



## 3/C CSA TECK 90 1000V ALUMINUM POWER CABLE

Three Conductor 1000V Multi Conductor, FT4 - Flame Retardancy Rating, Direct Burial, XLPE Insulation, Aluminum Interlocked Armour, Sunlight Resistant, -40°C Min, 90°C Max, Rated HL (Hazardous Locations)

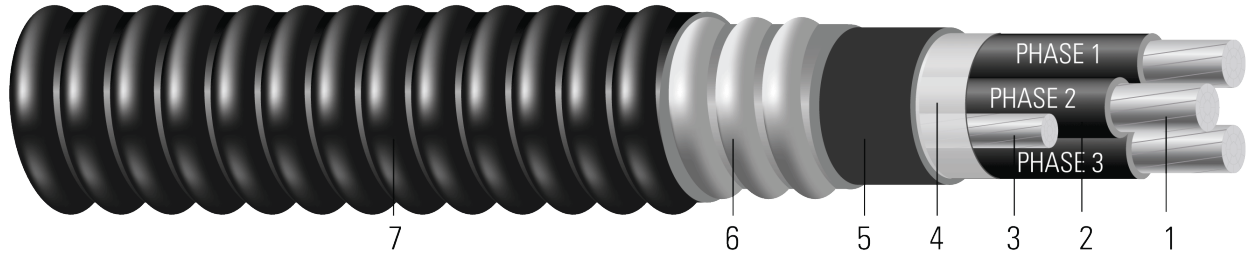


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series Aluminum.
2. **Insulation:** Cross-Linked Polyethylene (XLPE), Color Code: Black and numbered
3. **Grounding Conductors:** Uninsulated Aluminum Class B stranded grounding conductor
4. **Assembly:** Polypropylene tape
5. **Inner Jacket:** Black Polyvinyl Chloride (PVC)
6. **Armor:** Aluminum Interlocked Armour (AIA)
7. **Overall Jacket:** Black PVC (optional colours available)

### APPLICATIONS AND FEATURES:

For exposed or concealed wiring in wet or dry locations. For use in ventilated, non-ventilated and ladder type cable troughs and ventilated flexible cableway in wet, dry, hazardous locations or direct buried. Sunlight Resistant. Typical applications are for control, lighting and power circuits in: pulp and paper mills, steel mills, food processing plants, commercial centers, mines, generating stations, refineries, industrial plants and chemical plants. Voltage 1000V CSA / 600V UL.

### SPECIFICATIONS:

- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 1569 Metal-Clad Cables
- CSA C22.2 No. 174 Cables in Hazardous Locations
- CSA C22.2 No. 131 Type TECK 90 Cable
- CSA C22.2 No. 2556 & No. 0.3 Wire and Cable Test Methods
- CSA HL - for Hazardous Locations rating
- CSA SUN RES - for Sunlight Resistant rating
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test

### SAMPLE PRINT LEGEND:

{SQMTR\_DUAL} SOUTHWIRE® {CSA} LL90458 X/C XX AWG 8000 TECK 90 XLPE -40°C FT4 SUN RES 90°C 1000V HL USA  
{UL} E96627 TYPE MC XLPE 600V SUN. RES. DIRECT BURIAL 90°C





**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Strand	Insul. Thickness	Ground	Inner Jacket Thickness	Dia. Over Armour	Overall Jacket Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/ Kcmil	No.	mil	No. x AWG	mil	inch	mil	inch	lb/ 1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
584846 <sup>^</sup>	6	7	60	1x6	65	1.089	55	1.199	536	8.3	472	0.674	0.812	0.051	55
674938 <sup>^</sup>	4	7	60	1x6	85	1.226	55	1.336	684	9.3	751	0.424	0.510	0.048	75
584848 <sup>^</sup>	2	6	60	1x6	85	1.345	55	1.455	818	10.1	1194	0.267	0.321	0.045	100
584852	1	8	80	1x4	85	1.503	65	1.635	1031	11.4	1506	0.211	0.254	0.046	115
584873	1/0	18	80	1x4	85	1.583	65	1.715	1144	12.0	1900	0.168	0.201	0.044	135
584876	2/0	12	80	1x4	85	1.669	65	1.801	1294	12.6	2395	0.133	0.160	0.043	150
584883	3/0	16	80	1x4	85	1.771	65	1.903	1459	13.3	3020	0.105	0.126	0.042	175
584891	4/0	18	80	1x4	85	1.893	65	2.025	1716	14.1	3808	0.084	0.100	0.041	205
583957	250	35	90	1x2	115	2.099	65	2.231	2104	15.6	4500	0.071	0.086	0.041	230
615167	350	35	90	1x2	50	2.306	75	2.456	2592	17.1	6300	0.050	0.062	0.029	280
583961	500	35	90	1x1	115	2.565	80	2.731	3284	19.1	9000	0.035	0.044	0.039	350
668789	750	53	90	1x1/0	115	2.937	80	3.103	4318	21.7	13500	0.024	0.031	0.038	435

All dimensions are nominal and subject to normal manufacturing tolerances  
 ◊ Cable marked with this symbol is a standard stock item  
 \* Strand count meets minimum number per ASTM

**Table 2 – Weights and Measurements (Metric)**

Stock Number	Cond. Size	Strand	Insul. Thickness	Ground	Inner Jacket Thickness	Dia. Over Armour	Jacket Thickness <sup>1</sup>	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/ Kcmil	No.	mm	No. x AWG	mm	mm	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
584846	6	7	1.52	1x6	1.65	27.66	1.40	30.45	798	210.82	2100	2.21	2.66	0.1673	55
674938	4	7	1.52	1x6	2.16	31.14	1.40	33.93	1018	236.22	3342	1.39	1.67	0.1575	75
584848	2	6	1.52	1x6	2.16	34.16	1.40	36.96	1217	256.54	5313	0.88	1.05	0.1476	100
584852	1	8	2.03	1x4	2.16	38.18	1.65	41.53	1534	289.56	6702	0.69	0.83	0.1509	115
584873	1/0	18	2.03	1x4	2.16	40.21	1.65	43.56	1702	304.80	8455	0.55	0.66	0.1444	135
584876	2/0	12	2.03	1x4	2.16	42.39	1.65	45.75	1926	320.04	10658	0.44	0.52	0.1411	150
584883	3/0	16	2.03	1x4	2.16	44.98	1.65	48.34	2171	337.82	13439	0.34	0.41	0.1378	175
584891	4/0	18	2.03	1x4	2.16	48.08	1.65	51.43	2554	358.14	16946	0.28	0.33	0.1345	205
583957	250	35	2.29	1x2	2.92	53.31	1.65	56.67	3131	396.24	20025	0.23	0.28	0.1345	230
615167	350	35	2.29	1x2	1.27	58.57	1.91	62.38	3857	434.34	28035	0.16	0.20	0.0951	280
583961	500	35	2.29	1x1	2.92	65.15	2.03	69.37	4887	485.14	40050	0.11	0.14	0.1280	350
668789	750	53	2.29	1x1/0	2.92	74.60	2.03	78.82	6426	551.18	60075	0.08	0.10	0.1247	435

All dimensions are nominal and subject to normal manufacturing tolerances  
 ◊ Cable marked with this symbol is a standard stock item  
 \* Strand count meets minimum number per ASTM





**Phase Colors**

^ Phase Colors: Black, Red, Blue

