CSA TECK 90 CU 1000V NON-SHIELDED XLPE POWER CABLE

1000V, Non-Shielded, XLPE Insulation, FT4, -40°C, HL (Hazardous Locations), 90°C

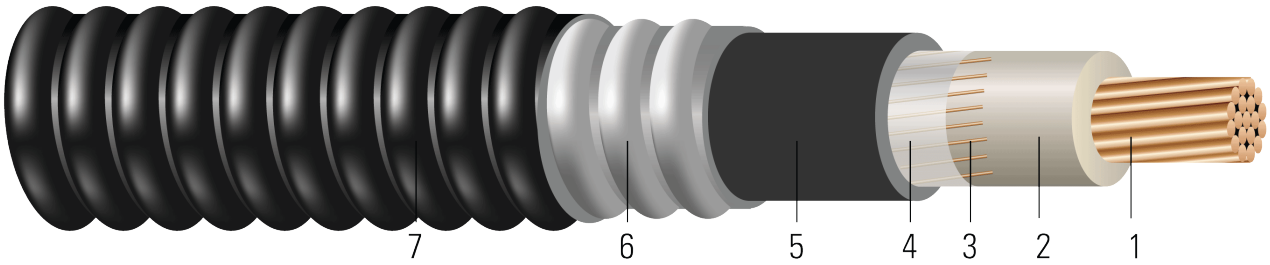


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B stranded compressed copper in accordance with ASTM B3 and ASTM B8
2. **Insulation:** XLPE (Cross Linked Polyethylene), Minimum Average Thickness: 4/0 = 0.08 inches (2.03 mm), 250 kcmil to 1000 kcmil = 0.090 inches (2.3 mm), 90°C
3. **Concentric Bonding Conductors:** Class B, concentric bare copper wire serve
4. **Binder:** Polypropylene Separator
5. **Inner Jacket:** Black PVC, Minumum average thickness - 4/0 = 0.050" (1.27mm), 250 kcmil to 1000 kcmil = 0.060" (1.5 mm)
6. **Armor:** Aluminum Interlocked Armour (AIA)
7. **Overall Jacket:** Black PVC (optional colours available), Minimum Thickness: 4/0 to 400 kcmil = 0.050 inches (1.3 mm), 500 kcmil to 1000 kcmil = 0.060 inches (1.5 mm)

APPLICATIONS AND FEATURES:

Southwire's Single Conductor 1kV Teck 90 is a CSA approved armoured cable for Industrial and Commercial applications. FT4, -40C, HL, AG14 and 90°C rated for use in harsh Canadian environments. Rated for installation in cable trays, duct banks, direct burial, troughs, hazardous locations, continuous rigid cable supports, and concrete encaseable. CSA AG14 Acid Gas compliance.

- -40°C - CSA Cold Bend and Impact Temperature
- -25°C - Min. Installation Temperature
- 90°C - Max. Continuous Operating Temperature
- 140°C for Emergency Overload Temperature

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- 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 LTGG [-40°C] - as per C68.10 - for Cold Bend and Impact rating
- CSA HL - for Hazardous Locations rating
- CSA SUN RES - for Sunlight Resistant rating
- CSA AG14 - Acid Gas Compliance
- ICEA S-96-659 (NEMA WC 71) 2001-5000 V Nonshielded Cables

Copyright © 2024 Southwire Company, LLC. All Rights Reserved

- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- FT1 Flame Test (1,706 BTU/Hr nominal - Vertical Wire Flame Test)

SAMPLE PRINT LEGEND:

{SQMTR} SOUTHWIRE {CSA} LL90458 1/C XX KCMIL CU TECK 90 XLPE -40°C FT4 AG14 SUN RES 90°C 1000V HL USA

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand	Insul. Thickness	Inner Jacket Thickness	Concentric Bond	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	mil	No. x AWG	inch	mil	inch	lb/ 1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
597824	4/0	19	80	55	13x14	1.221	45	1.311	1271	9.1	1692	0.051	0.062	0.041	260
606912	250	37	90	60	17x14	1.308	45	1.398	1507	9.7	2000	0.043	0.053	0.041	290
586405	350	37	90	60	13x12	1.449	45	1.539	1935	10.7	2800	0.031	0.039	0.040	350
581915	500	37	90	60	17x12	1.574	55	1.684	2579	11.7	4000	0.022	0.029	0.039	430
576233	750	61	90	60	21x12	1.771	55	1.881	3572	13.1	6000	0.014	0.022	0.038	535
584258	1000	61	90	60	21x12	1.935	55	2.045	4480	14.3	8000	0.011	0.018	0.037	615

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Other conductor sizes and outer jacket colours are available upon request. (#s in brackets represent # of strands / conductor. Number of strands may vary as per CSA standard.)
** Non-Standard sizes are available upon request. Reel sizes are not guaranteed. The factory reserves the right to make changes as necessary to optimize manufacturing requirements.

Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Strand	Insul. Thickness	Inner Jacket Thickness	Concentric Neutral	Dia. Over Armour	Jacket Thickness[1]	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	mm	No. x AWG	mm	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
597824	4/0	19	2.03	1.40	13x14	31.01	1.14	33.30	1891	231.14	7529	0.17	0.20	0.1345	260
606912	250	37	2.29	1.52	17x14	33.22	1.14	35.51	2243	246.38	8900	0.14	0.17	0.1345	290
586405	350	37	2.29	1.52	13x12	36.80	1.14	39.09	2880	271.78	12460	0.10	0.13	0.1312	350
581915	500	37	2.29	1.52	17x12	39.98	1.40	42.77	3838	297.18	17800	0.07	0.10	0.1280	430
576233	750	61	2.29	1.52	21x12	44.98	1.40	47.78	5316	332.74	26700	0.05	0.07	0.1247	535
584258	1000	61	2.29	1.52	21x12	49.15	1.40	51.94	6667	363.22	35600	0.04	0.06	0.1214	615

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Other conductor sizes and outer jacket colours are available upon request. (#s in brackets represent # of strands / conductor. Number of strands may vary as per CSA standard.)
** Non-Standard sizes are available upon request. Reel sizes are not guaranteed. The factory reserves the right to make changes as necessary to optimize manufacturing requirements.