

CSA TECK 90 600V LSZH CONTROL CABLE

600V Multi Conductor, 14-10 AWG Copper, FT4 - Flame Retardancy Rating, XLPE Insulation, Aluminum Interlocked Armour, Sunlight Resistant, -40°C - 90°C, Rated HL, AG14

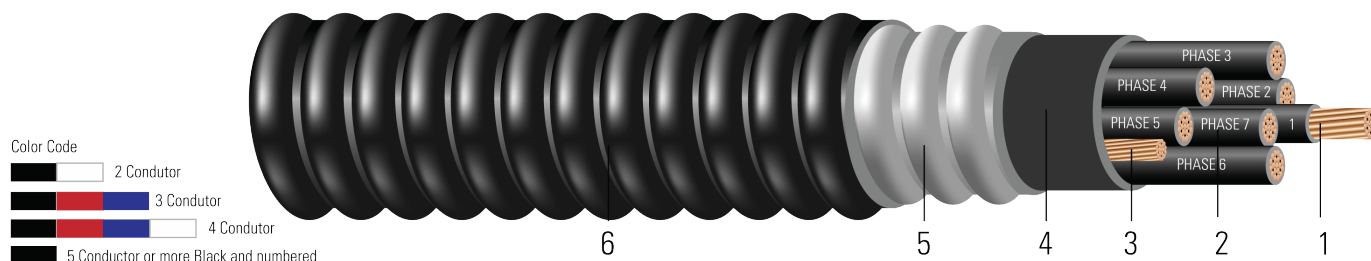


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B stranded copper, compressed or compact, in accordance with ASTM B3 and B8.
- Insulation:** Cross-Linked Polyethylene (XLPE), Colour Code: 2/C black, white; 3/C red, black, blue; 4/C red, black, blue, white; For 5/C cables or more, the insulation is black and numbered
- Grounding Conductors:** Uninsulated Class B stranded grounding conductor
- Inner Jacket:** Black Polyvinyl Chloride (PVC)
- Aarmor:** Aluminum Interlocked Armour (AIA)
- Overall Jacket:** Black Low Smoke Zero Halogen (LSZH)

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, or hazardous locations. 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. Meets flame spread and smoke release requirements of NFPA 130. Rated for 1000 lbs./FT maximum sidewall pressure.

- -40°C - CSA Cold Bend and Impact Temperature
- -40°C - Min. Installation Temperature
- 90°C - Max. Continuous Operating 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 SUN RES - for Sunlight Resistant rating
- CSA AG14 - Acid Gas Compliance
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems



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SAMPLE PRINT LEGEND:

{SQMTR} SOUTHWIRE {CSA} LL90458 X/C XX AWG CU TECK 90 XLPE LSZH JACKET -40°C FT4-ST1 AG14 SUN RES 90°C
600V HL USA

Table 1 – Weights and Measurements

Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Inner Jacket Thickness	Dia. Over Armor	Jacket Thickness	Approx. OD	Approx. Weight
AWG/Kcmil	No.	No.	inch	mil	mil	inch	mil	inch	lb/1000ft
14	2	7	0.070	30	50	0.570	45	0.660	196
14	3	7	0.070	30	50	0.591	45	0.681	220
14	4	7	0.070	30	50	0.625	45	0.715	247
14	5	7	0.070	30	50	0.663	45	0.753	276
14	6	7	0.070	30	50	0.702	45	0.792	305
14	7	7	0.070	30	65	0.702	45	0.792	324
14	8	7	0.070	30	65	0.774	45	0.864	377
14	10	7	0.070	30	65	0.866	45	0.956	442
14	12	7	0.070	30	65	0.887	45	0.977	483
14	15	7	0.070	30	65	0.954	45	1.044	556
14	19	7	0.070	30	85	1.109	45	1.199	697
14	20	7	0.070	30	85	1.136	45	1.226	724
14	25	7	0.070	30	85	1.283	45	1.373	903
14	30	7	0.070	30	85	1.338	45	1.428	1012
12	2	7	0.088	30	50	0.605	45	0.695	222
12	3	7	0.088	30	50	0.629	45	0.719	256
12	4	7	0.088	30	50	0.667	45	0.757	293
12	5	7	0.088	30	65	0.710	45	0.800	332
12	6	7	0.088	30	65	0.786	45	0.876	395
12	7	7	0.088	30	65	0.786	45	0.876	422
12	8	7	0.088	30	65	0.833	45	0.923	463
12	10	7	0.088	30	65	0.936	45	1.026	549
12	12	7	0.088	30	65	0.954	45	1.044	605
12	15	7	0.088	30	85	1.195	45	1.285	816
12	20	7	0.088	30	85	1.285	45	1.375	981
12	25	7	0.088	30	85	1.389	45	1.479	1156
12	30	7	0.088	30	85	1.425	45	1.515	1295
10	2	7	0.113	30	50	0.653	45	0.743	270
10	3	7	0.113	30	50	0.680	45	0.770	319
10	4	7	0.113	30	65	0.725	45	0.815	371
10	6	7	0.113	30	65	0.858	45	0.948	505
10	8	7	0.113	30	65	0.918	45	1.008	604
10	10	7	0.113	30	85	1.142	45	1.232	777
10	12	7	0.113	30	85	1.211	45	1.301	911
10	15	7	0.113	30	85	1.307	45	1.397	1067

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item



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UPDATED: Dec. 11, 2023, 9:29 p.m. UTC REVISION: 1.000.000

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* Use Table 5C in the 2015 Canadian Electrical Code to derate this ampacity as per Rules 4-004 & 12-2210

† Ampacities based on not more than 3 conductors (4 with neutral) in raceway or cable as per Table 2 of 2015 Canadian Electrical Code

Table 2 – Electrical and Engineering Data

Cond. Size	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance	Max Pull Tension	Max Pull Tension	Min Bending Radius	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/Kcmil	Ω/1000ft	Ω/1000ft	Ω/1000ft	lb	lb	inch	Amp	Amp	Amp
14	2.631	3.170	0.058	65	65	4.6	15	20	25
14	2.631	3.170	0.058	98	98	4.7	15	20	25
14	2.631	3.170	0.058	131	131	5.0	12	16	20
14	2.631	3.170	0.058	164	164	5.2	12	16	20
14	2.631	3.170	0.058	197	197	5.5	12	16	20
14	2.631	3.170	0.058	230	230	5.5	10	14	17
14	2.631	3.170	0.058	263	263	6.0	10	14	17
14	2.631	3.170	0.058	328	328	6.6	7	10	12
14	2.631	3.170	0.058	394	394	6.8	7	10	12
14	2.631	3.170	0.058	493	493	7.3	7	10	12
14	2.631	3.170	0.058	624	624	8.3	7	10	12
14	2.631	3.170	0.058	657	657	8.5	7	10	12
14	2.631	3.170	0.058	822	822	9.6	6	9	11
14	2.631	3.170	0.058	986	986	9.9	6	9	11
12	1.662	2.002	0.054	104	104	4.8	20	25	30
12	1.662	2.002	0.054	156	156	5.0	20	25	30
12	1.662	2.002	0.054	208	208	5.2	16	20	24
12	1.662	2.002	0.054	261	261	5.6	16	20	24
12	1.662	2.002	0.054	313	313	6.1	16	20	24
12	1.662	2.002	0.054	365	365	6.1	14	17	21
12	1.662	2.002	0.054	417	417	6.4	14	17	21
12	1.662	2.002	0.054	522	522	7.1	10	12	15
12	1.662	2.002	0.054	626	626	7.3	10	12	15
12	1.662	2.002	0.054	783	783	8.9	10	12	15
12	1.662	2.002	0.054	1044	1044	9.6	10	12	15
12	1.662	2.002	0.054	1306	1306	10.3	9	11	13
12	1.662	2.002	0.054	1567	1567	10.6	9	11	13
10	1.040	1.253	0.050	166	166	5.2	30	35	40
10	1.040	1.253	0.050	249	249	5.3	30	35	40
10	1.040	1.253	0.050	332	332	5.7	24	28	32
10	1.040	1.253	0.050	498	498	6.6	24	28	32
10	1.040	1.253	0.050	664	664	7.0	21	24	28
10	1.040	1.253	0.050	830	830	8.6	15	17	20
10	1.040	1.253	0.050	996	996	9.1	15	17	20
10	1.040	1.253	0.050	1245	1245	9.7	15	17	20

* Inductive impedance is based on non-ferrous conduit with one diameter spacing.

