

# **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



# **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



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# **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

| Cond.<br>Size | Cond.<br>Number | Cond.<br>Strands | Diameter Over<br>Conductor | Insul.<br>Thickness | Inner Jacket<br>Thickness | Dia. Over<br>Armor | Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | Jacket<br>Color |
|---------------|-----------------|------------------|----------------------------|---------------------|---------------------------|--------------------|---------------------|---------------|-------------------|-----------------|
| AWG/<br>Kcmil | No.             | No.              | inch                       | mil                 | mil                       | inch               | mil                 | inch          | lb/1000ft         |                 |
| 500           | 4               | 37               | 0.789                      | 90                  | 115                       | 2.872              | 65                  | 3.004         | 8351              | 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.<br>Size | DC Resistance @<br>25°C | AC Resistance @<br>90°C | Inductive<br>Reactance | Max Pull<br>Tension | Min Bending<br>Radius | Allowable Ampacity At<br>75°C | Allowable Ampacity At<br>90°C |
|---------------|-------------------------|-------------------------|------------------------|---------------------|-----------------------|-------------------------------|-------------------------------|
| AWG/<br>Kcmil | Ω/1000ft                | Ω/1000ft                | Ω/1000ft               | lb                  | inch                  | Amp                           | Amp                           |
| 500           | 0.022                   | 0.029                   | 0.039                  | 16000               | 21.0                  | 304                           | 344                           |

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

