

# **CSA TECK 90 600V PVC 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:**

- 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 5/C cables or more, 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 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, 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.

- -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 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 600V HL USA

# **Table 1 – Weights and Measurements**

| 1 | Stock<br>Number | Cond.<br>Size | Cond.<br>Number | Strand | Insul.<br>Thickness | Ground       | Inner<br>Jacket<br>Thickness | Dia.<br>Over<br>Armour | Overall<br>Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | Min<br>Bending<br>Radius | Max<br>Pull<br>Tension | DC<br>Resistance<br>@ 25°C | AC<br>Resistance<br>@ 75°C | Inductive<br>Reactance<br>@ 60Hz | Allowable<br>Ampacity<br>In<br>Raceway<br>90°C† |
|---|-----------------|---------------|-----------------|--------|---------------------|--------------|------------------------------|------------------------|--------------------------------|---------------|-------------------|--------------------------|------------------------|----------------------------|----------------------------|----------------------------------|---|
|   |                 | AWG/<br>Kcmil |                 | No.    | mil                 | No. x<br>AWG | mil                          | inch                   | mil                            | inch          | lb/<br>1000ft     | inch                     | lb                     | Ω/1000ft                   | Ω/1000ft                   | Ω/1000ft                         | Amp   |
| í | 584443          | 10            | 8               | 7      | 30                  | 1x12         | 65                           | 0.918                  | 45                             | 1.008         | 604               | 7.0                      | 664                    | 1.040                      | 1.253                      | 0.050                            | 28  |

All dimensions are nominal and subject to normal manufacturing tolerances

# Table 2 – Weights and Measurements (Metric)

| Stoo<br>Numl | k Cond<br>er Size | . Cond.<br>Number | Strand | Insul.<br>Thickness | Ground       | Inner<br>Jacket<br>Thickness | Dia.<br>Over<br>Armour | Jacket<br>Thickness <sup>1</sup> | Approx.<br>OD | Approx.<br>Weight | Min<br>Bending<br>Radius | Max<br>Pull<br>Tension | DC<br>Resistance<br>@ 25°C | AC<br>Resistance<br>@ 75°C | Inductive<br>Reactance<br>@ 60Hz | Allowable<br>Ampacity<br>In<br>Raceway<br>90°C |
|--------------|-------------------|-------------------|--------|---------------------|--------------|------------------------------|------------------------|----------------------------------|---------------|-------------------|--------------------------|------------------------|----------------------------|----------------------------|----------------------------------|--|
|              | AWG<br>Kcmi       |                   | No.    | mm                  | No. x<br>AWG | mm                           | mm                     | mm                               | mm            | kg/km             | mm                       | newton                 | Ω/km                       | Ω/km                       | Ω/km                             | Amp  |
| 5844         | 43 10             | 8                 | 7      | 0.76                | 1x12         | 1.65                         | 23.32                  | 1.14                             | 25.60         | 899               | 177.80                   | 2955                   | 3.41                       | 4.11                       | 0.1640                           | 28   |

All dimensions are nominal and subject to normal manufacturing tolerances



<sup>♦</sup> Cable marked with this symbol is a standard stock item

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

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

<sup>♦</sup> Cable marked with this symbol is a standard stock item

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

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