



## **CU 1000V XLPE Insulation PVC Jacket XHHW-2 Teck CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free**

1000V Multi Conductor, 14-10 AWG Copper, FT4 - Flame Retardancy Rating, XLPE Insulation, Aluminum Interlocked Armor, Sunlight Resistant, Direct Buried, 90°C



Image not to scale. See Table 1 for dimensions.

### **CONSTRUCTION:**

1. **Conductor:** Class B stranded copper, compressed in accordance with ASTM B3 and B8.
2. **Insulation:** Cross-Linked Polyethylene (XLPE), Color Code: 2/C black, white; 3/C red, black, blue; 4/C red, black, blue, white
3. **Grounding Conductor:** Uninsulated Class B stranded grounding conductor
4. **Inner Jacket:** Black Polyvinyl Chloride (PVC)
5. **Aarmor:** Aluminum Interlocked Armor (AIA)
6. **Overall Jacket:** Black PVC (optional colors 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, hazardous locations or direct buried. 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.

### **SPECIFICATIONS:**

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- CSA C22.2 No. 174 Cables in Hazardous Locations
- CSA C22.2 No. 131 Type TECK 90 Cable
- CSA AG14 - Acid Gas Compliance
- ICEA S-58-679 Control Cable Conductor Identification Method 1 Table 2
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy





**SAMPLE PRINT LEGEND:**

{SQMTR\_DUAL} SOUTHWIRE® {CSA} LL90458 X/C XXX AWG (XX{mm2}) CU TECK 90 XLPE -40°C FT4 AG14 SUN. RES. 90°C 1000V HL --- {UL} E96627 TYPE MC XLPE 600V SUN. RES. DIRECT BURIAL 90°C --- {NOM}-ANCE Tipo MC XHHW-2 CT FT4 600V 1000V 90°C USA

**Table 1 – Weights and Measurements**

| Cond. Size | Cond. Number | Strand Count   | Insul. Thickness | Ground    | Inner Jacket Thickness | Dia. Over Armor | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight | Jacket Color |
|------------|--------------|----------------|------------------|-----------|------------------------|-----------------|------------------|------------|---------------|----------------|--------------|
| AWG/Kcmil  |              | No. of Strands | mil              | No. x AWG | mil                    | inch            | mil              | inch       | lb/1000ft     | lb/1000ft      |              |
| 12         | 3            | 7              | 45               | 1 x 14    | 50                     | 0.698           | 50               | 0.798      | 73            | 294            | Black        |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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 | Cond. Number | Min Bending Radius | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|------------|--------------|--------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|
| AWG/Kcmil  |              | inch               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                        | Amp                        |
| 12         | 3            | 5.6                | 1.662                | 2.002                | 0.054                      | 25                         | 30                         |

\* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

\* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

