



CSA TECK 90 1000V LSZH POWER CABLE

1000V Multi Conductor, 8AWG -1000 Kcmil 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:

1. **Conductor:** Class B stranded copper, compressed or compact, in accordance with ASTM B3 and B8.
2. **Insulation:** Cross-Linked Polyethylene (XLPE), Colour Code: 2/C black, white; 3/C red, black, blue; 4/C red, black, blue, white; For cables larger than No. 2 AWG or more than 4/C, the insulation is black and numbered
3. **Grounding Conductors:** Uninsulated Class B stranded grounding conductor
4. **Inner Jacket:** Black Polyvinyl Chloride (PVC)
5. **Armor:** Aluminum Interlocked Armour (AIA)
6. **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. Rated for 1000 lbs./FT maximum sidewall pressure.

- -40°C - CSA Cold Bend and Impact Temperature
- -25°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 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
- IEEE 383 Flame Test (70,000 btu)
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test





SAMPLE PRINT LEGEND:

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





Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Inner Jacket Thickness | Dia. Over Armor | Jacket Thickness | Approx. OD | Approx. Weight | Jacket Color |
|--------------|------------|--------------|---------------|-------------------------|------------------|------------------------|-----------------|------------------|------------|----------------|--------------|
| | AWG/Kcmil | No. | No. | inch | mil | mil | inch | mil | inch | lb/1000ft | |
| 138931 | 1 | 2 | 19 | 0.322 | 80 | 85 | 1.471 | 45 | 1.561 | 1245 | Black |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

^ Colour Code: 2/C black, Red

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

| Cond. Size | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive Reactance | Max Pull Tension | Min Bending Radius | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|------------|----------------------|----------------------|---------------------|------------------|--------------------|----------------------------|----------------------------|
| AWG/Kcmil | Ω/1000ft | Ω/1000ft | Ω/1000ft | lb | inch | Amp | Amp |
| 1 | 0.128 | 0.154 | 0.046 | 1339 | 10.9 | 130 | 145 |

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

