

# UL Control Cable

## 600V Type TC Cables — Overview

### Introduction

Belden offers a wide selection of UL-rated 600V Tray Cable for a variety of control applications.

Multi-conductor versions are available as standards from 18 to 1 AWG. 1/0 through 4/0 are also available as custom made constructions. These are unshielded and shielded versions that come with various insulation and jacket combinations.

These TC cables are installed in cable trays, ducts and conduit and can be used in direct burial applications. They are extensively used in manufacturing facilities, especially in the process industries such as petrochemical, steel, pulp and paper, cement and mining.

These flexible, space efficient cables can be substantially more economical than traditional wiring methods.

### Construction

Soft annealed bare or tinned copper conductors, with various insulation and jacketing options as seen in chart below.

### Application

These cables are suitable for installation in wet or dry locations. Cable jackets are resistant to sunlight, moisture and vapor penetration. The cables can be used in raceways (supported by messenger wire), outdoor applications and direct burial applications.

### Unshielded

Cabled non-shielded conductors provide a minimal O.D. allowing greater tray and conduit fill. Non-shielded control cable may be utilized when recommended by the equipment manufacturer and used in a metallic conduit.

### Overall Shield

Recommended for use in control applications where signals are transmitted in excess of 100 millivolts, except in areas where high voltage and current sources create excessive noise interference. The Beldfoil® shield with drain wire provides 100% coverage for maximum shield effectiveness. Copper tape shield available upon request.

Only 2-conductor round constructions can be shielded. Flat constructions cannot be shielded.

### Tray Cable Construction Options

Insulation/Jacket	UL Listed for MC and TC		Flame Tests	Ratings*
	Max. Temp Rating			
	Wet	Dry		
PVC-Nylon/PVC (THHN or THWN) 14 AWG & larger	75°C	90°C	UL 1685 FT4/IEEE 1202/383 ICEA T-29-520	ICEA S-73-532 ICEA S-95-658 ICEA S-61-402
PVC-Nylon/PVC (TFN or TFFN) 16 & 18 AWG	NA	90°C	UL 1685 FT4/IEEE 1202/383 ICEA T-29-520	ICEA S-73-532 ICEA S-95-658 ICEA S-61-402
XLPE/PVC or CPE (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1685 FT4/IEEE 1202/383 VW-1 rated singles ICEA T-29-520	ICEA S-73-532 ICEA S-95-658 ICEA S-66-524
XLPE/PVC or CPE (RFH-2) 16 & 18 AWG	75°C	75°C	UL 1685 FT4/IEEE 1202/383 VW-1 rated singles ICEA T-29-520	ICEA S-73-532 ICEA S-95-658 ICEA S-66-524
FRPO/PVC 18 AWG & larger	—	75°C	UL 1685	
TPE/TPE	75°C	90°C	UL 1685	
FRPO/PVC	75°C	90°C	UL 1685	
XLPE/Haloarrest® (XHHW-2) 14 AWG & larger	90°C	90°C	UL 1685 FT4/IEEE 1202/383 ICEA T-29-520	TC-LS
XLPE/Haloarrest (RFH-2) 16 & 18 AWG	75°C	75°C	UL 1685 FT4/IEEE 1202/383 ICEA T-29-520	TC-LS
FEP/PVC	90°C	90°C	UL 1685	

CPE = Chlorinated Polyethylene • FEP = Fluorinated Ethylene-propylene • FRPO = Flame-retardant Polyolefin • PVC = Polyvinyl Chloride • TPE = Thermoplastic Elastomer • XLPE = Cross-linked Polyethylene

\*Applicable to TC-rated cables only.

### Ground Wire

- Non-insulated, bare copper ground wires are included for constructions 8 through 1 AWG. Non-insulated, bare copper, full sized ground wires may be requested on other constructions.
- All shielded PVC-Nylon/PVC constructions include full sized ground (drain) wires.

### Color Code

Multi-conductor control cables (10 AWG to 18 AWG) are printed alpha-numerically in addition to being color coded per ICEA Table E2.

8 AWG and larger are black and numbered per ICEA Method 4.

Refer to Technical Information Section for ICEA color code charts.

### Specifications

- UL Subject 1277 Type TC
- XLPE/Haloarrest jacketed cables are UL 1277 TC-LS rated
- UL Subject 1424 (per outline for NPLF requirements dated May 3, 1979)
- UL 1685 (UL 1581) Vertical Flame Test comparable to IEEE 383-1974 (70,000 BTU/hr) Flame Test

- Approved for cable tray use in Class 1, Division 2 areas, per NEC Articles 340, 318 and 501, and for Class 1 circuits as permitted in Article 725
- PVC-Nylon/PVC, XLPE/PVC and XLPE/CPE constructed cables meet IEEE 1202/IEEE 383-2003/FT4 (70,000 BTU/hr) Flame Test

### TC-ER Rated Cables

As an option, Belden offers all PVC-nylon/PVC, XLPE/PVC and XLPE/CPE jacketed tray cables with a TC-ER (Exposed Run) rating, formerly referred to as Open Wiring.

Per NEC Article 336, a TC-ER rated cable may be installed in an industrial establishment between a cable tray and the utilization equipment or device. A TC-ER rated cable must meet the crush and impact requirements of UL Type MC cable. By eliminating the need for metal conduit and/or armor, using a TC-ER rated cable results in savings in both installation and maintenance.

Standard lengths may be subject to tolerance. Custom lengths may be available upon request. Contact the Belden Electronics Division Customer Service Department for additional information. 1-800-BELDEN-1

# UL Control Cable

## 600V Type TC Cables

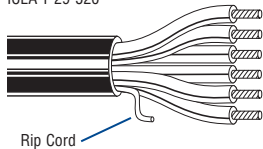
### Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**18 AWG Multi-conductor** Stranded (7x26) Bare Copper Conductors

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF  
 FT4/IEEE 1202/383  
 ICEA S-73-532  
 ICEA S-95-658  
 ICEA S-61-402  
 ICEA T-29-520

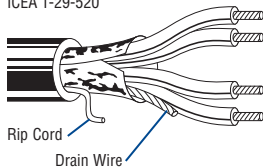


<b>27916A</b> <sup>†</sup>	2	E2	Bulk	Bulk	33.0	49.1	.045	1.14	.180 x .266	4.57 x 6.76	44	195.8	2.7	68.58
<b>27325A</b> <sup>††</sup>	2	E2	Bulk	Bulk	34.0	50.6	.045	1.14	.270	6.86	44	195.8	2.7	68.58
<b>27334A</b>	3	E2	Bulk	Bulk	45.0	67.0	.045	1.14	.280	7.11	66	293.7	2.8	71.12
<b>27326A</b>	4	E2	Bulk	Bulk	52.0	77.4	.045	1.14	.310	7.87	88	391.6	3.1	78.74
<b>27335A</b>	5	E2	Bulk	Bulk	62.0	92.3	.045	1.14	.330	8.38	110	489.5	3.3	83.82
<b>27600A</b>	6	E2	Bulk	Bulk	72.0	107.2	.045	1.14	.350	8.89	132	587.4	3.5	88.90
<b>27327A</b>	7	E2	Bulk	Bulk	79.0	117.6	.045	1.14	.350	8.89	154	685.3	3.5	88.90
<b>27601A</b>	8	E2	Bulk	Bulk	89.0	132.5	.045	1.14	.390	9.83	176	783.2	3.8	96.52
<b>27336A</b>	9	E2	Bulk	Bulk	104.0	154.8	.045	1.14	.410	10.41	198	881.1	4.1	104.14
<b>27328A</b>	10	E2	Bulk	Bulk	111.0	165.2	.060	1.52	.450	11.43	220	979.0	4.5	114.30
<b>27602A</b>	11	E2	Bulk	Bulk	—	—	.060	1.52	.450	11.43	242	1076.9	4.5	114.30
<b>27329A</b>	12	E2	Bulk	Bulk	127.0	189.0	.060	1.52	.450	11.43	264	1174.8	4.5	114.30
<b>27603A</b>	13	E2	Bulk	Bulk	142.0	211.3	.060	1.52	.470	11.94	286	1272.7	4.7	119.38
<b>27604A</b>	14	E2	Bulk	Bulk	—	—	.060	1.52	.480	12.19	308	1370.6	4.8	121.92
<b>27605A</b>	15	E2	Bulk	Bulk	175.0	260.4	.060	1.52	.510	12.95	330	1468.5	5.1	129.54
<b>27606A</b>	16	E2	Bulk	Bulk	167.0	248.5	.060	1.52	.500	12.70	352	1566.4	5.0	127.00
<b>27607A</b>	17	E2	Bulk	Bulk	—	—	.060	1.52	.570	14.48	374	1664.3	5.7	144.78
<b>27608A</b>	18	E2	Bulk	Bulk	196.0	291.7	.060	1.52	.570	14.48	396	1762.2	5.7	144.78
<b>27609A</b>	19	E2	Bulk	Bulk	202.0	300.6	.060	1.52	.570	14.48	418	1860.1	5.7	144.78
<b>27610A</b>	20	E2	Bulk	Bulk	214.0	318.5	.060	1.52	.600	15.24	440	1958.0	5.9	149.86
<b>27611A</b>	25	E2	Bulk	Bulk	258.0	384.0	.060	1.52	.660	16.76	550	2447.5	6.6	167.64
<b>27612A</b>	30	E2	Bulk	Bulk	300.0	446.5	.060	1.52	.690	17.53	660	2937.0	6.6	167.64
<b>27613A</b>	37	E2	Bulk	Bulk	360.0	535.8	.080	2.03	.740	18.80	814	3622.3	7.4	187.96
<b>27614A</b>	50	E2	Bulk	Bulk	511.0	760.5	.080	2.03	.910	23.11	1100	4895.0	9.1	231.14
<b>27632A</b>	60	E2	Bulk	Bulk	627.0	933.1	.080	2.03	.960	24.38	1320	5874.0	9.6	243.84

**18 AWG Multi-conductor** Stranded (7x26) Bare Copper Conductors • Overall Beldfoil® Shield (100% Coverage) with Drain Wire

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF  
 FT4/IEEE 1202/383  
 ICEA S-73-532  
 ICEA S-95-658  
 ICEA S-61-402  
 ICEA T-29-520



<b>27325AS</b>	2	E2	Bulk	Bulk	34.0	50.6	.045	1.14	.270	6.86	67	298	2.70	68.58
<b>27334AS</b>	3	E2	Bulk	Bulk	45.0	67.0	.045	1.14	.280	7.11	90	400	2.80	71.12
<b>27326AS</b>	4	E2	Bulk	Bulk	60.0	89.3	.045	1.14	.300	7.62	112	498	3.10	81.28

E2 = Refer to Technical Information section for color code.

<sup>†</sup> Flat construction; overall shield not available.

<sup>††</sup> Twisted Conductors.

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

**Conductor, Insulation and Jacket Options**

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest®

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a Z to an 8. For example: 2Z080A with TC-ER rating becomes 28080A.



# UL Control Cable

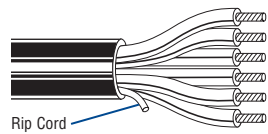
600V Type TC Cables

Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

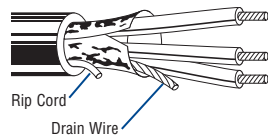
**16 AWG Multi-conductor** Stranded (7x24) Bare Copper Conductors

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	27917A†	2	E2	Bulk	Bulk	42.0	62.5	.045	1.14	.190 x .290	4.83 x 7.37	70	312	2.9	73.66
	27337A††	2	E2	Bulk	Bulk	45.0	67.0	.045	1.14	.299	7.60	70	312	2.9	73.66
	27331A	3	E2	Bulk	Bulk	55.0	81.9	.045	1.14	.307	7.80	105	467	3.1	78.74
	27338A	4	E2	Bulk	Bulk	69.0	102.7	.045	1.14	.332	8.18	140	623	3.3	83.82
	27339A	5	E2	Bulk	Bulk	83.0	123.5	.045	1.14	.360	9.14	175	779	3.6	91.44
	27615A	6	E2	Bulk	Bulk	96.0	142.9	.045	1.14	.390	9.91	210	935	3.9	99.06
	27323A	7	E2	Bulk	Bulk	106.0	157.7	.045	1.14	.390	9.91	245	1090	3.9	99.06
	27616A	8	E2	Bulk	Bulk	122.0	181.6	.045	1.14	.420	10.67	280	1246	4.2	106.68
	27340A	9	E2	Bulk	Bulk	138.0	200.4	.045	1.14	.450	11.43	315	1402	4.5	114.30
	27617A	10	E2	Bulk	Bulk	149.0	221.7	.045	1.14	.490	12.45	350	1558	4.9	124.46
	27618A	11	E2	Bulk	Bulk	161.0	239.6	.045	1.14	.490	12.45	385	1713	4.9	124.46
	27341A	12	E2	Bulk	Bulk	174.0	258.9	.045	1.14	.500	12.70	420	1869	5.0	127.00
	27619A	13	E2	Bulk	Bulk	203.0	302.1	.045	1.14	.570	14.48	455	2025	5.7	144.78
	27620A	14	E2	Bulk	Bulk	223.0	331.8	.045	1.14	.570	14.48	490	2181	5.7	144.78
	27621A	15	E2	Bulk	Bulk	229.0	340.8	.060	1.52	.590	14.99	525	2336	5.9	149.86
	27330A	16	E2	Bulk	Bulk	241.0	358.7	.045	1.14	.600	15.24	560	2492	6.0	152.40
	27622A	17	E2	Bulk	Bulk	267.0	397.3	.060	1.52	.630	16.00	595	2648	6.3	160.02
	27623A	18	E2	Bulk	Bulk	—	—	.060	1.52	.630	16.00	630	2804	6.3	160.02
	27624A	19	E2	Bulk	Bulk	287.0	427.1	.060	1.52	.630	16.00	665	2959	6.3	160.02
	27625A	20	E2	Bulk	Bulk	304.0	452.4	.060	1.52	.660	16.76	700	3115	6.6	167.64
	27324A	25	E2	Bulk	Bulk	367.0	546.1	.080	2.03	.730	18.54	875	3894	7.3	185.42
	27626A	30	E2	Bulk	Bulk	428.0	636.9	.080	2.03	.770	19.56	1050	4673	7.7	195.58
	27627A	37	E2	Bulk	Bulk	514.0	764.8	.080	2.03	.830	21.08	1295	5763	8.3	210.82
	27628A	50	E2	Bulk	Bulk	723.0	1075.8	.080	2.03	1.000	25.40	1750	7788	10.0	254.00
	27633A	60	E2	Bulk	Bulk	844.0	1255.9	.080	2.03	1.100	27.94	2100	9345	11.0	279.40



**16 AWG Multi-conductor** Stranded (7x24) Bare Copper Conductors • Overall Beldfoil® Shield (100% Coverage) with Drain Wire

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	27337AS	2	E2	Bulk	Bulk	45.0	67.0	.045	1.14	.302	7.67	94	418	3.00	76.20
	27331AS	3	E2	Bulk	Bulk	55.0	81.8	.045	1.14	.320	8.13	130	578	3.20	81.28



E2 = Refer to Technical Information section for color code.

† Flat construction; overall shield not available.

†† Twisted Conductors.

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a 7 to an 8. For example: 27080A with TC-ER rating becomes 28080A.

**Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest®



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

# UL Control Cable

600V Type TC Cables

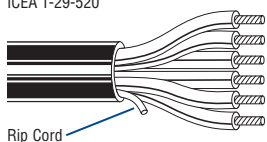
Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**14 AWG Multi-conductor** Stranded (7x22) Bare Copper Conductors

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

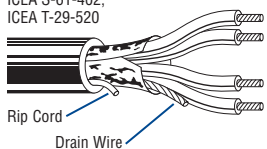
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	<b>27080A</b> †	2	E2	1000 Bulk	304.8 Bulk	61.0 61.0	27.7 27.7	.045	1.14	.210 x .320	5.33 x 8.13	108	481	3.5	88.90
	<b>27636A</b> ††	2	E2	Bulk	Bulk	62.0	92.3	.045	1.14	.320	8.13	108	481	3.2	81.28
	<b>27081A</b>	3	E2	1000 Bulk	304.8 Bulk	86.0 86.0	39.0 39.0	.045	1.14	.340	8.64	162	721	3.4	86.36
	<b>27082A</b>	4	E2	1000 Bulk	304.8 Bulk	110.0 110.0	49.9 49.9	.045	1.14	.360	9.14	216	961	3.6	91.44
	<b>27083A</b>	5	E2	Bulk	Bulk	118.0	175.6	.045	1.14	.400	10.16	270	1202	3.9	99.06
	<b>27084A</b>	6	E2	Bulk	Bulk	140.0	208.3	.045	1.14	.434	11.02	324	1442	4.3	109.22
	<b>27085A</b>	7	E2	Bulk	Bulk	153.0	227.7	.045	1.14	.433	11.00	378	1682	4.3	109.22
	<b>27086A</b>	8	E2	Bulk	Bulk	173.0	257.5	.045	1.14	.480	12.19	432	1922	4.7	119.38
	<b>27087A</b>	9	E2	Bulk	Bulk	196.0	291.7	.045	1.14	.510	12.95	486	2163	5.1	129.54
	<b>27088A</b>	10	E2	Bulk	Bulk	230.0	342.3	.060	1.52	.588	14.94	540	2403	5.7	144.78
	<b>27089A</b>	11	E2	Bulk	Bulk	251.0	373.6	.060	1.52	.595	15.11	594	2643	5.9	149.86
	<b>27090A</b>	12	E2	Bulk	Bulk	270.0	401.8	.060	1.52	.595	15.11	648	2884	5.9	149.86
	<b>27091A</b>	13	E2	Bulk	Bulk	—	—	.060	1.52	.640	16.26	702	3124	6.3	160.02
	<b>27092A</b>	14	E2	Bulk	Bulk	308.0	458.3	.060	1.52	.640	16.26	756	3364	6.3	160.02
	<b>27093A</b>	15	E2	Bulk	Bulk	330.0	491.1	.060	1.52	.670	17.02	810	3605	6.7	170.18
	<b>27094A</b>	16	E2	Bulk	Bulk	343.0	510.5	.060	1.52	.671	17.04	864	3845	6.6	167.64
	<b>27095A</b>	17	E2	Bulk	Bulk	—	—	.060	1.52	.700	17.78	918	4085	7.0	177.80
	<b>27096A</b>	18	E2	Bulk	Bulk	—	—	.060	1.52	.700	17.78	972	4325	7.0	177.80
	<b>27097A</b>	19	E2	Bulk	Bulk	396.0	589.3	.060	1.52	.705	17.91	1026	4566	7.0	177.80
	<b>27098A</b>	20	E2	Bulk	Bulk	425.0	632.5	.060	1.52	.735	18.67	1080	4806	7.4	187.96
	<b>27099A</b>	21	E2	Bulk	Bulk	438.0	651.7	.060	1.52	.740	18.80	1134	5046	7.4	187.96
	<b>27100A</b>	22	E2	Bulk	Bulk	—	—	.060	1.52	.760	19.30	1188	5287	7.6	193.04
	<b>27101A</b>	23	E2	Bulk	Bulk	—	—	.060	1.52	.760	19.30	1242	5527	7.6	193.04
	<b>27102A</b>	24	E2	Bulk	Bulk	495.0	736.7	.060	1.52	.810	20.57	1296	5767	8.1	205.74
	<b>27103A</b>	25	E2	Bulk	Bulk	560.0	833.4	.060	1.52	.810	20.57	1350	6008	8.1	205.74
	<b>27104A</b>	26	E2	Bulk	Bulk	—	—	.060	1.52	.810	20.57	1404	6248	8.1	205.74
	<b>27105A</b>	27	E2	Bulk	Bulk	587.0	873.5	.080	2.03	.870	22.10	1458	6488	8.7	220.98
	<b>27106A</b>	28	E2	Bulk	Bulk	—	—	.080	2.03	.910	23.11	1512	6728	9.1	231.14
	<b>27107A</b>	29	E2	Bulk	Bulk	680.0	1012.0	.080	2.03	.910	23.11	1566	6969	9.1	231.14
	<b>27108A</b>	30	E2	Bulk	Bulk	639.0	950.8	.080	2.03	.902	22.91	1620	7209	9.0	228.60
	<b>27629A</b>	37	E2	Bulk	Bulk	768.0	1142.9	.080	2.03	.975	24.77	1998	8891	9.7	246.38
	<b>27912A</b>	50	E2	Bulk	Bulk	1080.0	1607.3	.080	2.03	1.138	28.91	2700	12015	11.3	287.02



**14 AWG Multi-conductor** Stranded (7x22) Bare Copper Conductors • Overall Beldfoil® Shield (100% Coverage) with Drain Wire

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532, ICEA S-95-658 ICEA S-61-402, ICEA T-29-520	<b>27081AS</b>	3	E2	Bulk	Bulk	80.0	119.1	.045	1.14	.340	8.64	99	440	3.4	86.36
	<b>27082AS</b>	4	E2	Bulk	Bulk	105.0	156.3	.045	1.14	.391	9.93	273	1214	3.9	99.06



E2 = Refer to Technical Information section for color code.

† Flat construction; overall shield not available.

†† Twisted Conductors.

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

**Conductor, Insulation and Jacket Options**

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil Shield

Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest®

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a 7 to an 8. For example: 27080A with TC-ER rating becomes 28080A.



# UL Control Cable

600V Type TC Cables

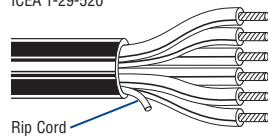
Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**12 AWG Multi-conductor** Stranded (7x20) Bare Copper Conductors

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF  
 FT4/IEEE 1202/383  
 ICEA S-73-532  
 ICEA S-95-658  
 ICEA S-61-402  
 ICEA T-29-520



27109A <sup>†</sup>	2	E2	1000 Bulk	304.8 Bulk	74.0 74.0	110.0 110.0	.045	1.14	.220 x .350	5.59 x 8.89	172	765	3.5	88.90
27641A <sup>††</sup>	2	E2	Bulk	Bulk	86.0	128.0	.045	1.14	.360	9.14	172	765	3.6	91.44
27110A	3	E2	1000 Bulk	304.8 Bulk	110.0 110.0	163.7 163.7	.045	1.14	.374	9.50	258	1148	3.7	93.98
27111A	4	E2	1000 Bulk	304.8 Bulk	134.0 134.0	199.0 199.0	.045	1.14	.410	10.41	344	1531	4.1	104.14
27112A	5	E2	Bulk	Bulk	165.0	245.6	.045	1.14	.450	11.43	430	1914	4.5	114.30
27113A	6	E2	Bulk	Bulk	197.0	293.2	.045	1.14	.480	12.19	516	2296	4.8	121.92
27114A	7	E2	Bulk	Bulk	216.0	321.5	.045	1.14	.480	12.19	602	2679	4.8	121.92
27115A	8	E2	Bulk	Bulk	263.0	391.4	.060	1.52	.560	14.22	688	3062	5.6	142.24
27116A	9	E2	Bulk	Bulk	297.0	442.0	.060	1.52	.600	15.24	774	3444	6.0	152.40
27117A	10	E2	Bulk	Bulk	324.0	482.2	.060	1.52	.660	16.76	860	3827	6.6	167.64
27118A	11	E2	Bulk	Bulk	—	—	.060	1.52	.670	17.02	946	4210	6.7	170.18
27119A	12	E2	Bulk	Bulk	378.0	562.5	.060	1.52	.670	17.02	1032	4592	6.7	170.18
27120A	13	E2	Bulk	Bulk	—	—	.060	1.52	.700	17.78	1118	4975	7.0	177.80
27121A	14	E2	Bulk	Bulk	—	—	.060	1.52	.700	17.78	1204	5358	7.0	177.80
27122A	15	E2	Bulk	Bulk	468.0	696.5	.060	1.52	.740	18.80	1290	5741	7.4	187.96
27123A	16	E2	Bulk	Bulk	490.0	729.2	.060	1.52	.750	19.05	1376	6123	7.5	190.50
27124A	17	E2	Bulk	Bulk	—	—	.060	1.52	.770	19.56	1462	6506	7.7	195.58
27125A	18	E2	Bulk	Bulk	—	—	.060	1.52	.770	19.56	1548	6889	7.7	195.58
27126A	19	E2	Bulk	Bulk	568.0	845.3	.060	1.52	.790	20.07	1634	7271	7.9	200.66
27127A	20	E2	Bulk	Bulk	640.0	952.4	.080	2.03	.870	22.10	1720	7654	8.7	220.98
27128A	21	E2	Bulk	Bulk	—	—	.080	2.03	.870	22.10	1806	8037	8.7	220.98
27129A	22	E2	Bulk	Bulk	—	—	.080	2.03	.890	22.61	1892	8419	8.9	226.06
27130A	23	E2	Bulk	Bulk	—	—	.080	2.03	.890	22.61	1978	8802	8.9	226.06
27131A	24	E2	Bulk	Bulk	—	—	.080	2.03	.940	23.88	2064	9185	9.4	238.76
27132A	25	E2	Bulk	Bulk	775.0	1153.4	.080	2.03	.960	24.38	2150	9568	9.6	243.84
27133A	26	E2	Bulk	Bulk	—	—	.080	2.03	.960	24.38	2236	9950	9.6	243.84
27134A	27	E2	Bulk	Bulk	828.0	1232.2	.080	2.03	.960	24.38	2322	10333	9.6	243.84
27135A	28	E2	Bulk	Bulk	—	—	.080	2.03	.990	25.15	2408	10716	9.9	251.46
27136A	29	E2	Bulk	Bulk	—	—	.080	2.03	.990	25.15	2494	11098	9.9	251.46
27137A	30	E2	Bulk	Bulk	910.0	1354.3	.080	2.03	1.020	25.91	2580	11481	10.2	259.08
27630A	37	E2	Bulk	Bulk	1100.0	1637.0	.080	2.03	1.090	27.69	3182	14160	10.9	276.86
27634A	50	E2	Bulk	Bulk	1450.0	2157.9	.080	2.03	1.300	33.02	4300	19135	13.0	330.20

E2 = Refer to Technical Information section for color code.

<sup>†</sup> Flat construction; overall shield not available.

<sup>††</sup> Twisted Conductors.

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil <sup>®</sup> Shield

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a 2 to an 8. For example: 27080A with TC-ER rating becomes 87080A.

**Conductor, Insulation and Jacket Options**

Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest <sup>®</sup>



For more information, contact Belden Technical Support: 1-800-BELDEN-1 • www.belden.com

# UL Control Cable

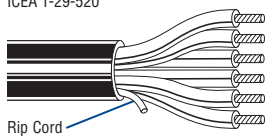
## 600V Type TC Cables

### Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

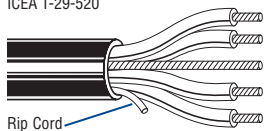
#### 10 AWG Multi-conductor Stranded (7x18) Bare Copper Conductors

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	27138A <sup>†</sup>	2	E2	Bulk	Bulk	83.0	123.5	.045	1.14	.260 x .420	6.60 x 10.67	296	1317	4.2	106.68
	27643A <sup>††</sup>	2	E2	Bulk	Bulk	131.0	195.0	.045	1.14	.420	10.67	296	1317	4.2	106.68
	27139A	3	E2	1000 Bulk	304.8 Bulk	164.0 164.0	244.0 244.0	.045	1.14	.450	11.43	444	1976	4.5	114.30
	27140A	4	E2	1000 Bulk	304.8 Bulk	216.0 216.0	321.0 321.0	.045	1.14	.490	12.45	592	2634	4.9	124.46
	27141A	5	E2	Bulk	Bulk	276.0	410.7	.060	1.52	.570	14.48	740	3293	5.7	144.78
	27142A	6	E2	Bulk	Bulk	329.0	489.6	.060	1.52	.620	15.75	888	3952	6.2	157.48
	27143A	7	E2	Bulk	Bulk	361.0	537.2	.060	1.52	.620	15.75	1036	4610	6.2	157.48
	27144A	8	E2	Bulk	Bulk	411.0	611.7	.060	1.52	.680	17.27	1184	5269	6.8	172.72
	27145A	9	E2	Bulk	Bulk	465.0	692.0	.060	1.52	.720	18.29	1332	5927	7.2	182.88
	27146A	10	E2	Bulk	Bulk	542.0	806.6	.060	1.52	.790	20.07	1480	6586	7.9	200.66
	27147A	11	E2	Bulk	Bulk	582.0	866.0	.060	1.52	.790	20.07	1628	7245	7.9	200.66
	27148A	12	E2	Bulk	Bulk	620.0	922.7	.080	2.03	.820	20.83	1776	7903	8.2	208.28



#### 8 AWG Multi-conductor Stranded (7x16) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire

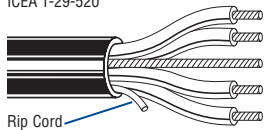
PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	27149A	2	**	Bulk	Bulk	220.0	327.4	.060	1.52	.560	14.22	384	1709	5.6	142.24
	27150A	3	**	1000 Bulk	304.8 Bulk	354.0 354.0	527.0 527.0	.060	1.52	.590	14.99	576	2563	5.9	149.86
	27151A	4	**	Bulk	Bulk	394.0	327.4	.060	1.52	.650	16.51	768	3418	6.5	165.10



\*\*ICEA Method 4 Color Code

#### 6 AWG Multi-conductor Stranded (7x14) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

PVC/Nylon Insulation and PVC Jacket Constructions (See chart below for other options)															
NEC: TC, NPLF FT4/IEEE 1202/383 ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	27152A	2	**	Bulk	Bulk	316.0	434.6	.060	1.52	.630	16.00	610	2715	6.3	160.02
	27153A	3	**	1000 Bulk	304.8 Bulk	477.0 477.0	710.0 710.0	.060	1.52	.670	17.02	915	4072	6.7	170.18
	27154A	4	**	Bulk	Bulk	519.0	759.0	.060	1.52	.730	18.54	1220	5429	7.3	185.42



\*\*ICEA Method 4 Color Code

E2 = Refer to Technical Information section for color code.

<sup>†</sup> Flat construction; overall shield not available.

<sup>††</sup> Twisted Conductors.

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

#### Conductor, Insulation and Jacket Options

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil <sup>®</sup> Shield

Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest <sup>®</sup>

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a Z to an 8. For example: 2Z080A with TC-ER rating becomes 28080A.



# UL Control Cable

## 600V Type TC Cables

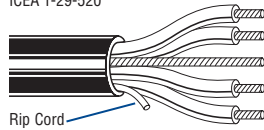
### Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part No.	No. of Cond.	Color Code	Standard Lengths		Weight		Jacket Thickness		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
				Ft.	m	Lbs./1000'	kg/km	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**4 AWG Multi-conductor** Stranded (7x12) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF FT4/IEEE 1202/383	<b>27155A</b>	2	**	Bulk	Bulk	455.0	677.1	.060	1.52	.770	19.56	970	4317	7.7	195.58
ICEA S-73-532	<b>27156A</b>	3	**	Bulk	Bulk	630.0	937.6	.080	2.03	.820	20.83	1455	6475	8.2	208.28
ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	<b>27157A</b>	4	**	Bulk	Bulk	850.0	1265.0	.080	2.03	.950	24.13	1940	8633	9.5	241.30

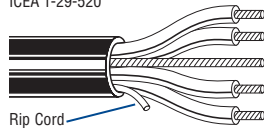


\*\*ICEA Method 4 Color Code

**2 AWG Multi-conductor** Stranded (7x10) Bare Copper Conductors • 6 AWG Bare Copper Ground Wire

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF FT4/IEEE 1202/383	<b>27158A</b>	2	**	Bulk	Bulk	716.0	1065.6	.080	2.03	.970	24.64	1544	6871	9.7	246.38
ICEA S-73-532	<b>27159A</b>	3	**	Bulk	Bulk	960.0	1428.7	.080	2.03	.990	25.15	2316	10306	9.9	251.46
ICEA S-95-658 ICEA S-61-402 ICEA T-29-520	<b>27160A</b>	4	**	Bulk	Bulk	1213.0	1805.2	.080	2.03	1.090	27.69	3088	13742	10.9	276.86

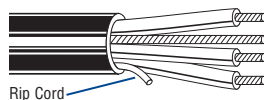


\*\*ICEA Method 4 Color Code

**1 AWG Multi-conductor** Stranded (19x14) Bare Copper Conductors • 6 AWG Bare Copper Ground Wire

**PVC/Nylon Insulation and PVC Jacket Constructions** (See chart below for other options)

NEC: TC, NPLF FT4/IEEE 1202/383	<b>27161A</b>	3	**	Bulk	Bulk	—	—	.080	2.03	1.120	28.45	2919	12990	11.2	284.48
ICEA S-73-532 ICEA S-95-658 ICEA S-61-402 ICEA T-29-520															



\*\*ICEA Method 4 Color Code

Bulk = 5000 ft. or 10,000 ft. put-up one piece, ±10%. Check length available for specific construction.

**Conductor, Insulation and Jacket Options**

To Specify:		
<b>12345</b>	<b>A</b>	<b>S</b>
Start with core Part No.	add Conductor, Insulation, Jacket type	add "S" for optional Beldfoil® Shield

Note: To specify TC-ER (Exposed Run) rated control cable, simply replace the second digit of the part number from a **Z** to an **8**. For example: 2**Z**080A with TC-ER rating becomes 2**8**080A.

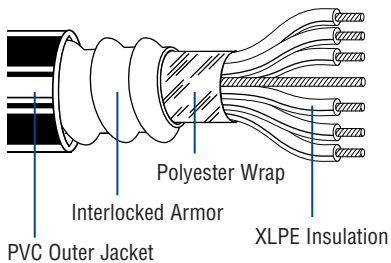
Bare	Tinned	Insulation/Jacket
<b>A</b>	<b>B</b>	PVC-Nylon/PVC
<b>C</b>	<b>D</b>	XLPE/PVC
<b>E</b>	<b>F</b>	FRPO/PVC
<b>G</b>	<b>H</b>	XLPE/TPE
<b>K</b>	<b>L</b>	TPE/TPE
<b>M</b>	<b>N</b>	PVC-Nylon/Oil Res II
<b>Q</b>	<b>R</b>	XLPE/CPE
<b>S</b>	<b>T</b>	XLPE/Haloarrest®



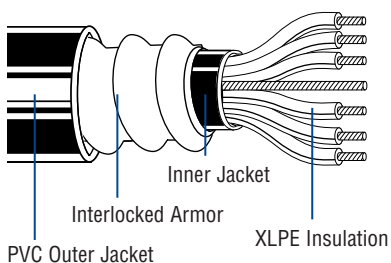
## UL Control Cable

### 600V Type MC Metal Clad and Teck-Style® Cables — Overview

#### Metal Clad



#### Teck-Style



#### Introduction

Belden® Metal Clad (MC) and Teck-Style cables are designed to meet demanding industrial needs by combining rugged durability and corrosion resistance with flexibility and easy handling.

MC and Teck-Style cables are available in a wide range of constructions to meet the needs of pulp and paper, chemical, petroleum and other demanding industrial and resource industry environments. They are ideal for use in wet or dry areas; ventilated, non-ventilated or ladder-type cable troughs; ventilated flexible cableways; and for direct burial. Custom cables are available to meet exacting requirements.

Belden Type MC Cable is marked sunlight-resistant for cable tray use in direct burial designations, and cable constructions are listed to NEC Type MC.

Teck-Style cables are price-competitive, high-performance, UL and CSA dual-rated cables with a flame-retardant XHHW insulated conductor and an inner PVC jacket for mechanical moisture and corrosion protection.

#### Construction

Class B stranded bare copper conductors, cross-linked polyethylene insulation, bare copper ground wire, standard aluminum or optional galvanized steel interlocking armor, PVC outer jacket.

- Thermoset insulation — XHHW-2 conductors
- NEC conductor temperature 90°C dry and 90°C wet

#### Voltage Rating

14 AWG — 2 AWG: 600 Volt

#### Application

Type MC Cable is a general-purpose cable used in the pulp and paper, mining, petroleum and chemical industries as well as in commercial buildings.

MC Cable may be used under the following conditions:

- Exposed or concealed wiring in dry or wet conditions
- In ventilated, non-ventilated or ladder-type cable trays in dry or wet conditions
- On walls or beams
- Directly buried
- Class I and II Div. 2 and Class III Div. 1 and 2 hazardous locations

#### Minimum Bending Radius

12 times the overall cable diameter

#### Pulling Tensions

The combined use of Kellems grips and pulling eyes is recommended.

#### Design Advantages

##### Insulation Properties

- High tensile strength
- Impact- and crush-resistant
- Heat-resistant
- Excellent elongation
- Moisture-resistant
- Good low temperature properties
- 90°C dry and 90°C wet

##### Electrical Properties

- High insulation resistance
- Low dielectric loss
- High dielectric strength

##### Other Features

- Corrosion-resistant
- Versatile and flexible
- Provides cost savings as conduit and ducts are not required

#### Specifications

- UL 44
- UL 1569
- UL 1685 (UL 1581) Vertical Tray Flame Test (70,000 BTU/hr)

#### Tech-Style CSA Specifications

- CSA C22.2 #131
- FT4 Flame Test
- HAZ LOC
- CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

# UL Control Cable

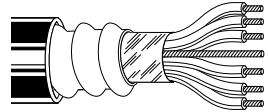
600V Type MC Metal Clad Cables

Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm

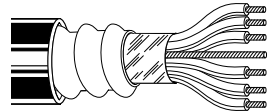
**14 AWG** Stranded (7x22) Bare Copper Conductors • 14 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

	27243	28243	2	.030	.76	.050	1.27	.48	12.19	.58	14.73	7.3	185.42
	27244	28244	3	.030	.76	.050	1.27	.50	12.70	.61	15.49	7.6	193.04
	27245	28245	4	.030	.76	.050	1.27	.54	13.72	.64	16.26	7.9	200.66
	27246	28246	5	.030	.76	.050	1.27	.57	14.48	.68	17.27	8.4	213.36
	27247	28247	6	.030	.76	.050	1.27	.62	15.75	.72	18.29	8.9	226.06
	27248	28248	7	.030	.76	.050	1.27	.62	15.75	.72	18.29	8.9	226.06
	27269	28269	8	.030	.76	.050	1.27	.69	17.53	.80	20.32	9.4	238.76
	27535	28535	9	.030	.76	.050	1.27	.70	17.78	.80	20.32	10.0	254.00
	27249	28249	10	.030	.76	.050	1.27	.75	19.05	.85	21.59	10.5	266.70
	27250	28250	12	.030	.76	.050	1.27	.77	19.56	.87	22.10	10.8	274.32
	27251	28251	15	.030	.76	.050	1.27	.87	22.10	.98	24.89	11.6	294.64
	27969	28969	19	.030	.76	.050	1.27	1.00	25.40	1.11	28.19	12.1	307.34
	27252	28252	20	.030	.76	.050	1.27	1.03	26.16	1.14	28.96	13.3	337.82
	27270	28270	25	.030	.76	.050	1.27	1.10	27.94	1.21	30.73	14.4	365.76
	27253	28253	30	.030	.76	.050	1.27	1.18	29.97	1.29	32.77	15.1	383.54
	27292	28292	37	.030	.76	.050	1.27	1.14	28.96	1.24	31.50	16.1	408.94
27433	28433	40	.030	.76	.050	1.27	1.28	32.51	1.40	35.56	16.7	424.18	
27434	28434	50	.030	.76	.050	1.27	1.40	35.56	1.52	38.61	18.4	467.36	

**12 AWG** Stranded (7x20) Bare Copper Conductors • 12 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

	27254	28254	2	.030	.76	.050	1.27	.52	13.21	.62	15.75	7.8	198.12
	27255	28255	3	.030	.76	.050	1.27	.54	13.72	.64	16.26	8.0	203.20
	27256	28256	4	.030	.76	.050	1.27	.58	14.73	.68	17.22	8.5	215.90
	27271	28271	5	.030	.76	.050	1.27	.62	15.75	.72	18.29	9.1	231.14
	27272	28272	6	.030	.76	.050	1.27	.67	17.02	.77	19.56	9.6	243.84
	27273	28273	7	.030	.76	.050	1.27	.67	17.02	.77	19.56	9.6	243.84
	27274	28274	8	.030	.76	.050	1.27	.77	19.56	.88	22.35	10.2	259.08
	27538	28538	9	.030	.76	.050	1.27	.76	19.30	.86	21.84	10.8	274.32
	27275	28275	10	.030	.76	.050	1.27	.80	20.32	.91	23.11	11.5	292.10
	27276	28276	12	.030	.76	.050	1.27	.84	21.34	.94	23.88	11.7	297.18
	27277	28277	15	.030	.76	.050	1.27	.94	23.88	1.05	26.67	13.4	340.36
	27539	28539	19	.030	.76	.055	1.40	1.05	26.67	1.16	29.46	14.0	355.60
	27278	28278	20	.030	.76	.055	1.40	1.16	29.46	1.27	32.26	14.6	370.84
	27279	28279	25	.030	.76	.055	1.40	1.26	32.00	1.37	34.80	15.8	401.32
	27280	28280	30	.030	.76	.055	1.40	1.29	32.77	1.40	35.56	16.8	426.72
	27540	28540	37	.030	.76	.055	1.40	1.44	36.58	1.55	39.37	17.8	452.12
27432	28432	40	.030	.76	.055	1.40	1.50	38.10	1.63	41.40	18.4	467.36	

Color Code: Use ICEA Table E2 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.

## UL Control Cable

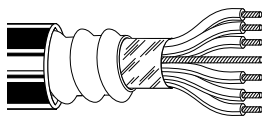
600V Type MC Metal Clad Cables

Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm

**10 AWG** Stranded (7x18) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

	NEC: MC	27257	28257	2	.030	.76	.050	1.27	.56	14.22	.67	17.02	8.4	213.36
		27258	28258	3	.030	.76	.050	1.27	.58	14.73	.69	17.53	8.6	218.44
		27259	28259	4	.030	.76	.050	1.27	.62	15.75	.74	18.80	9.2	233.68
		27281	28281	5	.030	.76	.050	1.27	.68	17.27	.79	20.07	12.8	325.12
		27282	28282	6	.030	.76	.050	1.27	.74	18.80	.84	21.34	10.4	264.16
		27283	28283	7	.030	.76	.050	1.27	.74	18.80	.84	21.34	10.4	264.16
		27284	28284	8	.030	.76	.050	1.27	.81	20.57	.92	23.37	11.2	284.48
		27541	28541	9	.030	.76	.050	1.27	.87	22.10	.98	24.89	11.8	299.72
		27285	28285	10	.030	.76	.050	1.27	.89	22.61	1.03	26.16	13.3	337.82
		27286	28286	12	.030	.76	.050	1.27	1.01	25.65	1.12	28.45	13.7	347.98
		27287	28287	15	.030	.76	.050	1.27	1.09	27.69	1.22	30.99	14.8	375.92
		27288	28288	20	.030	.76	.055	1.40	1.22	30.99	1.35	34.29	16.2	411.48
		27289	28289	25	.030	.76	.055	1.40	1.32	33.53	1.47	37.34	17.8	452.12
		27290	28290	30	.030	.76	.055	1.40	1.42	36.07	1.55	39.37	18.6	472.44

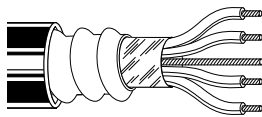
**8 AWG** Stranded (7x16) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

	NEC: MC	27291	28291	2	.045	1.14	.050	1.27	.70	17.78	.81	20.57	9.8	248.92
		27260	28260	3	.045	1.14	.050	1.27	.72	18.29	.82	20.83	10.2	259.08
		27261	28261	4	.045	1.14	.050	1.27	.78	19.81	.88	22.35	10.9	276.86

**6 AWG** Stranded (7x14) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

	NEC: MC	27293	28293	2	.045	1.14	.050	1.27	.76	19.30	.87	22.10	10.7	271.78
		27262	28262	3	.045	1.14	.050	1.27	.80	20.32	.90	22.86	11.2	284.48
		27263	28263	4	.045	1.14	.050	1.27	.87	22.10	.97	24.64	12.1	307.34

Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.  
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.

# UL Control Cable

600V Type MC Metal Clad Cables

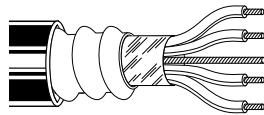
Industrial Grade Sunlight- and Oil-Resistant Jackets

Description	Part Number		No. of Cond.	Insulation Thickness		Outer Jacket Thickness		Armor OD		Nominal OD		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Inch	mm

**4 AWG** Stranded (7x12) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

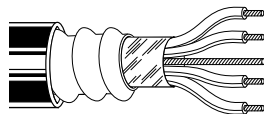
NEC: MC	27264	28264	3	.045	1.14	.050	1.27	.90	22.86	1.00	25.40	13.1	332.74
	27265	28265	4	.045	1.14	.050	1.27	1.97	50.04	1.08	27.43	14.2	360.68



**2 AWG** Stranded (7x10) Bare Copper Conductors • 6 AWG Bare Copper Ground Wire

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

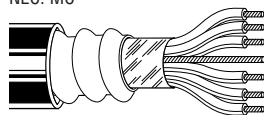
NEC: MC	27267	28267	3	.045	1.14	.050	1.27	1.02	25.91	1.13	28.70	14.7	373.38
	27268	28268	4	.045	1.14	.050	1.27	1.11	28.19	1.22	30.99	16.0	406.40



**Composite 14 AWG (7x22) and 12 AWG (7x20) Stranded Bare Copper Conductors • 12 AWG Bare Copper Ground Wire**

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

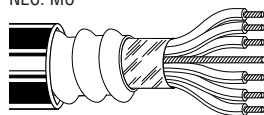
NEC: MC	27428	28428	3c/14	.030	.76	.050	1.27	.70	17.78	.81	20.57	9.7	246.38
			3c/12	.030	.76								



**Composite 14 AWG (7x22) and 10 AWG (7x18) Stranded Bare Copper Conductors • 10 AWG Bare Copper Ground Wire**

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

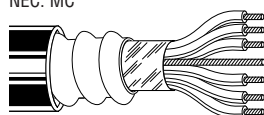
NEC: MC	27429	28429	3c/14	.030	.76	.050	1.27	.74	18.80	.85	21.59	10.2	259.08
			3c/10	.030	.76								



**Composite 14 AWG (7x22) and 8 AWG (7x16) Stranded Bare Copper Conductors • 10 AWG Bare Copper Ground Wire**

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

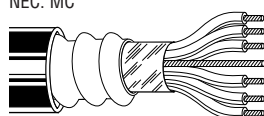
NEC: MC	27430	28430	3c/14	.030	.76	.050	1.27	.83	21.08	.94	23.88	11.2	284.48
			3c/8	.045	1.14								



**Composite 14 AWG (7x22) and 6 AWG (7x14) Stranded Bare Copper Conductors • 8 AWG Bare Copper Ground Wire**

**Aluminum or Steel Interlocked Armor • Cross-linked Polyethylene Insulation • PVC Jacket**

NEC: MC	27431	28431	3c/14	.030	.76	.050	1.27	.89	22.61	1.01	25.65	12.0	304.80
			3c/6	.045	1.14								



Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.  
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.

# UL Control Cable

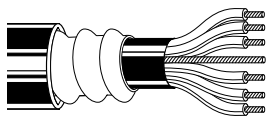
600V Teck-Style® Cables

Dual-Rated Type MC/Teck 90

Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

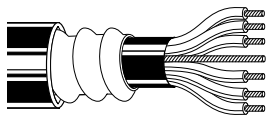
**14 AWG** Stranded (7x22) Bare Copper Conductors • 14 AWG Bare Copper Ground Wire

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27840</b>	<b>28840</b>	2	.030	.76	.37	9.40	.56	14.22	.67	17.02	66	294	8.0	203
	<b>27841</b>	<b>28841</b>	3	.030	.76	.39	9.91	.58	14.73	.69	17.53	98	436	8.3	211
	<b>27842</b>	<b>28842</b>	4	.030	.76	.43	10.92	.62	15.75	.73	18.54	131	583	8.7	221
	<b>27843</b>	<b>28843</b>	5	.030	.76	.47	11.94	.66	16.76	.77	19.56	164	730	9.2	234
	<b>27844</b>	<b>28844</b>	6	.030	.76	.51	12.95	.70	17.78	.81	20.57	191	850	9.7	246
	<b>27845</b>	<b>28845</b>	7	.030	.76	.51	12.95	.70	17.78	.81	20.57	225	1001	9.7	246
	<b>27846</b>	<b>28846</b>	8	.030	.76	.58	14.73	.77	19.56	.88	22.35	260	1157	10.5	267
	<b>27847</b>	<b>28847</b>	10	.030	.76	.67	17.02	.93	23.62	1.04	26.42	321	1428	12.5	318
	<b>27848</b>	<b>28848</b>	12	.030	.76	.69	17.53	.95	24.13	1.06	26.92	388	1726	10.9	277
	<b>27849</b>	<b>28849</b>	15	.030	.76	.77	19.56	1.03	26.16	1.14	28.96	481	2140	13.7	348
	<b>27850</b>	<b>28850</b>	20	.030	.76	.86	21.84	1.12	28.45	1.23	31.24	649	2887	15.3	389
	<b>27851</b>	<b>28851</b>	25	.030	.76	.92	23.37	1.18	29.97	1.30	33.02	810	3603	16.3	414
	<b>27852</b>	<b>28852</b>	30	.030	.76	.98	24.89	1.24	31.50	1.36	34.54	975	4337	17.0	432
CSA C22.2 #131 FT4 Flame Test, HAZ LOC CSA C22.2 #0.3 Clause 4.31 Low Acid Gas	<b>27885</b>	<b>28885</b>	40	.030	.76	1.09	27.69	1.35	34.29	1.47	37.34	1301	5787	18.5	470
	<b>27886</b>	<b>28886</b>	50	.030	.76	1.19	30.23	1.45	36.83	1.57	39.88	1630	7251	19.8	503

**12 AWG** Stranded (7x20) Bare Copper Conductors • 12 AWG Bare Copper Ground Wire

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27853</b>	<b>28853</b>	2	.030	.76	.41	10.41	.60	15.24	.71	18.03	104	463	8.5	216
	<b>27854</b>	<b>28854</b>	3	.030	.76	.43	10.92	.62	15.75	.73	18.54	156	694	8.8	224
	<b>27855</b>	<b>28855</b>	4	.030	.76	.47	11.94	.66	16.76	.77	19.56	207	921	9.2	234
	<b>27856</b>	<b>28856</b>	5	.030	.76	.52	13.21	.71	18.03	.82	20.83	260	1157	9.8	249
	<b>27857</b>	<b>28857</b>	6	.030	.76	.59	14.99	.78	19.81	.89	22.61	310	1379	10.7	272
	<b>27858</b>	<b>28858</b>	7	.030	.76	.59	14.99	.78	19.81	.89	22.61	361	1606	10.7	272
	<b>27859</b>	<b>28859</b>	8	.030	.76	.64	16.26	.83	21.08	.94	23.88	415	1846	11.3	287
	<b>27860</b>	<b>28860</b>	10	.030	.76	.75	19.05	1.01	25.65	1.12	28.45	520	2313	13.4	340
	<b>27861</b>	<b>28861</b>	12	.030	.76	.77	19.56	1.03	26.16	1.14	28.96	619	2753	13.7	348
	<b>27862</b>	<b>28862</b>	15	.030	.76	.87	22.10	1.13	28.70	1.25	31.75	718	3194	15.0	381
	<b>27863</b>	<b>28863</b>	20	.030	.76	.96	24.38	1.22	30.99	1.33	33.78	1040	4626	15.9	404
	<b>27864</b>	<b>28864</b>	25	.030	.76	1.04	26.42	1.30	33.02	1.42	36.07	1301	5787	17.0	432
CSA C22.2 #131 FT4 Flame Test, HAZ LOC CSA C22.2 #0.3 Clause 4.31 Low Acid Gas	<b>27865</b>	<b>28865</b>	30	.030	.76	1.15	29.21	1.41	35.81	1.53	38.86	1560	6939	18.3	465
	<b>27887</b>	<b>28887</b>	40	.030	.76	1.20	30.48	1.54	39.12	1.67	42.42	2020	8985	20.0	508

Color Code: Use ICEA Table E2 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.

# UL Control Cable

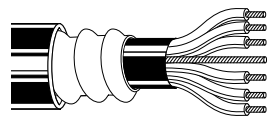
## 600V Teck-Style® Cables

### Dual-Rated Type MC/Teck 90

Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**10 AWG** Stranded (7x18) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire

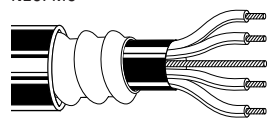
**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

	NEC: MC	<b>27866</b>	<b>28866</b>	2	.030	.76	.46	11.68	.65	16.51	.74	18.80	166	738	9.1	231
		<b>27867</b>	<b>28867</b>	3	.030	.76	.48	12.19	.67	17.02	.77	19.56	249	1108	9.4	239
		<b>27868</b>	<b>28868</b>	4	.030	.76	.56	14.22	.75	19.05	.84	21.34	330	1468	10.3	262
		<b>27869</b>	<b>28869</b>	5	.030	.76	.67	17.02	.86	21.84	.96	24.38	415	1846	11.6	295
		<b>27870</b>	<b>28870</b>	6	.030	.76	.67	17.02	.86	21.84	.96	24.38	491	2184	11.6	295
		<b>27877</b>	<b>28877</b>	7	.030	.76	.70	17.78	.90	22.86	1.00	25.40	560	2491	12.1	307
		<b>27878</b>	<b>28878</b>	8	.030	.76	.75	19.05	.95	24.13	1.05	26.67	640	2847	12.7	323
		<b>27879</b>	<b>28879</b>	10	.030	.76	.78	19.81	1.04	26.42	1.15	29.21	801	3563	13.8	351
		<b>27880</b>	<b>28880</b>	12	.030	.76	.89	22.61	1.15	29.21	1.26	32.00	960	4270	15.1	384
		<b>27881</b>	<b>28881</b>	15	.030	.76	.93	23.62	1.19	30.23	1.30	33.02	1195	5316	15.6	396
		<b>27882</b>	<b>28882</b>	20	.030	.76	1.06	26.92	1.32	33.53	1.44	36.58	1600	7117	17.3	439
		<b>27883</b>	<b>28883</b>	25	.030	.76	1.12	28.45	1.44	36.58	1.58	40.13	1990	8852	19.0	483
		<b>27884</b>	<b>28884</b>	30	.030	.76	1.28	32.51	1.54	39.12	1.67	42.42	2355	10476	20.0	508

CSA C22.2 #131  
FT4 Flame Test, HAZ LOC  
CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**8 AWG** Stranded (7x16) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire

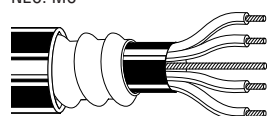
**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

	NEC: MC	<b>27871</b>	<b>28871</b>	2	.045	1.14	.59	14.99	.78	19.81	.89	22.61	264	1174	10.7	272
		<b>27872</b>	<b>28872</b>	3	.045	1.14	.62	15.75	.81	20.57	.91	23.11	396	1762	10.9	277
		<b>27873</b>	<b>28873</b>	4	.045	1.14	.68	17.27	.94	23.88	1.05	26.67	528	2349	12.6	320

CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**6 AWG** Stranded (7x14) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

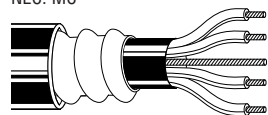
**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

	NEC: MC	<b>27874</b>	<b>28874</b>	2	.060	1.52	.71	18.03	.97	24.64	1.08	27.43	420	1868	13.0	330
		<b>27875</b>	<b>28875</b>	3	.060	1.52	.76	19.30	1.02	25.91	1.13	28.70	630	2802	13.5	343
		<b>27876</b>	<b>28876</b>	4	.060	1.52	.88	22.35	1.14	28.96	1.25	31.75	840	3737	15.0	381

CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**4 AWG** Stranded (7x12) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

	NEC: MC	<b>27894</b>	<b>28894</b>	3	.060	1.52	.91	23.11	1.17	29.72	1.29	32.77	1002	4457	15.5	394
		<b>27895</b>	<b>28895</b>	4	.060	1.52	.99	25.15	1.25	31.75	1.37	34.80	1335	5938	16.4	417

CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**3 AWG** Stranded (7x11) Bare Copper Conductors • 6 AWG Bare Copper Ground Wire

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

	NEC: MC	<b>27896</b>	<b>28896</b>	3	.060	1.52	.96	24.38	1.22	30.99	1.33	33.78	1263	5618	16.0	406
---	---------	--------------	--------------	---	------	------	-----	-------	------	-------	------	-------	------	------	------	-----

CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.  
For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.

# UL Control Cable

600V Teck-Style® Cables

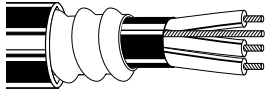
Dual-Rated Type MC/Teck 90

Description	Part Number		No. of Cond.	Insulation Thickness		Inner Jacket OD		Armor OD		Nominal OD		Maximum Pull Tension		Minimum Bend Radius	
	Aluminum Armor	Steel Armor		Inch	mm	Inch	mm	Inch	mm	Inch	mm	Lbs.	N	Inch	mm

**2 AWG** Stranded (7x10) Bare Copper Conductors • 6 AWG Bare Copper Ground Wire

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27888</b>	<b>28888</b>	3	.060	1.52	1.08	27.43	1.28	32.51	1.40	35.56	1593	7086	16.8	427
	<b>27889</b>	<b>28889</b>	4	.060	1.52	1.12	28.45	1.38	35.05	1.50	38.10	2124	9448	18.0	457

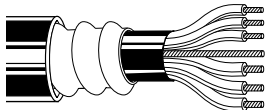


CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**Composite 14 AWG (7x22) and 12 AWG (7x20) Bare Copper Conductors • 12 AWG Bare Copper Ground Wire**

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27890</b>	<b>28890</b>	3c/14	.030	.76	.56	14.22	.75	19.05	.86	21.84	202	899	10.3	262
			3c/12	.030	.76										

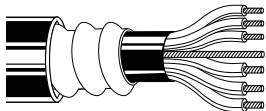


CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**Composite 14 AWG (7x22) and 10 AWG (7x18) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire**

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27891</b>	<b>28891</b>	3c/14	.030	.76	.61	15.49	.80	20.32	.91	23.11	305	1357	10.9	277
			3c/10	.030	.76										

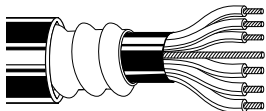


CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**Composite 14 AWG (7x22) and 8 AWG (7x16) Bare Copper Conductors • 10 AWG Bare Copper Ground Wire**

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27892</b>	<b>28892</b>	3c/14	.045	1.14	.70	17.78	.96	24.38	1.07	27.18	435	1935	12.8	325
			3c/8	.030	.76										

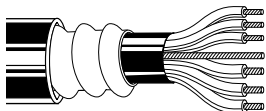


CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

**Composite 14 AWG (7x22) and 6 AWG (7x14) Bare Copper Conductors • 8 AWG Bare Copper Ground Wire**

**Aluminum or Steel Armor • Cross-linked Polyethylene Insulation • PVC Inner Jacket • PVC Outer Jacket**

NEC: MC	<b>27893</b>	<b>28893</b>	3c/14	.060	1.52	.90	22.86	1.15	29.21	1.26	32.00	655	2914	15.1	384
			3c/6	.030	.76										



CSA C22.2 #131, FT4 Flame Test, HAZ LOC, CSA C22.2 #0.3 Clause 4.31 Low Acid Gas

Color Code: For sizes 14, 12, 10, use ICEA Table E2 with printed numbers.

For sizes 8 and larger, use ICEA Method 4 with printed numbers.

Non-stocked items. Check length available for specific construction. Minimum order may apply.