.83	3.44	87.4	3.73	94.8	3.88	98.6	7720	9250	11490	13770	438

TRXLPE/Tape Shield/PVC/AIA/PVC, Power, Shielded, Armored 28KV, CSA HVTECK, 133% Ins. Level, 345 Mils, Three Conductor



Applications:

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Standard:

CSA FT1 and FT4
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UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
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Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color-Coded: Black, Red or Blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

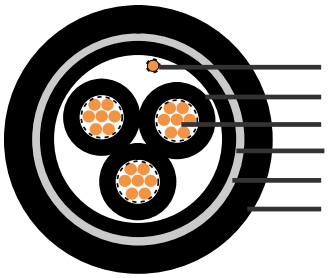
Armor: Aluminum Interlocked Armor (AIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black or as requested.

Cables Parameter

CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (Over)										Appr. Cable Weight W/AL Armor				Ampacity (40°C Ambient)
		Insulation		Insulation Shield		Inner Jacket		Armor		Cable		LBS/ 1000FT		kg/km		
		Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm	AL	Steel	AL	Steel	In Air
1	6	1.04	26.42	1.13	28.70	2.68	68.2	2.97	75.5	3.10	78.8	3980	5210	5930	7750	187
1/0	6	1.08	27.43	1.17	29.72	2.76	70.2	3.05	77.5	3.18	80.8	4360	5620	6490	8370	215
2/0	6	1.12	28.45	1.21	30.73	2.92	74.2	3.21	81.6	3.36	85.4	4950	6280	7370	9350	246
3/0	4	1.17	29.72	1.26	32.00	3.02	76.7	3.31	84.1	3.46	87.9	5490	6860	8160	10210	283
4/0	4	1.22	30.99	1.31	33.27	3.14	79.6	3.43	87.2	3.58	90.9	6090	7510	9060	11180	325
250	4	1.27	32.26	1.37	34.80	3.26	82.9	3.55	90.2	3.70	94.0	6660	8140	9910	12120	359
350	3	1.42	36.07	1.51	38.35	3.56	90.5	3.85	97.8	4.00	101.6	7960	9540	11840	14190	438

XLPE/PVC/GSIA/PVC, Power, Unshielded, Armored 1KV, CSA TECK90, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C22.2 No. 131 and No. 174
CSA Approval (file) number: LR1781
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Insulation: Cross-Linked Polyethene (XLPE) Type RW90.

Color-Coded: Printed numbers.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare

copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option jacket with raised ribs—Black.

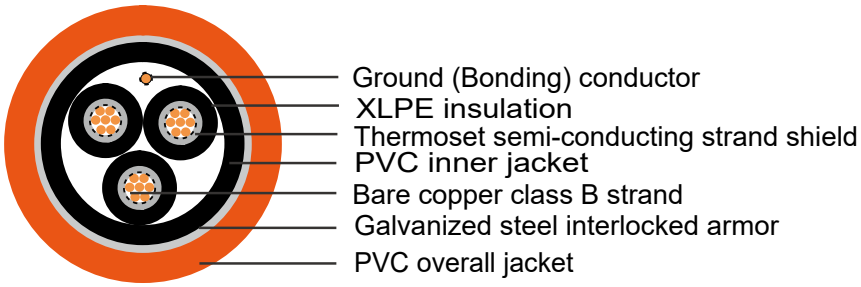
Armor: Galvanized Steel Interlocked Armor (GSIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter (over)								Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)
			Min. AVG. Insulation Thickness		Insulation		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	In Air
3	1/0	6	0.080	2.03	0.36	9.0	1.66	42.2	1.78	45.2	2520	3760	155
3	2/0	6	0.080	2.03	0.54	13.8	1.75	44.5	1.87	47.5	2880	4280	185
3	3/0	4	0.080	2.03	0.59	15.0	1.85	47.0	1.97	50.1	3360	5000	210
3	4/0	4	0.080	2.03	0.64	16.3	1.96	49.8	2.08	52.9	4080	6080	235
3	250	4	0.090	2.29	0.71	18.0	2.15	54.6	2.27	57.7	4790	7130	265
3	350	3	0.090	2.29	0.81	20.4	2.36	60.0	2.50	63.5	6100	9080	325
3	500	2	0.090	2.29	0.93	23.5	2.62	66.6	2.76	70.1	7900	11760	395
3	750	2	0.090	2.29	1.10	27.9	2.99	76.0	3.13	79.5	10830	16110	500
3	1000	1	0.090	2.29	1.25	31.8	3.38	85.6	3.54	89.9	13970	20780	585

XLPE/PVC/GSIA/PVC, Power, Unshielded, Armored 5KV, CSA TECK90, 90 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr)/CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C22.2 No. 131 and No. 174
CSA Approval (file) number: LR1781
Meets EPA 40 CFR part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Cross-Linked Polyethene (XLPE) Type RW90.

Color-Coded: Printed numbers.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option jacket with raised ribs—Black.

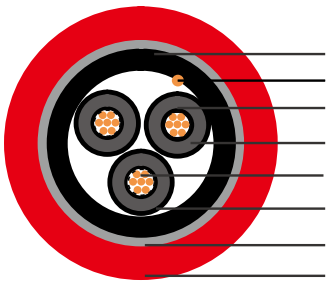
Armor: Galvanized Steel Interlocked Armor (GSIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Orange.

Cables Parameter

CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter(over)						Cable Weight		Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)	Max. Self-Supporting Length
		Insulation		Armor		Cable							
		Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	In Air	m
1/0	6	0.56	14.2	1.77	45.0	1.87	47.5	1082	1610	2700	4020	155	200
2/0	6	0.60	15.2	1.86	47.3	1.96	49.8	1343	1999	3060	4550	185	221
3/0	4	0.65	16.4	1.97	50.0	2.07	52.6	1720	2560	3550	5280	210	240
4/0	4	0.70	17.8	2.08	52.9	2.18	55.4	2315	3445	4290	6380	235	249
250	4	0.75	19.1	2.25	57.2	2.35	59.7	2469	3674	4990	7430	265	251
350	3	0.85	21.8	2.46	62.5	2.59	65.8	3476	5173	6340	9430	325	278
500	2	0.98	24.9	2.72	69.1	2.85	72.4	4837	7198	8130	12100	395	230

TRXLPE/Tape Shield/PVC/GSIA/PVC, Power, Shielded, Armored 15KV, CSA HVTECK, 100% Ins. Level, 175 Mils, Three Conductor



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA FT1 and FT4
IEEE 383 (70,000 BTU/hr)
UL 1581(70,000 BTU/hr)
IEEE 1202 (70,000 BTU/hr) CSA FT4
ICEA T-30-520 (70,000 BTU/hr)
ICEA T-29-520 (210,000 BTU/hr)
Hazardous location rating: HL
CSA Standard C68.3
CSA Standard C22.2 No. 174
CSA Approval (file) numbers: LR27161
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare copper Class B strand.

Strand Shield: A thermoset semi-conducting strand shield is extruded over the conductor.

Insulation: Tree-Retardant Cross-Linked Polyethylene (TR-XLPE).

Insulation Shield: This consists of a semi-conducting thermosetting layer, applied in a triple extrusion process, plus a helically applied gapped copper tape.

Color Code: black, red, or blue colored tape placed longitudinally under the copper tape shield.

Ground (Bonding) Conductor: The conductor consists of one uninsulated stranded bare copper conductor.

Inner Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

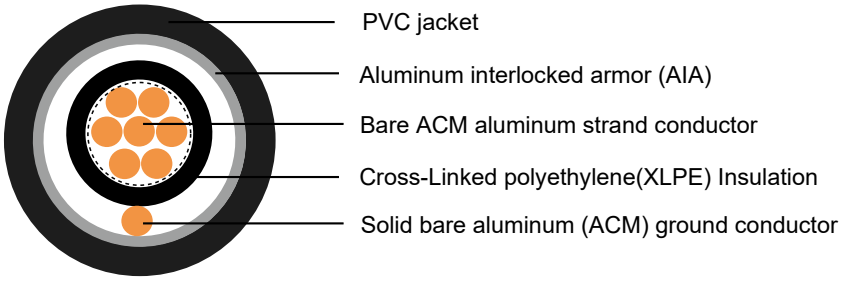
Armor: Galvanized Steel Interlocked Armor (GSIA).

Overall Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Red.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Nominal Diameter(over)								Appr. Cable Weight W/AL Armor		Max. Self-Supporting Length
			Insulation		Insulation Shield		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	m
3	2	6	0.67	17.0	0.72	18.3	2.30	58.4	2.46	62.5	3761	5596	94
3	1	6	0.70	17.8	0.76	19.3	2.37	60.2	2.53	64.3	4022	5985	110
3	1/0	6	0.74	18.8	0.80	20.3	2.46	62.5	2.61	66.3	4385	6525	128
3	2/0	6	0.78	19.8	0.84	21.3	2.55	64.8	2.71	68.8	4800	7142	147
3	3/0	4	0.83	21.1	0.89	22.6	2.67	67.8	2.83	71.9	5354	7967	166
3	4/0	4	0.88	22.4	0.94	23.9	2.79	70.9	2.95	74.9	5979	8897	188
3	250	4	0.92	23.4	0.98	24.9	2.89	73.4	3.05	77.5	6518	9699	204
3	350	3	1.02	25.9	1.09	27.7	3.15	80.0	3.33	84.6	8043	11968	231
3	500	3	1.14	29.0	1.21	30.7	3.47	88.1	3.66	93.0	10132	15076	262
3	750	2	1.32	33.5	1.39	35.3	3.86	98.0	4.04	102.6	13403	19944	298

XLPE/AIA/PVC, Control, Armored 600V, CSA ACWU90 (-40˚C)



Applications:

These cables are used in ventilated, non-ventilated and ladder type cable trays in dry, damp or wet locations, direct earth burial (with protection as required by inspection authority). They are exposed and concealed wiring in dry, damp or wet locations. Besides,the wires are in all hazardous locations when used with certified HL cable glands.

Standard:

CSA Standard C22.2 No. 51 and No. 174
CSA FT1 and FT4
IEEE 1202 (70,000 BTU/hr) CSA FT4
IEEE 383 (70,000 BTU/hr)
UL 1581 (70,000 BTU/hr)
ICEA T-30-520 (70,000 BTU/hr)
Hazardous location rating: HL
Meets EPA 40 CFR, part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare ACM aluminum (8000 series Aluminum) Class B strand.

Insulation: Cross-Linked Polyethylene (XLPE) Type RW90—Black.

Ground (Bonding) Conductor: The conductor is a concentric serving of solid bare aluminum (ACM) wires applied over the Insulation.

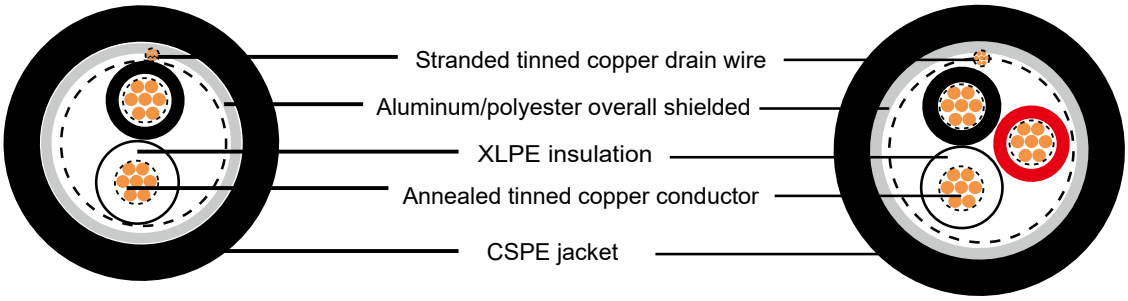
Armor: Aluminum Interlocked Armor (AIA).

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option—Black.

Cables Parameter

NO. of CON.	CON. Size (AWG/ kcmil)	GRND. Wire Size AWG	Min. AVG . Insulation Thickness		Nominal Diameter (over)						Appr. Cable Weight W/AL Armor		Ampacity (30°C Ambient)
					Insulation		Armor		Cable				
			Inches	mm	Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km	
1	4/0	2	0.055	1.40	0.591	15.01	0.940	23.88	1.036	26.31	504	750	300
1	250	1	0.065	1.65	0.658	16.71	1.007	25.58	1.103	28.02	600	893	330
1	350	1/0	0.065	1.65	0.754	19.15	1.103	28.02	1.199	30.45	745	1107	415
1	500	2/0	0.065	1.65	0.872	22.15	1.221	31.01	1.317	33.45	952	1417	515
1	600	2/0	0.080	2.03	0.985	25.02	1.334	33.88	1.430	36.32	1099	1635	585
1	750	3/0	0.080	2.03	1.080	27.43	1.429	36.30	1.525	38.74	1305	1942	670
1	1000	3/0	0.080	2.03	1.230	31.42	1.667	42.34	1.779	45.19	1704	2536	800
3	6	8	0.045	1.14	0.266	6.76	0.783	19.89	0.879	22.33	325	484	55
3	4	6	0.045	1.14	0.310	7.87	0.878	22.30	0.974	24.74	417	621	65
3	2	6	0.045	1.14	0.365	9.27	0.997	25.32	1.093	27.76	530	789	95
3	1/0	4	0.055	1.40	0.418	10.62	1.111	28.22	1.207	30.66	637	948	120
3	2/0	4	0.055	1.40	0.496	12.60	1.279	32.49	1.375	34.93	850	1265	145
3	3/0	4	0.055	1.40	0.543	13.79	1.380	35.05	1.476	37.49	996	1482	165
3	4/0	4	0.055	1.40	0.593	15.06	1.488	37.80	1.584	40.23	1161	1728	185
3	250	2	0.065	1.65	0.662	16.81	1.727	43.87	1.839	46.71	1493	2222	215
3	350	2	0.065	1.65	0.757	19.23	1.931	49.05	2.043	51.89	1885	2805	260
3	500	1	0.065	1.65	0.878	22.30	2.192	55.68	2.304	58.52	2485	3698	330
3	600	1	0.080	2.03	0.984	24.99	2.424	61.57	2.563	65.10	3035	4516	370
3	750	1/0	0.080	2.03	1.077	27.36	2.621	66.57	2.763	70.18	3597	5353	405
4	2	6	0.045	1.14	0.365	9.27	1.091	27.71	1.187	30.15	634	943	95
4	1	4	0.055	1.40	0.418	10.62	1.219	30.96	1.315	33.40	772	1149	105
4	1/0	4	0.055	1.40	0.456	11.58	1.311	33.30	1.407	35.74	869	1323	120
4	2/0	4	0.055	1.40	0.496	12.60	1.407	35.74	1.503	38.18	1037	1543	145
4	3/0	4	0.055	1.40	0.543	13.79	1.611	40.92	1.723	43.76	1337	1990	165
4	4/0	4	0.055	1.40	0.593	15.06	1.732	43.99	1.844	46.84	1556	2316	185
4	250	2	0.065	1.65	0.662	16.81	1.898	48.21	2.010	51.05	1836	2732	215
4	350	2	0.065	1.65	0.757	19.23	2.127	54.03	2.239	56.87	2335	3475	260
4	500	1	0.065	1.65	0.878	22.30	2.419	61.44	2.561	65.05	3165	4710	330
4	600	1	0.080	2.03	0.984	24.99	2.678	68.02	2.817	71.55	3773	5615	370
4	750	1/0	0.080	2.03	1.077	27.36	2.900	73.66	3.042	77.27	4482	6670	405

XLPE/HYP, Instrumentation, Shielded 300V, UL Type PLTC, Overall Shielded Pairs/Triads



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC. Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL 13 Type PLTC
UL 1581

Flame Tests Standard:

UL 1581 VW-1
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant 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 shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Low-lead Chlorosulfonated Polyethylene(CSPE)/Elastomer blend.

Cable Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	20	7/0.0121	0.012	0.30	0.040	1.02	0.230	5.84	27	40
1 Trl	20	7/0.0121	0.012	0.30	0.040	1.02	0.240	6.10	33	49
2	20	7/0.0121	0.012	0.30	0.050	1.27	0.320	8.13	48	71
4	20	7/0.0121	0.012	0.30	0.050	1.27	0.370	9.40	73	109
8	20	7/0.0121	0.012	0.30	0.060	1.52	0.500	12.70	138	205
12	20	7/0.0121	0.012	0.30	0.060	1.52	0.575	14.61	186	277
16	20	7/0.0121	0.012	0.30	0.060	1.52	0.665	16.89	248	369
20	20	7/0.0121	0.012	0.30	0.060	1.52	0.740	18.80	300	446
24	20	7/0.0121	0.012	0.30	0.070	1.78	0.795	20.19	350	521
36	20	7/0.0121	0.012	0.30	0.070	1.78	1.005	25.53	525	781
50	20	7/0.0121	0.012	0.30	0.080	2.03	1.175	29.85	697	1037
1	18	7/0.0152	0.015	0.38	0.040	0.89	0.245	6.22	32	48
1 Trl	18	7/0.0152	0.015	0.38	0.040	0.89	0.255	6.48	40	60
2	18	7/0.0152	0.015	0.38	0.050	1.27	0.350	8.89	58	86
4	18	7/0.0152	0.015	0.38	0.050	1.27	0.425	10.80	99	147
8	18	7/0.0152	0.015	0.38	0.060	1.52	0.545	13.84	173	257
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.640	16.26	245	365
16	18	7/0.0152	0.015	0.38	0.060	1.52	0.730	18.54	318	473
20	18	7/0.0152	0.015	0.38	0.070	1.78	0.810	20.57	392	583
24	18	7/0.0152	0.015	0.38	0.070	1.78	0.895	22.73	450	670
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.095	27.81	672	1000
50	18	7/0.0152	0.015	0.38	0.080	2.03	1.255	31.88	904	1345
1	16	7/0.0192	0.015	0.38	0.040	1.02	0.270	6.86	41	61
1 Trl	16	7/0.0192	0.015	0.38	0.040	1.02	0.285	7.24	54	80
2	16	7/0.0192	0.015	0.38	0.050	1.27	0.430	10.92	85	126
4	16	7/0.0192	0.015	0.38	0.050	1.27	0.490	12.45	135	201
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.650	16.51	246	366
12	16	7/0.0192	0.015	0.38	0.070	1.78	0.755	19.18	346	515

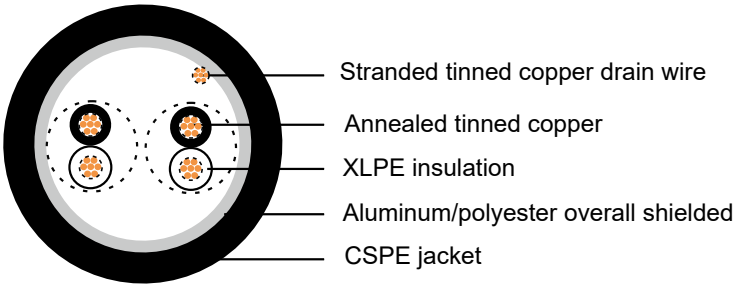
Caledonian Industrial Cables UL Standard

300V Instrumentation Cables

www.caledonian-cables.co.uk

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
16	16	7/0.0192	0.015	0.38	0.070	1.78	0.845	21.46	444	661
20	16	7/0.0192	0.015	0.38	0.070	1.78	0.900	22.86	552	821
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.020	25.91	655	975
36	16	7/0.0192	0.015	0.38	0.080	2.03	1.225	31.12	649	966
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.415	35.94	1308	1947

XLPE/HYP, Instrumentation, Shielded 300V, UL Type PLTC, Individual and Overall Shielded Pairs



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL 13 Type PLTC
UL 1581

Flame Tests Standard:

UL 1581 VW-1
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Annealed copper per ASTM B33 class B.

Insulation: Flame-retardant 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.

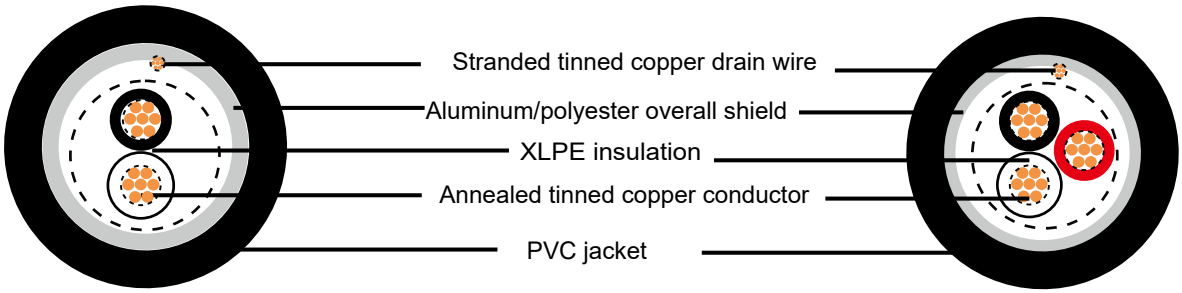
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Low-lead Chloro sulfonated Polyethylene(CSPE)/Elastomer blend.

Cable Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	20	7/0.0121	0.012	0.30	0.050	1.27	0.340	8.64	54	80
4	20	7/0.0121	0.012	0.30	0.050	1.27	0.415	10.54	93	138
8	20	7/0.0121	0.012	0.30	0.060	1.52	0.525	13.34	157	234
12	20	7/0.0121	0.012	0.30	0.060	1.52	0.645	16.38	233	347
16	20	7/0.0121	0.012	0.30	0.060	1.52	0.715	18.16	294	438
20	20	7/0.0121	0.012	0.30	0.070	1.78	0.785	19.94	357	531
24	20	7/0.0121	0.012	0.30	0.070	1.78	0.875	22.23	422	628
36	20	7/0.0121	0.012	0.30	0.070	1.78	1.045	26.54	620	923
50	20	7/0.0121	0.012	0.30	0.080	2.03	1.215	30.86	828	1232
2	18	7/0.0152	0.015	0.38	0.050	1.27	0.415	10.54	76	113
4	18	7/0.0152	0.015	0.38	0.050	1.27	0.475	12.07	113	168
8	18	7/0.0152	0.015	0.38	0.060	1.52	0.605	15.37	203	302
12	18	7/0.0152	0.015	0.38	0.070	1.78	0.750	19.05	300	446
16	18	7/0.0152	0.015	0.38	0.070	1.78	0.830	21.08	383	570
20	18	7/0.0152	0.015	0.38	0.070	1.78	0.945	24.00	483	719
24	18	7/0.0152	0.015	0.38	0.070	1.78	1.045	26.54	571	850
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.225	31.12	816	1214
50	18	7/0.0152	0.015	0.38	0.080	2.03	1.450	36.83	1119	1665
2	16	7/0.0192	0.015	0.38	0.050	1.27	0.440	11.18	92	137
4	16	7/0.0192	0.015	0.38	0.050	1.27	0.545	13.84	163	243
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.965	24.51	287	427
12	16	7/0.0192	0.015	0.38	0.060	1.52	0.885	22.48	437	650
16	16	7/0.0192	0.015	0.38	0.070	1.78	0.980	24.89	553	823
20	16	7/0.0192	0.015	0.38	0.070	1.78	1.080	27.43	680	1012
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.235	31.37	800	1191
36	16	7/0.0192	0.015	0.38	0.080	2.03	1.405	35.69	1108	1649
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.640	41.66	1523	2267

XLPE/PVC, Instrumentation, Shielded 300V, UL Type PLTC, Overall Shielded Pairs/Triads



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL 13 Type PLTC
UL 1581

Flame Tests Standard:

UL 1581 VW-1
IEEE 383

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant 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.

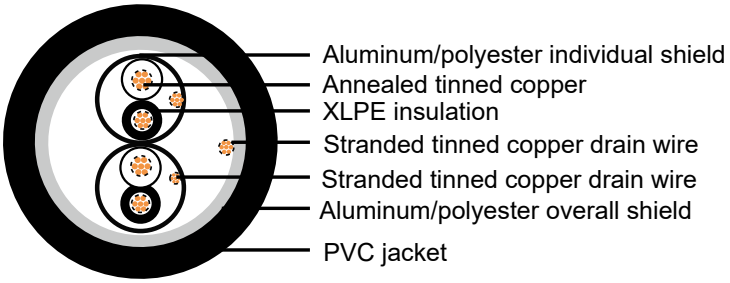
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.015	0.38	0.035	0.89	0.235	5.97	32	48
1 Trl	18	7/0.0152	0.015	0.38	0.040	1.02	0.250	6.35	40	60
2	18	7/0.0152	0.015	0.38	0.040	1.02	0.365	9.27	56	83
4	18	7/0.0152	0.015	0.38	0.050	1.27	0.440	11.18	98	146
8	18	7/0.0152	0.015	0.38	0.050	1.27	0.550	13.97	175	260
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.675	17.15	250	372
16	18	7/0.0152	0.015	0.38	0.060	1.52	0.750	19.05	317	472
20	18	7/0.0152	0.015	0.38	0.060	1.52	0.785	19.94	392	583
24	18	7/0.0152	0.015	0.38	0.060	1.52	0.905	22.99	476	708
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.080	27.43	681	1013
50	18	7/0.0152	0.015	0.38	0.070	1.78	1.245	31.62	913	1359
1	16	7/0.0192	0.015	0.38	0.035	0.89	0.262	6.65	42	63
1 Trl	16	7/0.0192	0.015	0.38	0.040	1.02	0.280	7.11	53	79
2	16	7/0.0192	0.015	0.38	0.050	1.27	0.430	10.92	81	121
4	16	7/0.0192	0.015	0.38	0.050	1.27	0.490	12.45	131	195
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.650	16.51	254	378
12	16	7/0.0192	0.015	0.38	0.060	1.52	0.755	19.18	350	521
16	16	7/0.0192	0.015	0.38	0.060	1.52	0.845	21.46	451	671
20	16	7/0.0192	0.015	0.38	0.070	1.78	0.880	22.35	545	811
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.020	25.91	657	978
36	16	7/0.0192	0.015	0.38	0.070	1.78	1.220	30.99	965	1423
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.405	35.69	1322	1967

XLPE/PVC, Instrumentation, Shielded 300V, UL Type PLTC, Individual and Overall Shielded Pairs



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL 13 Type PLTC
UL 1581

Flame Tests Standard:

UL 1581 VW-1
IEEE 383

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per ICEA Method 1; pairs – black and white. One conductor in each pair is

printed alpha-numerically for easy identification.

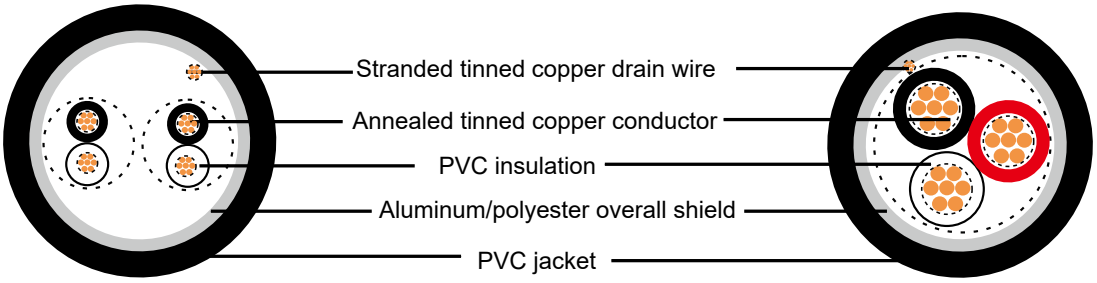
Shield: Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.015	0.38	0.050	1.27	0.410	10.41	73	109
4	18	7/0.0152	0.015	0.38	0.050	1.27	0.475	12.07	117	174
8	18	7/0.0152	0.015	0.38	0.050	1.27	0.605	15.37	215	320
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.750	19.05	308	458
16	18	7/0.0152	0.015	0.38	0.060	1.52	0.830	21.08	392	583
20	18	7/0.0152	0.015	0.38	0.070	1.78	0.955	24.26	494	735
24	18	7/0.0152	0.015	0.38	0.070	1.78	1.030	26.16	583	868
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.210	30.73	830	1235
50	18	7/0.0152	0.015	0.38	0.080	2.03	1.425	36.20	1145	1704
2	16	7/0.0192	0.015	0.38	0.050	1.27	0.455	11.56	96	143
4	16	7/0.0192	0.015	0.38	0.050	1.27	0.530	13.46	160	238
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.710	18.03	293	436
12	16	7/0.0192	0.015	0.38	0.060	1.52	0.855	21.72	425	632
16	16	7/0.0192	0.015	0.38	0.070	1.78	0.955	24.26	563	838
20	16	7/0.0192	0.015	0.38	0.070	1.78	1.055	26.80	664	988
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.160	29.46	780	1161
36	16	7/0.0192	0.015	0.38	0.080	2.03	1.380	35.05	1137	1692
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.580	40.13	1518	2259

PVC/PVC, Instrumentation, Shielded 300V, UL Type PLTC/ ITC, Overall Shielded Pairs/Triads



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL Type PLTC/ITC

Flame Tests Standard:

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 Standard:

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: 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 shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	20	7/0.0121	0.012	0.30	0.040	1.02	0.220	5.59	28	42
1 TRI	20	7/0.0121	0.012	0.30	0.040	1.02	0.241	6.12	34	51
2	20	7/0.0121	0.012	0.30	0.040	1.02	0.255	6.48	41	60
4	20	7/0.0121	0.012	0.30	0.042	1.07	0.321	8.15	65	97
8	20	7/0.0121	0.012	0.30	0.050	1.27	0.475	12.07	104	154
12	20	7/0.0121	0.012	0.30	0.050	1.27	0.545	13.84	195	290
16	20	7/0.0121	0.012	0.30	0.050	1.27	0.605	15.37	248	369
20	20	7/0.0121	0.012	0.30	0.060	1.52	0.650	16.51	309	460
24	20	7/0.0121	0.012	0.30	0.060	1.52	0.740	18.80	376	559
36	20	7/0.0121	0.012	0.30	0.060	1.52	0.850	21.59	530	789
50	20	7/0.0121	0.012	0.30	0.070	1.78	0.970	24.64	713	1061
1	18	7/0.0152	0.015	0.38	0.040	1.02	0.240	6.10	35	52
1 TRI	18	7/0.0152	0.015	0.38	0.040	1.02	0.264	6.71	44	66
2	18	7/0.0152	0.015	0.38	0.042	1.07	0.325	8.26	55	82
4	18	7/0.0152	0.015	0.38	0.042	1.07	0.357	9.07	90	133
8	18	7/0.0152	0.015	0.38	0.060	1.52	0.646	16.41	192	285
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.670	17.02	293	436
16	18	7/0.0152	0.015	0.38	0.060	1.52	0.750	19.05	374	556
20	18	7/0.0152	0.015	0.38	0.060	1.52	0.780	19.81	449	668
24	18	7/0.0152	0.015	0.38	0.070	1.78	0.915	23.24	564	839
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.030	26.16	787	1171
50	18	7/0.0152	0.015	0.38	0.070	1.78	1.180	29.97	1059	1576

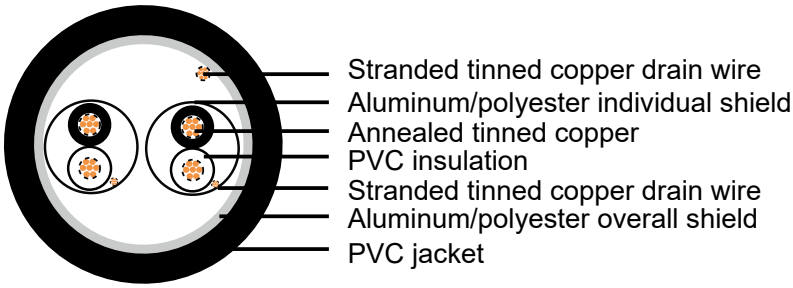
Caledonian Industrial Cables UL Standard

300V Instrumentation Cables

www.caledonian-cables.co.uk

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	16	7/0.0192	0.015	0.38	0.040	1.02	0.273	6.93	45	67
1TRI	16	7/0.0192	0.015	0.38	0.042	1.07	0.297	7.54	58	86
2	16	7/0.0192	0.015	0.38	0.042	1.07	0.344	8.74	74	109
4	16	7/0.0192	0.015	0.38	0.053	1.35	0.481	12.22	132	197
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.726	18.44	259	385
12	16	7/0.0192	0.015	0.38	0.060	1.52	0.755	19.18	408	607
16	16	7/0.0192	0.015	0.38	0.070	1.78	0.845	21.46	526	783
20	16	7/0.0192	0.015	0.38	0.070	1.78	0.905	22.99	655	975
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.030	26.16	803	1195
36	16	7/0.0192	0.015	0.38	0.070	1.78	1.165	29.59	1122	1670
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.355	34.42	1544	2298

PVC/PVC, Instrumentation, Shielded 300V, UL Type PLTC/ITC, Individual and Overall Shielded Pairs



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC. Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL Type PLTC/ITC

Flame Tests Standard:

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 Standard:

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Pairs – black and white. One conductor in each pair is printed alpha-numerically for easy identification.

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

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	20	7/0.0121	0.012	0.30	0.040	1.02	0.316	8.03	46	69
4	20	7/0.0121	0.012	0.30	0.042	1.07	0.325	8.26	76	113
8	20	7/0.0121	0.012	0.30	0.050	1.27	0.426	10.82	148	220
12	20	7/0.0121	0.012	0.30	0.060	1.52	0.640	16.26	223	332
16	20	7/0.0121	0.012	0.30	0.060	1.52	0.705	17.91	280	417
20	20	7/0.0121	0.012	0.30	0.060	1.52	0.780	19.81	339	504
24	20	7/0.0121	0.012	0.30	0.060	1.52	0.845	21.46	397	591
36	20	7/0.0121	0.012	0.30	0.070	1.78	1.015	25.78	586	872
50	20	7/0.0121	0.012	0.30	0.070	1.78	1.190	30.23	786	1170
2	18	7/0.0152	0.015	0.38	0.042	1.07	0.380	9.65	61	91
4	18	7/0.0152	0.015	0.38	0.042	1.07	0.410	10.41	100	149
8	18	7/0.0152	0.015	0.38	0.060	1.52	0.485	12.32	212	316
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.760	19.30	315	469
16	18	7/0.0152	0.015	0.38	0.060	1.52	0.845	21.46	401	597
20	18	7/0.0152	0.015	0.38	0.070	1.78	0.955	24.26	505	752
24	18	7/0.0152	0.015	0.38	0.070	1.78	1.040	26.42	596	887
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.215	30.86	846	1259
50	18	7/0.0152	0.015	0.38	0.080	2.03	1.450	36.83	1165	1734
2	16	7/0.0192	0.015	0.38	0.042	1.07	0.346	8.79	80	119
4	16	7/0.0192	0.015	0.38	0.053	1.35	0.506	12.85	151	225
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.665	16.89	288	429

Caledonian Industrial Cables UL Standard

300V Instrumentation Cables

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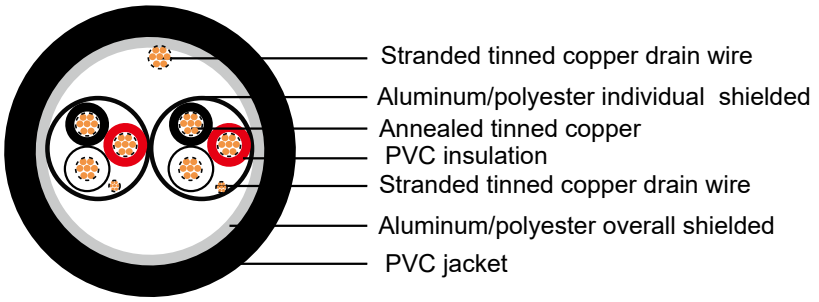
NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
12	16	7/0.0192	0.015	0.38	0.060	1.52	0.855	21.72	435	647
16	16	7/0.0192	0.015	0.38	0.070	1.78	0.970	24.64	575	856
20	16	7/0.0192	0.015	0.38	0.070	1.78	1.080	27.43	705	1049
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.165	29.59	828	1232
36	16	7/0.0192	0.015	0.38	0.080	2.03	1.390	35.31	1215	1808
50	16	7/0.0192	0.015	0.38	0.090	2.29	1.655	42.04	1670	2485

PVC/PVC, Instrumentation, Shielded 300V, UL Type PLTC/ ITC, Individual and Overall Shielded Triads



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL Type PLTC/ITC

Flame Tests Standard:

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 Standard:

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Triads - black, white and red. One conductor in each

triad is printed alpha-numerically for easy identification.

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

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

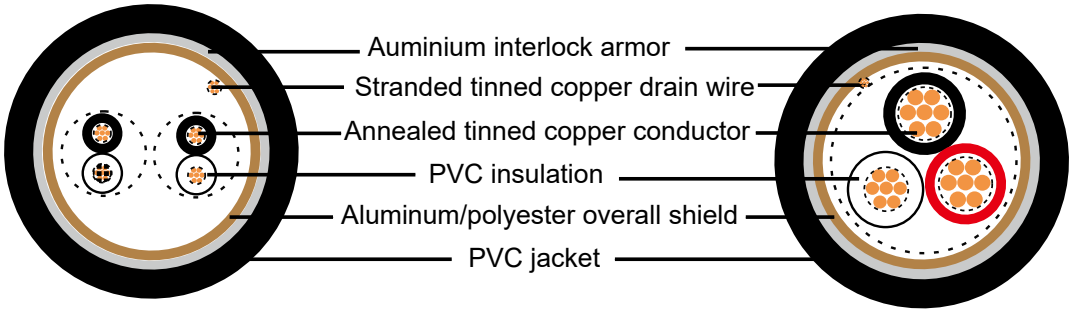
Cable Parameter

NO. of Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 Trl	20	7/0.0121	0.012	0.30	0.040	1.07	0.340	8.64	59	88
4 Trl	20	7/0.0121	0.012	0.30	0.040	1.07	0.365	9.27	97	144
8 Trl	20	7/0.0121	0.012	0.30	0.050	1.27	0.566	14.38	187	279
12 Trl	20	7/0.0121	0.012	0.30	0.060	1.52	0.705	17.91	287	427
16 Trl	20	7/0.0121	0.012	0.30	0.060	1.52	0.780	19.81	365	543
20 Trl	20	7/0.0121	0.012	0.30	0.060	1.52	0.860	21.84	440	655
24 Trl	20	7/0.0121	0.012	0.30	0.070	1.78	0.955	24.26	541	805
36 Trl	20	7/0.0121	0.012	0.30	0.070	1.78	1.115	28.32	767	1141
2 Trl	18	7/0.0152	0.015	0.38	0.040	1.07	0.321	8.15	77	115
4 Trl	18	7/0.0152	0.015	0.38	0.050	1.27	0.444	11.28	143	213
8 Trl	18	7/0.0152	0.015	0.38	0.060	1.52	0.691	17.55	275	409
12 Trl	18	7/0.0152	0.015	0.38	0.060	1.52	0.840	21.34	412	613
16 Trl	18	7/0.0152	0.015	0.38	0.070	1.78	0.960	24.38	550	819
20 Trl	18	7/0.0152	0.015	0.38	0.070	1.78	1.060	26.92	668	994
24 Trl	18	7/0.0152	0.015	0.38	0.070	1.78	1.145	29.08	785	1168
36 Trl	18	7/0.0152	0.015	0.38	0.080	2.03	1.365	34.67	1151	1713
2 Trl	16	7/0.0192	0.015	0.38	0.040	1.07	0.367	9.32	104	154
4 Trl	16	7/0.0192	0.015	0.38	0.050	1.27	0.502	12.75	195	290
8 Trl	16	7/0.0192	0.015	0.38	0.060	1.52	0.786	19.96	375	558
12 Trl	16	7/0.0192	0.015	0.38	0.070	1.78	0.970	24.64	597	888
16 Trl	16	7/0.0192	0.015	0.38	0.070	1.78	1.075	27.31	765	1138
20 Trl	16	7/0.0192	0.015	0.38	0.070	1.78	1.195	30.35	933	1388

300V Instrumentation Cables

NO. of Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
24 Trl	16	7/0.0192	0.015	0.38	0.080	2.03	1.310	33.27	1125	1674
36 Trl	16	7/0.0192	0.015	0.38	0.080	2.03	1.540	40.39	1620	2411

PVC/PVC, Instrumentation, Shielded & Armored 300V, UL Type PLTC/ITC, Overall Shielded Pairs/Triads



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL Type PLTC/ITC
UL 2250 Instrumentation Tray Cable

Flame Tests Standard:

UL 1685
IEEE 383 (70,000 BTU/hr)
UL 13 for PLTC
UL 2250 for ITC

Other Standard:

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
RoHS Compliant

Construction:

Conductor: Annealed copper per ASTM B33 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Pairs – black and white. Triads - black, white and red.

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

Armor: Auminium interlock armor.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	20	7/0.0121	0.012	0.30	0.040	1.02	0.501	12.725	104	155
1 TRI	20	7/0.0121	0.012	0.30	0.040	1.02	0.524	13.301	118	176
2	20	7/0.0121	0.012	0.30	0.040	1.02	0.597	15.163	145	216
4	20	7/0.0121	0.012	0.30	0.042	1.07	0.647	16.434	180	268
8	20	7/0.0121	0.012	0.30	0.050	1.27	0.758	19.253	257	382
12	20	7/0.0121	0.012	0.30	0.050	1.27	0.844	21.438	318	473
16	20	7/0.0121	0.012	0.30	0.050	1.27	0.919	23.343	388	577
24	20	7/0.0121	0.012	0.30	0.060	1.52	1.071	27.203	524	780
36	20	7/0.0121	0.012	0.30	0.060	1.52	1.191	30.251	667	992
50	20	7/0.0121	0.012	0.30	0.070	1.78	1.341	34.061	861	1281
1	18	7/0.0152	0.015	0.38	0.040	1.02	0.529	13.427	118	176
1 TRI	18	7/0.0152	0.015	0.38	0.040	1.02	0.552	14.021	133	198
2	18	7/0.0152	0.015	0.38	0.042	1.07	0.656	16.652	180	268
4	18	7/0.0152	0.015	0.38	0.042	1.07	0.726	18.440	229	341
8	18	7/0.0152	0.015	0.38	0.060	1.52	0.838	21.285	322	479

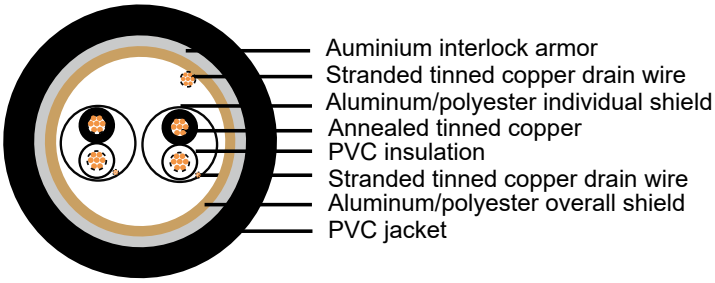
Caledonian Industrial Cables UL Standard

300V Instrumentation Cables

www.caledonian-cables.co.uk

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
12	18	7/0.0152	0.015	0.38	0.060	1.52	0.985	25.019	446	664
16	18	7/0.0152	0.015	0.38	0.060	1.52	1.054	26.772	524	780
24	18	7/0.0152	0.015	0.38	0.070	1.78	1.237	31.420	697	1037
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.386	35.204	931	1385
50	18	7/0.0152	0.015	0.38	0.070	1.78	1.541	39.141	1180	1756
1	16	7/0.0192	0.015	0.38	0.040	1.02	0.551	13.995	133	198
1TRI	16	7/0.0192	0.015	0.38	0.042	1.07	0.573	14.554	151	225
2	16	7/0.0192	0.015	0.38	0.042	1.07	0.694	17.627	205	305
4	16	7/0.0192	0.015	0.38	0.053	1.35	0.772	19.609	272	405
8	16	7/0.0192	0.015	0.38	0.060	1.52	0.922	23.419	416	619
12	16	7/0.0192	0.015	0.38	0.060	1.52	1.064	27.026	559	832
16	16	7/0.0192	0.015	0.38	0.070	1.78	1.164	29.566	671	998
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.376	34.950	935	1391
36	16	7/0.0192	0.015	0.38	0.070	1.78	1.520	38.608	1232	1833
50	16	7/0.0192	0.015	0.38	0.080	2.03	1.719	43.685	1617	2406

PVC/PVC, Instrumentation, Shielded & Armored 300V, UL Type PLTC/ITC, Individual and Overall Shielded Pairs



Applications:

These cables are typical applied include audio, intercom, control, energy management alarm circuits and applied in ducts, cable trays or conduit. Also they are permitted for use in in free air or raceways in accordance with Class I Division 2 industrial hazardous locations per NEC.Besides, in accordance with UL subject 13 as Power-Limited Circuit Cable.

Standard:

Industry Standard:

UL Type PLTC/ITC
UL 2250 Instrumentation Tray Cable

Flame Tests Standard:

UL 1685
IEEE 383 (70,000 BTU/hr)
UL 13 for PLTC
UL 2250 for ITC

Other Standard:

Meets EPA 40 CFR, Part 261 for leachable lead content per TCLP method
RoHS Compliant

Construction:

Conductor: Annealed copper per ASTM B33 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Color-coded: per ICEA Method 1; Pairs – black and white. Triads - black, white and red.

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

Armor: Auminium interlock armour.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

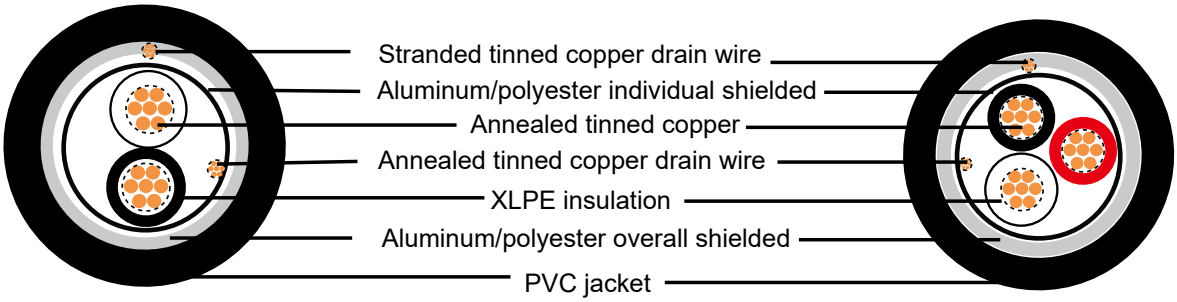
Cable Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	20	7/0.0121	0.012	0.30	0.040	1.02	0.70	17.80	66	96
4	20	7/0.0121	0.012	0.30	0.042	1.07	0.76	19.30	101	146
8	20	7/0.0121	0.012	0.30	0.050	1.27	0.92	23.40	170	246
12	20	7/0.0121	0.012	0.30	0.060	1.52	1.06	26.90	250	362
16	20	7/0.0121	0.012	0.30	0.060	1.52	1.16	29.50	316	458
20	20	7/0.0121	0.012	0.30	0.060	1.52	1.27	32.20	385	557
24	20	7/0.0121	0.012	0.30	0.060	1.52	1.42	36.10	466	675
36	20	7/0.0121	0.012	0.30	0.070	1.78	1.57	39.90	655	948
50	20	7/0.0121	0.012	0.30	0.070	1.78	1.75	44.40	902	1306
2	18	7/0.0152	0.015	0.38	0.042	1.07	0.78	19.80	84	122
4	18	7/0.0152	0.015	0.38	0.042	1.07	0.88	22.3	121	175
8	18	7/0.0152	0.015	0.38	0.060	1.52	1.03	26.20	211	306
12	18	7/0.0152	0.015	0.38	0.060	1.52	1.28	32.50	327	473
16	18	7/0.0152	0.015	0.38	0.060	1.52	1.37	34.80	415	601

300V Instrumentation Cables

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
20	18	7/0.0152	0.015	0.38	0.070	1.78	1.41	35.80	505	731
24	18	7/0.0152	0.015	0.38	0.070	1.78	1.63	41.40	614	889
36	18	7/0.0152	0.015	0.38	0.070	1.78	1.80	45.70	870	1260
50	18	7/0.0152	0.015	0.38	0.080	2.03	2.04	51.80	1201	1739
2	16	7/0.0192	0.015	0.38	0.042	1.07	0.81	20.60	120	174
4	16	7/0.0192	0.015	0.38	0.053	1.35	1.89	22.60	174	252
8	16	7/0.0192	0.015	0.38	0.060	1.52	1.16	29.50	317	459
12	16	7/0.0192	0.015	0.38	0.060	1.52	1.37	34.80	449	650
16	16	7/0.0192	0.015	0.38	0.070	1.78	1.48	37.60	592	857
20	16	7/0.0192	0.015	0.38	0.070	1.78	1.56	39.60	725	1050
24	16	7/0.0192	0.015	0.38	0.070	1.78	1.75	44.40	852	1234
36	16	7/0.0192	0.015	0.38	0.080	2.03	1.97	50.04	1245	1802
50	16	7/0.0192	0.015	0.38	0.090	2.29	2.17	55.12	1684	2438

XLPE/HYP, Instrumentation, Shielded 600V, UL Type TC, Individual and Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations in accordance with Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL Type RFH-2, FFH-2 conductors
UL 1277 Type TC
UL 1581
ICEA S-82-552
ICEA S-73-532

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant 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 alpha-numerically for easy identification

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

Jacket: Low-Lead Chlorosulfonated Polyethylene (CSPE)/Elastomer blend.

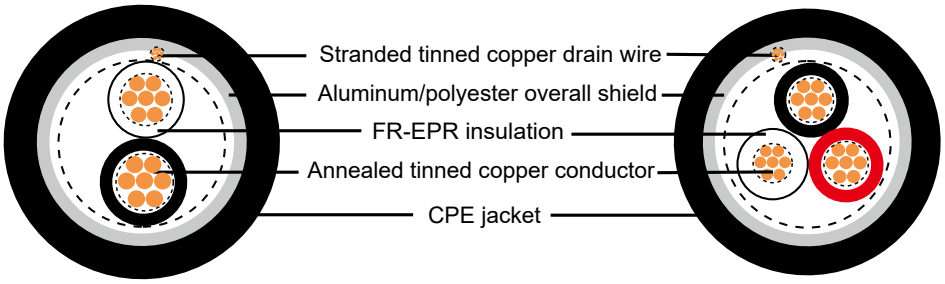
Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.030	0.76	0.045	1.52	0.315	8.15	49	73
1 TRI	18	7/0.0152	0.030	0.76	0.045	1.14	0.335	8.51	64	95
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.510	12.95	92	137
4	18	7/0.0152	0.030	0.76	0.060	1.52	0.630	16.00	167	249
8	18	7/0.0152	0.030	0.76	0.080	2.03	0.855	21.72	326	485
12	18	7/0.0152	0.030	0.76	0.080	2.03	1.030	26.16	441	656
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.140	28.96	554	824
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.265	32.13	676	1006
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.450	36.83	795	1183
36	18	7/0.0152	0.030	0.76	0.110	2.79	1.650	41.91	1118	1664
50	18	7/0.0152	0.030	0.76	0.110	2.79	2.085	52.96	1616	2405
1	16	7/0.0192	0.030	0.76	0.045	1.52	0.345	8.76	61	91
1 TRI	16	7/0.0192	0.030	0.76	0.045	1.52	0.360	9.10	85	127
2	16	7/0.0192	0.030	0.76	0.060	1.52	0.585	14.86	130	193
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.675	17.15	204	304
8	16	7/0.0192	0.030	0.76	0.080	2.03	0.915	23.24	394	586

600V Instrumentation Cables

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.110	28.19	548	816
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.350	34.29	713	1061
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.365	34.67	850	1265
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.570	39.88	1001	1490
36	16	7/0.0192	0.030	0.76	0.110	2.79	1.980	50.29	1548	2304
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.165	54.99	2020	3006

FR-EPR/CPE, Instrumentation, Shielded 600V, UL Type TC, Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations in accordance with Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-82-552

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

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 or triad is printed alpha-numerically for easy identification.

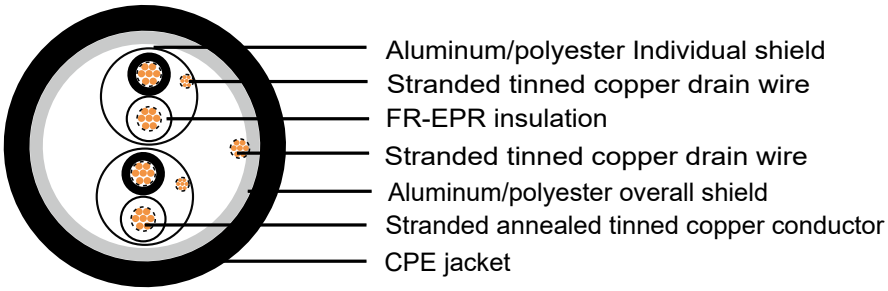
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant thermoplastic Chlorinated Polyethylene (CPE).

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.025	0.64	0.045	1.14	0.300	7.62	42	63
1 TRI	18	7/0.0152	0.025	0.64	0.045	1.14	0.315	8.00	53	79
2	18	7/0.0152	0.025	0.64	0.045	1.14	0.420	10.67	75	112
4	18	7/0.0152	0.025	0.64	0.045	1.14	0.490	12.45	117	174
8	18	7/0.0152	0.025	0.64	0.060	1.52	0.675	17.15	224	333
12	18	7/0.0152	0.025	0.64	0.060	1.52	0.775	19.69	305	454
16	18	7/0.0152	0.025	0.64	0.080	2.03	0.925	23.50	425	632
20	18	7/0.0152	0.025	0.64	0.080	2.03	1.025	26.04	510	759
24	18	7/0.0152	0.025	0.64	0.080	2.03	1.105	28.07	604	899
36	18	7/0.0152	0.025	0.64	0.080	2.03	1.360	34.54	865	1287
50	18	7/0.0152	0.025	0.64	0.080	2.03	1.555	39.50	1144	1703
1	16	7/0.0192	0.025	0.64	0.045	1.14	0.320	8.13	52	77
1 TRI	16	7/0.0192	0.025	0.64	0.045	1.14	0.335	8.51	66	98
2	16	7/0.0192	0.025	0.64	0.045	1.14	0.460	11.68	95	141
4	16	7/0.0192	0.025	0.64	0.060	1.52	0.560	14.22	171	254
8	16	7/0.0192	0.025	0.64	0.060	1.52	0.740	18.80	294	438
12	16	7/0.0192	0.025	0.64	0.080	2.03	0.900	22.86	438	652
16	16	7/0.0192	0.025	0.64	0.080	2.03	1.015	25.78	560	833
20	16	7/0.0192	0.025	0.64	0.080	2.03	1.130	28.70	680	1012
24	16	7/0.0192	0.025	0.64	0.080	2.03	1.215	30.86	807	1201
36	16	7/0.0192	0.025	0.64	0.080	2.03	1.505	38.23	1160	1726
50	16	7/0.0192	0.025	0.64	0.080	2.03	2.095	53.21	1702	2533

FR-EPR/CPE, Instrumentation, Shielded 600V, UL Type TC, Individual and Overall Shielded Pairs



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations in accordance with Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-82-552

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

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 alpha-numerically for easy identification.

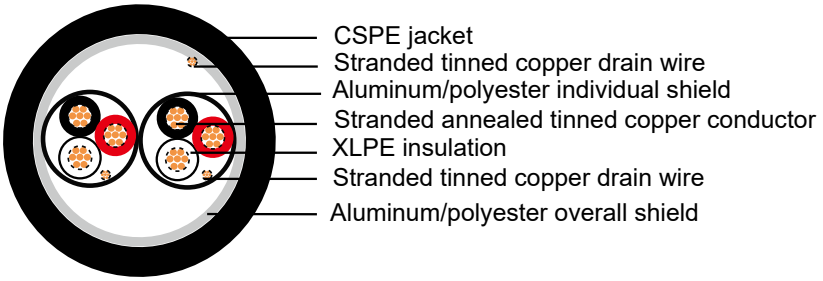
Shield: Individual pairs are 100% individually shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant thermoplastic Chlorinated Polyethylene (CPE).

Cables Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.025	0.64	0.045	1.14	0.473	12.01	83	124
4	18	7/0.0152	0.025	0.64	0.060	1.52	0.586	14.88	152	226
8	18	7/0.0152	0.025	0.64	0.060	1.52	0.751	19.08	259	385
12	18	7/0.0152	0.025	0.64	0.080	2.03	0.948	24.08	398	592
16	18	7/0.0152	0.025	0.64	0.080	2.03	1.050	26.67	502	747
20	18	7/0.0152	0.025	0.64	0.080	2.03	1.185	30.10	623	927
24	18	7/0.0152	0.025	0.64	0.080	2.03	1.220	30.99	709	1055
36	18	7/0.0152	0.025	0.64	0.080	2.03	1.474	37.44	1008	1500
50	18	7/0.0152	0.025	0.64	0.110	2.79	1.780	45.21	1454	2164
2	16	7/0.0192	0.025	0.64	0.045	1.14	0.500	12.70	103	153
4	16	7/0.0192	0.025	0.64	0.060	1.52	0.650	16.51	189	281
6	16	7/0.0192	0.025	0.64	0.060	1.52	0.755	19.18	268	399
8	16	7/0.0192	0.025	0.64	0.060	1.52	0.840	21.34	330	491
12	16	7/0.0192	0.025	0.64	0.080	2.03	1.065	27.05	506	753
16	16	7/0.0192	0.025	0.64	0.080	2.03	1.185	30.10	643	957
20	16	7/0.0192	0.025	0.64	0.080	2.03	1.320	33.53	777	1156
24	16	7/0.0192	0.025	0.64	0.080	2.03	1.485	37.72	932	1387
36	16	7/0.0192	0.025	0.64	0.080	2.03	1.760	44.70	1410	2098
50	16	7/0.0192	0.025	0.64	0.110	2.79	2.035	51.69	1883	2802

FR-EPR/CPE, Instrumentation, Shielded 600V, UL Type TC, Individual and Overall Shielded Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations in accordance with Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-82-552

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4
ICEA T-29-520

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant Ethylene Propylene Rubber (FR-EPR) Type II.

Color-coded: per ICEA Method 1; Triads - black, white and red. One conductor in each triad is printed alpha-numerically for easy identification.

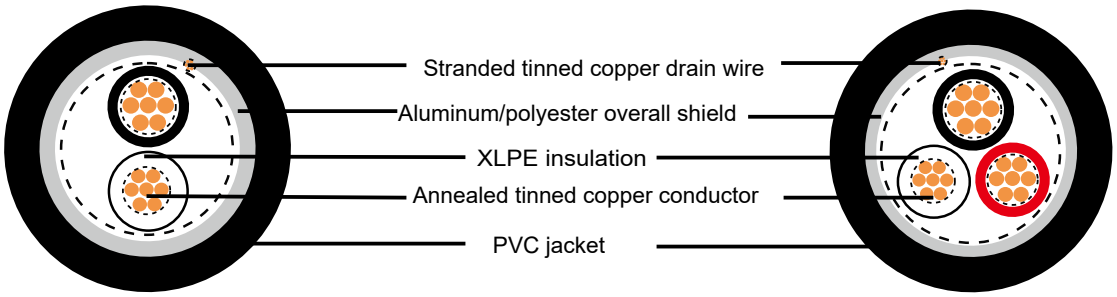
Shield: Individual triads are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant thermoplastic Chlorinated Polyethylene (CPE).

Cables Prameter

NO. of Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 TRI	18	7/0.0152	0.025	0.64	0.060	1.52	0.560	14.22	127	189
4 TRI	18	7/0.0152	0.025	0.64	0.060	1.52	0.640	16.26	201	299
8 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	0.825	20.96	343	510
12 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	1.065	27.05	528	786
16 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	1.180	29.97	675	1005
20 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	1.310	33.27	825	1228
24 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	1.500	38.10	972	1447
36 TRI	18	7/0.0152	0.025	0.64	0.080	2.03	1.740	44.20	1470	2188
2 TRI	16	7/0.0192	0.025	0.64	0.060	1.52	0.615	15.62	159	237
4 TRI	16	7/0.0192	0.025	0.64	0.060	1.52	0.705	17.91	249	371
8 TRI	16	7/0.0192	0.025	0.64	0.080	2.03	0.850	21.59	472	702
12 TRI	16	7/0.0192	0.025	0.64	0.080	2.03	1.160	29.46	683	1016
16 TRI	16	7/0.0192	0.025	0.64	0.080	2.03	1.290	32.77	879	1308
20 TRI	16	7/0.0192	0.025	0.64	0.080	2.03	1.380	35.05	1058	1575
24 TRI	16	7/0.0192	0.025	0.64	0.080	2.03	1.615	41.02	1266	1884
36 TRI	16	7/0.0192	0.025	0.64	0.110	2.79	1.920	48.77	1918	2854

XLPE/ARCTIC-PVC, Instrumentation, Shielded 600V, UL Type TC, CSA Type CIC, Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations in accordance with Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
CSA C22.2 No. 239 Type CIC

Flame Tests Standard:

UL 1581 VW-1
UL 1277
CSA FT-4
IEEE 383

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant 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 alpha-numerically for easy identification.

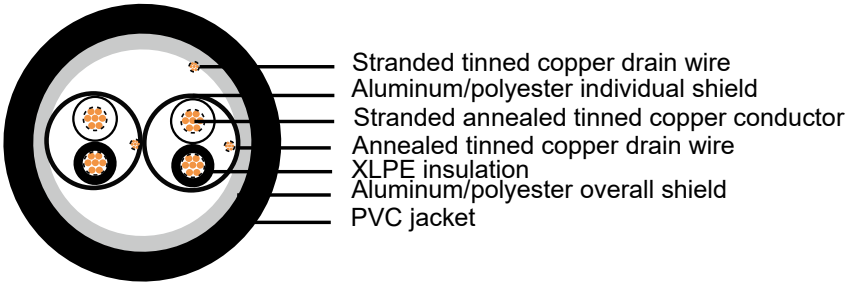
Shield: Overall Shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.030	0.76	0.045	1.14	0.315	8.00	46	68
1 TRI	18	7/0.0152	0.030	0.76	0.045	1.14	0.340	8.64	57	85
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.450	11.43	88	131
4	18	7/0.0152	0.030	0.76	0.045	1.14	0.560	14.22	144	214
8	18	7/0.0152	0.030	0.76	0.060	1.52	0.750	19.05	263	391
12	18	7/0.0152	0.030	0.76	0.080	2.03	0.850	21.59	358	533
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.010	25.65	461	686
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.085	27.56	600	893
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.210	30.73	761	1043
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.500	38.10	1005	1496
50	18	7/0.0152	0.030	0.76	0.080	2.03	2.570	65.28	1603	2386
1	16	7/0.0192	0.030	0.76	0.045	1.14	0.345	8.76	32	48
1 TRI	16	7/0.0192	0.030	0.76	0.045	1.14	0.360	9.14	71	106
2	16	7/0.0192	0.030	0.76	0.045	1.14	0.560	14.22	121	181
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.650	16.51	186	277
8	16	7/0.0192	0.030	0.76	0.060	1.52	0.810	20.57	324	482
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.000	25.40	486	723
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.120	28.45	616	917
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.170	29.72	734	1092
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.440	36.58	894	1330
36	16	7/0.0192	0.030	0.76	0.080	2.03	1.650	41.91	1254	1866
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.020	51.31	1800	2679

XLPE/ARCTIC-PVC, Instrumentation, Shielded 600V, UL Type TC, CSA Type CIC, Individual and Overall Shielded Pairs



Applications:

These cables are used in Industrial lighting, control and signaling circuits and in wet or dry locations. Also installationed in cable trays, raceways or outdoor applications where supported by a messenger wire.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
CSA C22.2 No. 239 Type CIC

Flame Tests Standard:

UL 1581 VW-1
UL 1277
CSA FT-4
IEEE 383

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per ICEA Method 1; pairs – black and white. One conductor in each pair is printed alpha-numerically for easy identification.

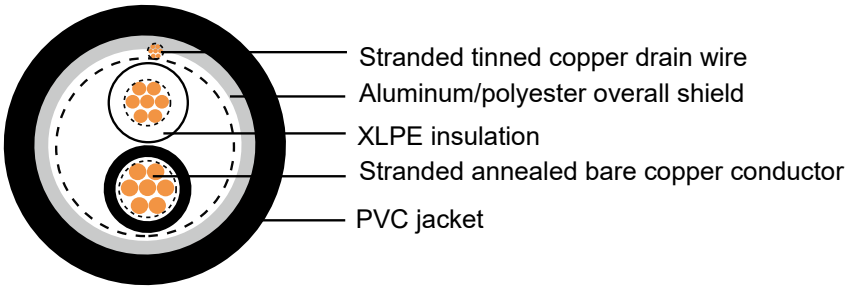
Shield: Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cable Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.515	13.08	93	138
4	18	7/0.0152	0.030	0.76	0.060	1.52	0.625	15.88	167	248
8	18	7/0.0152	0.030	0.76	0.060	1.52	0.805	20.45	304	460
12	18	7/0.0152	0.030	0.76	0.080	2.03	1.020	25.91	449	668
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.130	28.70	554	824
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.235	31.37	666	991
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.465	37.21	794	1182
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.630	41.40	1122	1670
50	18	7/0.0152	0.030	0.76	0.110	2.79	1.975	50.17	1598	2378
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.500	38.10	1005	1496
50	18	7/0.0152	0.030	0.76	0.080	2.03	2.570	65.28	1603	2386
2	16	7/0.0192	0.030	0.76	0.060	1.52	0.595	15.11	132	196
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.695	17.65	212	315
8	16	7/0.0192	0.030	0.76	0.060	1.52	0.900	22.86	395	588
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.110	28.19	578	860
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.260	32.00	733	1091
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.315	33.40	845	1258
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.510	38.35	1009	1502
36	16	7/0.0192	0.030	0.76	0.110	2.79	1.820	46.23	1259	1874
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.095	53.21	2032	3024

XLPE/PVC, Instrumentation, Shielded 600V, UL Type TC, Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-82-552
ICEA S-73-532

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B33 class B

Insulation: Flame-retardant 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

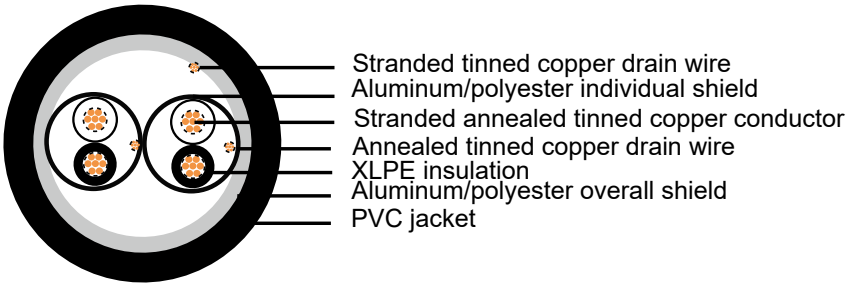
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.030	0.76	0.045	1.14	0.315	8.00	46	68
1 TRI	18	7/0.0152	0.030	0.76	0.045	1.14	0.340	8.64	58	86
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.450	11.43	88	131
4	18	7/0.0152	0.030	0.76	0.045	1.14	0.560	14.22	144	214
8	18	7/0.0152	0.030	0.76	0.060	1.52	0.750	19.05	263	391
12	18	7/0.0152	0.030	0.76	0.080	2.03	0.850	21.59	358	533
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.010	25.65	461	686
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.085	27.56	600	893
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.210	30.73	701	1043
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.500	38.10	1005	1496
50	18	7/0.0152	0.030	0.76	0.080	2.03	2.570	65.28	1603	2386
1	16	7/0.0192	0.030	0.76	0.045	1.14	0.345	8.76	32	48
1 TRI	16	7/0.0192	0.030	0.76	0.045	1.14	0.360	9.14	72	107
2	16	7/0.0192	0.030	0.76	0.045	1.14	0.560	14.22	121	180
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.650	16.51	186	277
8	16	7/0.0192	0.030	0.76	0.060	1.52	0.810	20.57	324	482
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.000	25.40	486	723
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.120	28.45	616	917
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.170	29.72	734	1092
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.440	36.58	894	1330
36	16	7/0.0192	0.030	0.76	0.080	2.03	1.650	41.91	1254	1866
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.020	51.31	1800	2679

XLPE/PVC, Instrumentation, Shielded 600V, UL Type TC, Individual and Overall Shielded Pairs



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
ICEA S-82-552
ICEA S-73-532

Flame Tests Standard:

UL 1581 VW-1
UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Cross-Linked Polyethylene (XLPE).

Color-coded: per ICEA Method 1; Pairs – black and white. One conductor in each pair is printed alpha-numerically for easy identification.

Shield: Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire.

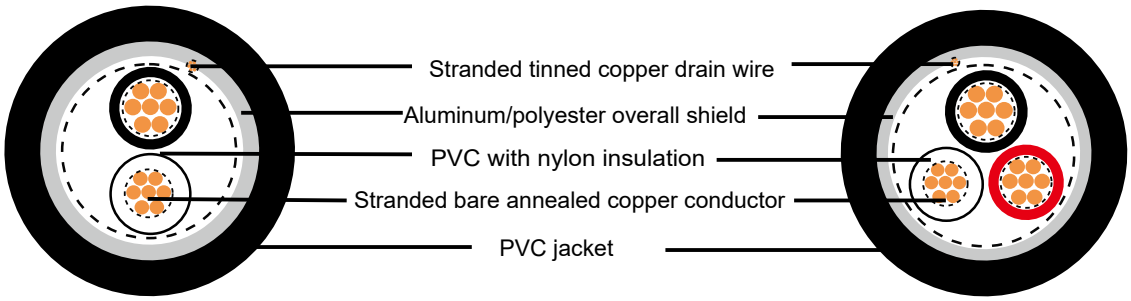
Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.515	13.08	95	141
4	18	7/0.0152	0.030	0.76	0.060	1.52	0.625	15.88	170	253
8	18	7/0.0152	0.030	0.76	0.060	1.52	0.805	20.45	292	435
12	18	7/0.0152	0.030	0.76	0.080	2.03	1.020	25.91	442	658
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.130	28.70	554	824
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.235	31.37	666	991
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.465	37.21	802	1194
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.630	41.40	1116	1661
50	18	7/0.0152	0.030	0.76	0.110	2.79	1.975	50.17	1598	2378
2	16	7/0.0192	0.030	0.76	0.060	1.52	0.595	15.11	135	201
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.695	17.65	214	318
8	16	7/0.0192	0.030	0.76	0.060	1.52	0.900	22.86	399	594
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.110	28.19	584	869
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.260	32.00	712	1060
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.315	33.40	845	1258
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.510	38.35	1009	1502
36	16	7/0.0192	0.030	0.76	0.110	2.79	1.820	46.23	1259	1874
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.095	53.21	2032	3024

PVC/Nylon/PVC, Instrumentation, Shielded 600V, UL Type TC, Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
NEC Type TFN conductors

Flame Tests Standard:

UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

Insulation: Flame-retardant Polyvinyl Chloride (PVC) with clear Polyamide (nylon).

Color-coded: per ICEA Method 1; Pairs – black and white. Triads - black, white and red. One conductor in each pair or triad is printed alpha-numerically for easy identification.

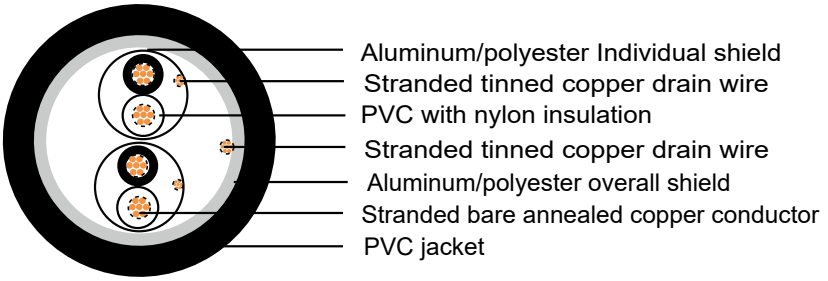
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.020	0.51	0.045	1.14	0.280	7.11	41	61
1 TRI	18	7/0.0152	0.020	0.51	0.045	1.14	0.300	7.62	49	73
2	18	7/0.0152	0.020	0.51	0.045	1.14	0.440	11.18	72	107
3	18	7/0.0152	0.020	0.51	0.045	1.14	0.465	11.81	90	134
4	18	7/0.0152	0.020	0.51	0.045	1.14	0.505	12.83	110	164
5	18	7/0.0152	0.020	0.51	0.060	1.52	0.570	14.48	144	214
7	18	7/0.0152	0.020	0.51	0.060	1.52	0.585	14.86	177	263
12	18	7/0.0152	0.020	0.51	0.060	1.52	0.770	19.56	277	412
16	18	7/0.0152	0.020	0.51	0.080	2.03	0.825	20.96	355	528
20	18	7/0.0152	0.020	0.51	0.080	2.03	0.905	22.99	455	677
24	18	7/0.0152	0.020	0.51	0.080	2.03	1.020	25.91	544	810
36	18	7/0.0152	0.020	0.51	0.080	2.03	1.150	29.21	763	1135
50	18	7/0.0152	0.020	0.51	0.080	2.03	1.405	35.69	1036	1542
1	16	7/0.0192	0.020	0.51	0.045	1.14	0.300	7.62	52	77
1 TRI	16	7/0.0192	0.020	0.51	0.045	1.14	0.315	8.00	61	91
2	16	7/0.0192	0.020	0.51	0.045	1.14	0.470	11.94	93	138
3	16	7/0.0192	0.020	0.51	0.045	1.14	0.505	12.83	117	174
4	16	7/0.0192	0.020	0.51	0.060	1.52	0.575	14.61	160	238
5	16	7/0.0192	0.020	0.51	0.060	1.52	0.610	15.49	190	283
7	16	7/0.0192	0.020	0.51	0.060	1.52	0.630	16.00	239	356
12	16	7/0.0192	0.020	0.51	0.060	1.52	0.825	20.96	370	551
16	16	7/0.0192	0.020	0.51	0.080	2.03	0.970	24.64	513	763
20	16	7/0.0192	0.020	0.51	0.080	2.03	1.010	25.65	628	935
24	16	7/0.0192	0.020	0.51	0.080	2.03	1.135	28.83	740	1101
36	16	7/0.0192	0.020	0.51	0.080	2.03	1.375	34.93	1063	1582
50	16	7/0.0192	0.020	0.51	0.080	2.03	1.570	39.88	1435	2136
1	14	7/0.0242	0.015	0.38	0.045	1.14	0.325	8.26	62	92

PVC/Nylon/PVC, Instrumentation, Shielded 600V, UL Type TC, Individual and Overall Shielded Pairs



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC
UL 1581
NEC Type TFN conductors

Flame Tests Standard:

UL 1277
IEEE 383
IEEE 1202
CSA FT-4

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Bare, annealed copper per ASTM B3 class B.

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 alpha-numerically for easy identification.

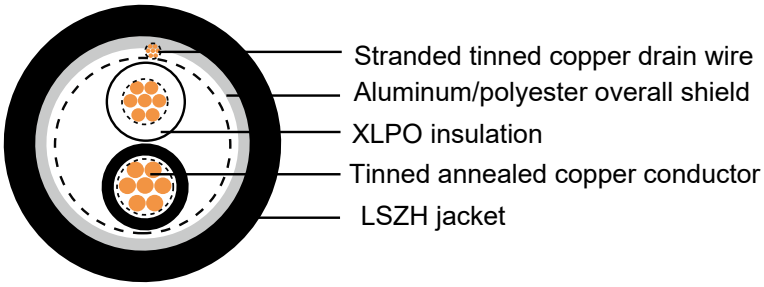
Shield: Individual pairs are 100% shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant Polyvinyl Chloride (PVC), UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option.

Cables Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.020	0.51	0.045	1.14	0.445	11.30	84	125
3	18	7/0.0152	0.020	0.51	0.045	1.14	0.480	12.19	106	158
4	18	7/0.0152	0.020	0.51	0.045	1.14	0.555	14.10	145	216
5	18	7/0.0152	0.020	0.51	0.060	1.52	0.580	14.73	169	252
7	18	7/0.0152	0.020	0.51	0.060	1.52	0.650	16.51	219	326
12	18	7/0.0152	0.020	0.51	0.060	1.52	0.845	21.46	390	506
16	18	7/0.0152	0.020	0.51	0.080	2.03	0.960	24.38	473	704
20	18	7/0.0152	0.020	0.51	0.080	2.03	1.050	26.67	594	884
24	18	7/0.0152	0.020	0.51	0.080	2.03	1.175	29.85	689	1025
36	18	7/0.0152	0.020	0.51	0.080	2.03	1.380	35.05	979	1457
50	18	7/0.0152	0.020	0.51	0.080	2.03	1.615	41.02	1371	1960
2	16	7/0.0192	0.020	0.51	0.045	1.14	0.495	12.57	105	156
3	16	7/0.0192	0.020	0.51	0.045	1.14	0.520	13.21	137	204
4	16	7/0.0192	0.020	0.51	0.045	1.14	0.600	15.24	188	280
5	16	7/0.0192	0.020	0.51	0.060	1.52	0.655	16.64	224	333
7	16	7/0.0192	0.020	0.51	0.060	1.52	0.710	18.03	290	432
8	16	7/0.0192	0.020	0.51	0.060	1.52	0.760	19.30	307	457
12	16	7/0.0192	0.020	0.51	0.060	1.52	0.940	23.88	498	741
16	16	7/0.0192	0.020	0.51	0.080	2.03	1.055	26.80	635	945
20	16	7/0.0192	0.020	0.51	0.080	2.03	1.175	29.85	768	1143
24	16	7/0.0192	0.020	0.51	0.080	2.03	1.350	34.29	903	1344
36	16	7/0.0192	0.020	0.51	0.080	2.03	1.480	37.59	1290	1920
50	16	7/0.0192	0.020	0.51	0.080	2.03	1.810	45.97	1809	2692

XLPO/LSZH, Instrumentation, Shielded 600V, UL Type TC-LS, Overall Shielded Pairs/Triads



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC-LS
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 1; Pairs – black and white. Triads - black, white and red. One conductor in each pair or triad is printed alpha-numerically for easy identification.

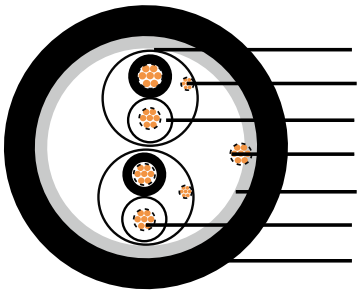
Shield: Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
1	18	7/0.0152	0.030	0.76	0.045	1.14	0.315	8.00	46	68
1 TRI	18	7/0.0152	0.030	0.76	0.045	1.14	0.340	8.64	58	86
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.450	11.43	88	131
4	18	7/0.0152	0.030	0.76	0.045	1.14	0.560	14.22	144	214
8	18	7/0.0152	0.030	0.76	0.060	1.52	0.750	19.05	263	391
12	18	7/0.0152	0.030	0.76	0.080	2.03	0.850	21.59	358	533
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.010	25.65	461	686
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.085	27.56	600	893
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.210	30.73	701	1043
36	18	7/0.0152	0.030	0.76	0.080	2.03	1.500	38.10	1005	1496
50	18	7/0.0152	0.030	0.76	0.080	2.03	2.570	65.28	1603	2386
1	16	7/0.0192	0.030	0.76	0.045	1.14	0.345	8.76	32	48
1 TRI	16	7/0.0192	0.030	0.76	0.045	1.14	0.360	9.14	72	107
2	16	7/0.0192	0.030	0.76	0.045	1.14	0.560	14.22	121	180
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.650	16.51	186	277
8	16	7/0.0192	0.030	0.76	0.060	1.52	0.810	20.57	324	482
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.000	25.40	486	723
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.120	28.45	616	917
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.170	29.72	734	1092
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.440	36.58	894	1330
36	16	7/0.0192	0.030	0.76	0.080	2.03	1.650	41.91	1254	1866
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.020	51.31	1800	2679

XLPO/LSZH, Instrumentation, Shielded 600V, UL Type TC-LS, Individual and Overall Shielded Pairs



Applications:

These cables are used in free air, raceways or direct burial and in wet or dry locations. What's more, permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC-LS
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 1; Pairs – black and white. One conductor in each pair is printed alpha-numerically for easy identification.

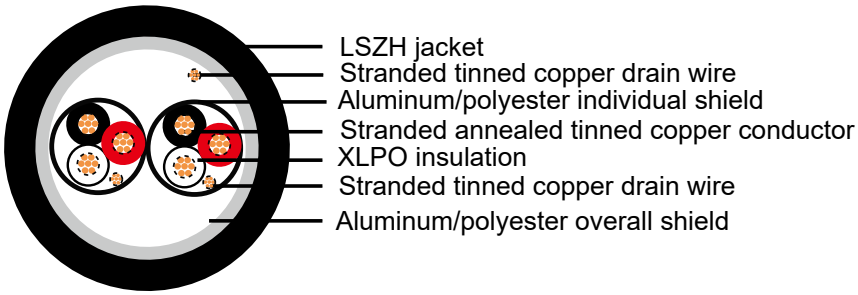
Shield: Individual pairs are 100% individually shielded with aluminum/polyester in contact with stranded tinned copper drain wire. Overall shield is aluminum/polyester in contact with stranded tinned copper drain wire.

Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke, Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of Pairs	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2	18	7/0.0152	0.030	0.76	0.045	1.14	0.510	12.95	92	137
4	18	7/0.0152	0.030	0.76	0.060	1.52	0.630	16.00	167	249
8	18	7/0.0152	0.030	0.76	0.080	2.03	0.855	21.72	326	485
12	18	7/0.0152	0.030	0.76	0.080	2.03	1.030	26.16	441	656
16	18	7/0.0152	0.030	0.76	0.080	2.03	1.140	28.96	554	824
20	18	7/0.0152	0.030	0.76	0.080	2.03	1.265	32.13	676	1006
24	18	7/0.0152	0.030	0.76	0.080	2.03	1.450	36.83	795	1183
36	18	7/0.0152	0.030	0.76	0.010	2.79	1.650	41.91	1118	1664
50	18	7/0.0152	0.030	0.76	0.010	2.79	2.085	52.96	1616	2405
2	16	7/0.0192	0.030	0.76	0.060	1.52	0.585	14.86	130	193
4	16	7/0.0192	0.030	0.76	0.060	1.52	0.675	17.15	204	304
6	16	7/0.0192	0.030	0.76	0.060	1.52	0.800	20.32	301	447
8	16	7/0.0192	0.030	0.76	0.080	2.03	0.915	23.24	394	586
12	16	7/0.0192	0.030	0.76	0.080	2.03	1.110	28.19	548	816
16	16	7/0.0192	0.030	0.76	0.080	2.03	1.350	34.29	713	1061
20	16	7/0.0192	0.030	0.76	0.080	2.03	1.365	34.67	850	1265
24	16	7/0.0192	0.030	0.76	0.080	2.03	1.570	39.88	1001	1490
36	16	7/0.0192	0.030	0.76	0.110	2.79	1.980	50.29	1548	2304
50	16	7/0.0192	0.030	0.76	0.110	2.79	2.165	54.99	2020	3006

XLPO/LSZH, Instrumentation, Shielded 600V, UL Type TC-LS, Individual and Overall Shielded Triads



Applications:

These cables are used in free air, raceways, aerial or direct burial and in wet or dry locations. What's more, they are permitted for use in Class I Division 2 industrial hazardous locations per NEC.

Standard:

Industry Standard:

UL 1277 Type TC-LS
UL 1581
ROHS Compliant

Flame Tests Standard:

UL 1581
UL 1277
UL 1685
IEEE 1202

Other Standard:

EPA 40 CFR, Part 261 for leachable lead content per TCLP

Construction:

Conductor: Tinned, annealed copper per ASTM B33 class B.

Insulation: Flame-retardant, Low-Smoke, Cross-Linked Polyolefin (XLPO).

Color-coded: per ICEA Method 1; Triads - black, white and red. One conductor in each triad is printed alpha-numerically for easy identification.

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

Jacket: Flame-retardant, Sunlight-resistant, Low-Smoke Zero-Halogen Polyolefin (LSZH).

Cables Parameter

NO. of Pairs/ Triads	CON. Size (AWG)	CON. Strand	Min. AVG. Insulation Thickness		Min. AVG. Jacket Thickness		Appr. Cable O.D.		Appr. Cable Weight	
			Inches	mm	Inches	mm	Inches	mm	LBS/ 1000 FT	kg/km
2 TRI	18	7/0.0152	0.030	0.76	0.060	1.52	0.595	15.11	150	223
4 TRI	18	7/0.0152	0.030	0.76	0.060	1.52	0.690	17.53	231	344
8 TRI	18	7/0.0152	0.030	0.76	0.080	2.03	0.940	23.88	435	647
12 TRI	18	7/0.0152	0.030	0.76	0.080	2.03	1.135	28.83	612	911
16 TRI	18	7/0.0152	0.030	0.76	0.080	2.03	1.265	32.13	773	1150
20 TRI	18	7/0.0152	0.030	0.76	0.080	2.03	1.405	35.69	935	1391
24 TRI	18	7/0.0152	0.030	0.76	0.080	2.03	1.565	39.75	1097	1633
36 TRI	18	7/0.0152	0.030	0.76	0.110	2.79	1.860	47.24	1662	2473
2 TRI	16	7/0.0192	0.030	0.76	0.060	1.52	0.640	16.26	183	272
4 TRI	16	7/0.0192	0.030	0.76	0.060	1.52	0.745	18.92	494	735
8 TRI	16	7/0.0192	0.030	0.76	0.080	2.03	1.015	25.78	549	817
12 TRI	16	7/0.0192	0.030	0.76	0.080	2.03	1.230	31.24	777	1156
16 TRI	16	7/0.0192	0.030	0.76	0.080	2.03	1.370	34.80	988	1470
20 TRI	16	7/0.0192	0.030	0.76	0.080	2.03	1.525	38.74	1120	1667
24 TRI	16	7/0.0192	0.030	0.76	0.110	2.79	1.760	44.70	1530	2277
36 TRI	16	7/0.0192	0.030	0.76	0.110	2.79	2.015	51.18	2142	3188

Common Color Sequence

Table E1 Color Sequence

NO. of CON.	Background or Base Color	First Tracer Color	Second Tracer Color	NO. of CON.	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	Blue	-	-	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	Blue	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	-				

Pair cables are Black, White and numbered. Triad cables are Black, White, Red and numbered.

Table E2 Color Sequence

NO. of CON.	Background or Base Color	Tracer Color	NO. of CON.	Background or Base Color	Tracer Color
1	Black	-	19	Orange	Blue
2	Red	-	20	Yellow	Blue
3	Blue	-	21	Brown	Blue
4	Orange	-	22	Black	Orange
5	Yellow	-	23	Red	Orange
6	Brown	-	24	Blue	Orange
7	Red	Black	25	Yellow	Orange
8	Blue	Black	26	Brown	Orange

NO. of CON.	Background or Base Color	Tracer Color	NO. of CON.	Background or Base Color	Tracer Color
9	Orange	Black	27	Black	Yellow
10	Yellow	Black	28	Red	Yellow
11	Brown	Black	29	Blue	Yellow
12	Black	Red	30	Orange	Yellow
13	Blue	Red	31	Brown	Yellow
14	Orange	Red	32	Black	Brown
15	Yellow	Red	33	Red	Brown
16	Brown	Red	34	Blue	Brown
17	Black	Blue	35	Orange	Brown
18	Red	Blue	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.

Method 4 - All Conductors Black

CON.	Conductor Printing
1st	“1-One”
2nd	“2-Two”
3rd	“3-Three”
4th	“4-Four”
5th	“5-Five”

Conductors for General Wiring

Class B Conductors for General Wiring

Copper Conductor

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class B					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
22	7/0.0100	0.64	0.32	0.030	0.76	2.2	3.3
20	7/0.0121	1.02	0.52	0.036	0.91	3.2	4.8
18	7/0.0152	1.62	0.82	0.045	1.14	5.0	7.4
16	7/0.0192	2.58	1.31	0.056	1.42	8.0	12
14	7/0.0242	4.11	2.08	0.071	1.80	12.7	18.9
12	7/0.0305	6.53	3.31	0.090	2.29	20.2	30.1
10	7/0.0385	10.38	5.26	0.113	2.87	32.1	47.8
9	7/0.0432	13.09	6.63	0.127	3.23	40.4	60.1
8	7/0.0486	16.51	8.37	0.141	3.58	51.0	74.4
7	7/0.0545	20.82	10.5	0.158	4.01	64.3	95.7
6	7/0.0612	26.24	13.3	0.178	4.52	81.1	121
5	7/0.0688	33.09	16.8	0.200	5.08	102	152
4	7/0.0772	41.74	21.2	0.225	5.72	129	192
3	7/0.0867	52.62	26.7	0.252	6.40	163	243
2	7/0.0974	66.36	33.6	0.283	7.19	205	305
1	19/0.0664	83.69	42.4	0.322	8.18	258	384
1/0	19/0.0745	105.6	53.5	0.362	9.19	326	485
2/0	19/0.0837	133.1	67.4	0.406	10.3	411	612
3/0	19/0.0940	167.8	85.0	0.458	11.6	518	771
4/0	19/0.1055	211.6	107	0.512	13.0	653	972
250	37/0.0822	250	127	0.558	14.2	772	1150
262.6	—	—	—	—	—	—	—
300	37/0.0900	300	152	0.611	15.5	926	1380
313.1	—	—	—	—	—	—	—
350	37/0.0973	350	177	0.661	16.8	1080	1607
373.7	—	—	—	—	—	—	—
400	37/0.1040	400	203	0.706	17.9	1235	1838
444.4	—	—	—	—	—	—	—
500	37/0.1162	500	253	0.789	20.0	1544	2297
535.3	—	—	—	—	—	—	—
592	—	—	—	—	—	—	—
600	61/0.0992	600	304	0.866	22.0	1853	2757
646.4	—	—	—	—	—	—	—

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class B					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
750	61/0.1109	750	380	0.968	24.6	2316	3446
777.7	—	—	—	—	—	—	—
1000	61/0.1280	1000	507	1.117	28.4	3088	4595
1111	—	—	—	—	—	—	—

Class C Conductors for General Wiring

Copper Conductor

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class C					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
22	19/0.0063	0.64	0.32	0.031	0.79	2.3	3.4
20	19/0.0080	1.02	0.52	0.038	0.97	3.8	5.7
18	19/0.0092	1.62	0.82	0.044	1.12	5.0	7.4
16	19/0.0117	2.58	1.31	0.056	1.42	8.0	12
14	19/0.0147	4.11	2.08	0.071	1.80	12.7	18.9
12	19/0.0185	6.53	3.31	0.089	2.26	20.2	30.1
10	19/0.0234	10.38	5.26	0.112	2.85	32.1	47.8
9	19/0.0262	13.09	6.63	0.123	3.12	40.4	60.1
8	19/0.0295	16.51	8.37	0.139	3.53	51.0	74.4
7	19/0.0331	20.82	10.5	0.156	3.96	64.3	95.7
6	19/0.0372	26.24	13.3	0.175	4.45	81.0	121
5	19/0.0417	33.09	16.8	0.203	5.16	102	152
4	19/0.0469	41.74	21.2	0.229	5.82	129	192
3	19/0.0526	52.62	26.7	0.256	6.50	163	243
2	19/0.0591	66.36	33.6	0.288	7.32	205	305
1	37/0.0476	83.69	42.4	0.325	8.26	258	384
1/0	37/0.0534	105.6	53.5	0.364	9.25	326	485
2/0	37/0.0600	133.1	67.4	0.410	10.4	411	612
3/0	37/0.0673	167.8	85.0	0.459	11.7	518	771
4/0	37/0.0756	211.6	107	0.516	13.1	653	972
250	31/0.0640	250	127	0.562	14.3	774	1150
262.6	—	—	—	—	—	—	—
300	61/0.0701	300	152	0.615	15.6	927	1380
313.1	—	—	—	—	—	—	—
350	61/0.0757	350	177	0.664	16.9	1082	1610
373.7	—	—	—	—	—	—	—
400	61/0.0810	400	203	0.711	18.1	1235	1838
444.4	—	—	—	—	—	—	—
500	61/0.0905	500	253	0.794	20.2	1545	2299

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class C					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
535.3	—	—	—	—	—	—	—
592	—	—	—	—	—	—	—
600	91/0.0812	600	304	0.893	22.7	1853	2757
646.4	—	—	—	—	—	—	—
750	91/0.0908	750	380	0.999	25.4	2316	3446
777.7	—	—	—	—	—	—	—
1000	91/0.1048	1000	507	1.153	29.3	3088	4595
1111	—	—	—	—	—	—	—

Class H Conductors for General Wiring

Copper Conductor

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class H					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
22	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—
10	—	—	—	—	—	—	—
9	—	—	—	—	—	—	—
8	133/0.0111	16.51	8.37	0.164	4.17	52	77
7	133/0.0126	20.82	10.5	0.190	4.83	67	100
6	133/0.0140	26.24	13.3	0.204	5.18	82	122
5	133/0.0158	33.09	16.8	0.231	5.87	105	156
4	133/0.0177	41.74	21.2	0.260	6.60	132	196
3	133/0.0199	52.62	26.7	0.292	7.42	167	248
2	133/0.0223	66.36	33.6	0.327	8.31	208	310
1	259/0.0180	83.69	42.4	0.363	9.22	266	396
1/0	259/0.0202	105.6	53.5	0.407	10.3	334	497
2/0	259/0.0227	133.1	67.4	0.458	11.6	422	628
3/0	259/0.0255	167.8	85.0	0.515	13.1	533	793
4/0	259/0.0286	211.6	107	0.579	14.7	670	997
250	427/0.0242	250	127	0.627	15.9	795	1183
262.6	—	—	—	—	—	—	—
300	427/0.0265	300	152	0.702	17.8	953	1418
313.1	—	—	—	—	—	—	—

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class H					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
350	427/0.0286	350	177	0.740	18.8	1110	1652
373.7	—	—	—	—	—	—	—
400	427/0.0306	400	203	0.809	20.5	1270	1890
444.4	—	—	—	—	—	—	—
500	427/0.0342	500	253	0.900	22.9	1590	2366
535.3	—	—	—	—	—	—	—
592	—	—	—	—	—	—	—
600	703/0.0292	600	304	1.022	26.0	1920	2857
646.4	—	—	—	—	—	—	—
750	703/0.0327	750	380	1.122	28.5	2410	3586
777.7	—	—	—	—	—	—	—
1000	703/0.0377	1000	507	1.294	32.9	3205	4769
1111	—	—	—	—	—	—	—

Class I Conductors for General Wiring

Copper Conductor

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class I					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
22	—	—	—	—	—	—	—
20	—	—	—	—	—	—	—
18	—	—	—	—	—	—	—
16	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—
12	—	—	—	—	—	—	—
10	27/24	10.91	5.53	0.123	3.12	33.7	50
9	—	—	—	—	—	—	—
8	37/24	14.95	7.57	0.138	3.50	46.0	68
7	—	—	—	—	—	—	—
6	61/24	24.64	12.5	0.190	4.83	77	114
5	91/24	36.76	19	0.240	6.10	113	168
4	105/24	42.42	21	0.260	6.60	132	196
3	125/24	50.5	25	0.285	7.24	155	231
2	150/24	60.6	31	0.320	8..13	189	281
1	225/24	90.9	46	0.385	9.78	280	417
1/0	275/24	111.1	56	0.435	11.0	346	515
2/0	325/24	131.3	66	0.470	11.9	403	600

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class I					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
3/0	450/24	181.8	92	0.545	13.8	567	844
4/0	550/24	222.2	112	0.580	14.7	684	1018
250	—	—	—	—	—	—	—
262.6	650/24	262.6	133	0.652	16	820	1220
300	—	—	—	—	—	—	—
313.1	775/24	313.1	159	0.700	18	960	1428
350	—	—	—	—	—	—	—
373.7	925/24	373.7	189	0.760	19	1105	1644
400	—	—	—	—	—	—	—
444.4	1100/24	444.4	225	0.850	21	1370	2038
500	—	—	—	—	—	—	—
535.3	1325/24	535.3	271	0.940	24	1700	2530
592	1480/24	597.9	303	0.970	25	1835	2730
600	—	—	—	—	—	—	—
646.4	1600/24	646.4	327	1.040	26	1992	2964
750	—	—	—	—	—	—	—
777.7	1925/24	777.7	394	1.120	28	2390	3556
1000	—	—	—	—	—	—	—
1111	2750/24	1111	563	1.340	34	3400	5059

Class K Conductors for General Wiring

Copper Conductor

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class K					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
22	—	—	—	—	—	—	—
20	10/0.010	1.02	0.52	0.036	0.91	3.2	4.8
18	16/0.010	1.62	0.82	0.046	1.2	5.0	7.4
16	26/0.010	2.58	1.31	0.057	1.4	7.8	12
14	41/0.010	4.11	2.08	0.071	1.8	12.8	19.0
12	65/0.010	6.53	3.31	0.088	2.2	20.3	30.2
10	105/0.010	10.38	5.26	0.112	2.8	33.3	49.6
9	133/0.010	13.09	6.63	0.150	3.8	42.4	63.1
8	168/0.010	16.51	8.37	0.158	4.0	54.3	80.8
7	210/0.010	20.82	10.5	0.175	4.4	66.8	99.4
6	266/0.010	26.24	13.3	0.198	5.0	84.2	125
5	336/0.010	33.09	16.8	0.261	6.6	106	158
4	420/0.010	41.74	21.2	0.249	6.3	132	196

Size AWG/kcmil	Stranding NO./Strand Diameter Inches	ASTM Class K					
		Nominal Area		Nominal Diameter		Nominal Weight	
		kcmil	mm²	Inches	mm	LBS/KFT	kg/km
3	532/0.010	52.62	26.7	0.298	7.6	169	251
2	665/0.010	66.36	33.6	0.317	8.1	211	314
1	836/0.010	83.69	42.4	0.356	9.0	266	396
1/0	1064/0.010	105.6	53.5	0.401	10	338	503
2/0	1323/0.010	133.1	67.4	0.501	13	425	632
3/0	1666/0.010	167.8	85.0	0.562	14	535	796
4/0	2107/0.010	211.6	107	0.632	16	676	1006
250	2499/0.010	250	127	0.688	17	802	1193
262.6	2220/0.010	222	112	0.680	17	850	1265
300	2989/0.010	300	152	0.753	19	960	1428
313.1	3136/0.010	313.6	159	0.750	19	969	1442
350	3458/0.010	350	177	0.818	21	1120	1667
373.7	3737/0.010	373.7	189	0.790	20	1210	1800
400	3990/0.010	400	203	0.878	22	1290	1920
444.4	—	—	—	—	—	—	—
500	5054/0.010	500	253	0.990	25	1635	2433
535.3	5320/0.010	532	270	0.950	24	1641	2442
592	—	—	—	—	—	—	—
600	5985/0.010	600	340	1.125	29	1950	2902
646.4	6466/0.010	646.4	328	1.040	26	1987	2957
750	7448/0.010	750	380	1.276	32	2427	3611
777.7	—	—	—	—	—	—	—
1000	9975/0.010	1000	507	1.498	38	3250	4769
1111	—	—	—	—	—	—	—

Jacket and Insulation Material Properties

Thermoplastic Properties

Insulation or Jacket Material	Chlorinated Polyethylene (CPE)	Polyvinyl Chloride (PVC)	Low-density Polyethyene	Cellular Polyethylene	High-density Polyethylene	Polyure-thane	Poly-propylene	Nylon	TPE
Oxidation Resistance	E	E	E	E	E	E	E	E	E
Heat Resistance	G-E	G-E	G	G-E	E	E	G	E	G
Oil Resistance	E	E	G-E	G-E	G-E	E	E	E	P
Low Temp. Flexibility	G	P-G	G-E	E	E	E	G	G	E
Weather, Sun Resistance	E	G-E	E	E	E	E	F-G	E	—
Ozone Resistance	E	E	E	E	E	E	E	E	E
Abrasion Resistance	E	F-G	F-G	G	E	F-G	O	E	F
Electrical Properties	F	F-G	E	E	E	E	P-F	F	G
Flame Resistance	F	E	P	P	P	P	P	P	F
Nuclear Radiation Resistance	G-E	P-F	G	G	G	F	G	F-G	F

Insulation or Jacket Material	Chlorinated Polyethylene (CPE)	Polyvinyl Chloride (PVC)	Low-density Polyethyene	Cellular Polyethylene	High-density Polyethylene	Polyure-thane	Poly-propylene	Nylon	TPE
Water Resistance	G	E	E	E	E	E	P	P-F	E
Acid Resistance	G-E	G-E	G-E	G-E	G-E	E	F	P-F	G
Alkali Resistance	G-E	G-E	G-E	G-E	G-E	E	F	E	G
Gasoline, Kerosene, Etc. (Alaphatic Hydrocarbons) Resistance	F	G-E	P-F	P-F	P-F	P-F	F	G	P
Benzol, Toluol, Etc. (Aromatic Hydrocarbons) Resistance	F	P-F	P	P	P	P-F	P	G	P
Degreaser Solvents (Halogenated Hydrocarbons) Resistance	P	P-F	P	P	P	P	P	G	P
Alcohol Resistance	G	G-E	E	E	E	E	P	P	E

P : Poor
F : Fair
G : Good
E: Excellent
O : Outstanding
Any given property can usually be improved by the use of selective compounding.

Thermoset Properties

Insulation or Jacket Material	Styrene Butadiene Rubber (SBR)	Narural Rubber	Synthetic Rubber	Polybu-tadiene	Neopr-ene	Chloro-sulfonated Polyet-hylene (CSPE)	Nitrile or Rubber Butadine Nitrile (NBR)	Nitrile/ Polych-loride (NBR/ PVC)	Ethylene Propylene Rubber (EPR)	Cross-linked Polye-thylene (XLPE)	Chlori-nated Polye-thylene (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 Temp. 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-E	G-E	G-E	E	F-G

Insulation or Jacket Material	Styrene Butadiene Rubber (SBR)	Narural Rubber	Synthetic Rubber	Polybu-tadiene	Neopr-ene	Chloro-sulfonated Polyet-hylene (CSPE)	Nitrile or Rubber Butadine Nitrile (NBR)	Nitrile/ Polych-loride (NBR/ PVC)	Ethylene Propylene Rubber (EPR)	Cross-linked Polye-thylene (XLPE)	Chlori-nated Polye-thylene (CPE)	Silicone Rubber
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. (Alaphatic Hydrocarbons) Resistance	P	P	P	P	G	F	E	G-E	P	F	F	P-E
Benzol, Toluol, Etc. (Aromatic Hydrocarbons) Resistance	P	P	P	P	P-G-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

Installation—Conductor Maximum Pulling Tensions

Multi-conductor Cables Having Equal-Sized Conductors; In Parallel or as Multiplexed Assemblies

AWG/kcmil	Max. Allowable Pulling Tension (LBS)					
	NO. of CON.					
	1	2	3	4	5	6
18	13	26	39	41	52	62
16	20	40	60	65	81	97
14	33	66	99	105	132	158
12	52	104	157	167	209	251
10	83	166	249	266	332	399
8	132	264	396	423	528	634
6	210	420	630	672	840	1008
4	334	668	1002	1069	1336	1603
2	531	1062	1593	1699	2124	2548
1	670	1339	2009	2142	2678	3214
1/0	845	1690	2534	2703	3379	4055
2/0	1065	2130	3194	3407	4259	5111
3/0	1342	2685	4027	4296	5370	6444
4/0	1693	3386	5078	5417	6771	8125
250	2000	4000	6000	6400	8000	9600
350	2800	5600	8400	8960	10000	10000
500	4000	8000	10000	10000	10000	10000
750	6000	10000	10000	10000	10000	10000
1000	8000	10000	10000	10000	10000	10000

Multiconductor Cables Having Equal-Sized Conductors, without Subassemblies

NO. of CON.	Max. Allowable Pulling Tension(LBS)				
	CON. Size (AWG/kcmil)				
	18	16	14	12	10
2	26	40	66	104	166
3	39	60	99	157	249
4	41	65	105	167	266
5	52	81	132	209	332
6	62	97	158	251	399
7	73	113	184	293	465
8	83	129	210	334	531
9	93	145	237	376	598
10	104	161	263	418	664
12	124	194	316	502	797
14	145	226	368	585	930
15	156	242	395	627	996
16	166	258	421	669	1000
18	187	290	473	752	1000
19	197	306	500	794	1000
20	207	323	526	836	1000
22	228	355	549	919	1000
24	249	387	631	1000	1000
25	259	403	658	1000	1000
30	311	484	789	1000	1000
37	383	596	974	1000	1000

Installation—Training and Bending Limitations

Physical Limitations Training and Bending

Overview

Training is the positioning of cable when it is not under tension. Bending is the positioning of cable when it is under tension. When installing cable, the object is to limit the mechanical forces so that the cable's physical and electrical characteristics are maintained for the expected service life. Bends in conductors, multi-conductor cables or assemblies of conductors shall be made so that the cable will not be damaged. A nonshielded cable can tolerate a sharper bend than a shielded cable. This is especially true for cables having helically applied metallic shielding tapes which, when bent too sharply, can separate or buckle and cut into the insulation. Remember that offsets are bends. The problem is compounded by the fact that most tapes are under jackets that sconceal such damage. The extruded polymers used for insulation shields have sufficient conductivity and coverage initially to pass acceptance testing, then fail prematurely due to corona at the shield/insulation interface.

Minimum Bending Radius in Accordance with National Electric Code

Voltage	Conductors	Shielding	Cable Types	Minimum Bending Radius as a Multiple of Conductor/ Assembly Diameter		
600V	Single	Nonshield	All	5X		
601-2000V			All	8X		
600V or 2000V	Multi-conductor or Multiplexed	Nonshielded	TC or TC-ER	1 in. (25 mm) or less	Over 1 in. to 2 in. (>25 mm to 50 mm)	Over 2 in. (>50 mm)
				4X	5X	6X
			MC[2]	7X		
		Shielded	All	12X		
			TC or TC-ER	12X		
			MC	12X/7X[1]		
Over 2000V	Single	Nonshielded	MV	8X		
			MC[2]	7X		
		Shielded	MC and MV	12X		
	Multiconductor Multiplexed	Nonshielded	MC and MV	8X		
		Shielded	MC and MV	12X/7X[1]		

[1] 12 times the diameter of an individual shielded conductor or 7 times the overall cable diameter, whichever is greater.
[2] Per 330.24B Interlocked-Type Armor or Corrugated Sheath.

Installation—Maximum Sidewall Pressure

Overview

Sidewall bearing pressure (SWBP), or sidewall loading, is the radial force exerted on a cable being pulled around a conduit bend or sheave. Excessive SWBP can crush a cable and is, therefore, one of the most restrictive factors in installations having bends and requiring high pulling tensions. SWBP is reduced by increasing the radius of bends. The maximum tension that can safely be applied to the cable during installation can be calculated using the maximum SWBP for the cable and the radius of the bend it is traversing. For example, a cable having a maximum SWBP of 300 lb/ft that is being pulled around a bend having a radius of 2 feet should have no more than 300 lbs/ft x 2 ft or 600 lbs tension applied to it as the cable exits the bend.

Cable Type	SWBP(LBS/FT)
300V Nonshielded, 300V and 600V Shielded Control & Instrumetation	500
600V Nonshielded Control & Instrumentation	500
600V and 2400V Nonshielded Power	1000
5KV-35KV Shielded Power	1000
Interlocked Armored Cable (all voltage)	300

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