# **CU 2000V NLEPR/CPE RW90 Traction Cable**

2000 Volt Single Conductor Copper, No Lead Ethylene Propylene Rubber(NL-EPR) insulation RW90 Chlorinated Polyethylene (CPE) Jacket



Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. **Conductor:** Compressed stranded bare or tinned copper per ASTM B3 or B33 and B8. Center strand embossed with "Southwire, Year, Plant" when required
- 2. Binder Tape: Mylar Tape
- 3. **Insulation:** No Lead Ethylene Propylene Rubber (EPR) Type RW90
- 4. **Overall Jacket:** Thermoset Chlorinated Polyethylene (CPE) Jacket

#### **APPLICATIONS AND FEATURES:**

Southwire 2000V EPR/CPE Cable is suited for use in mass transit and general industry applications where flexibility, fire resistance, and low smoke generation are a concern. May be installed in wet or dry locations in cable trays or raceways. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Resistance to moisture and most oils, acids, and alkalis with an overall durable thermoset CPE jacket. Alternate constructions available upon request.

#### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA C22.2 No.230 Tray Cables Rated TC-ER
- CSA SUN RES for Sunlight Resistant rating
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- Oil Res I & Sun Res AWG 8 & Larger
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)

#### **SAMPLE PRINT LEGEND:**

{SQMTR} SOUTHWIRE® LL90458 {CSA} XXX KCMIL CU TYPE RW90 -40°C XX MILS EPR XX MILS CPE FT4 PR I PR II SUN RES OIL RES TC-FR 2000V YEAR OF MANUFACTURE









**SPEC 25080** Stock #: TBA

## **Table 1 – Weights and Measurements**

| Cond.<br>Size | Strand | Insul.<br>Thickness | Overall<br>Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | Min<br>Bending<br>Radius | Max Pull<br>Tension | DC<br>Resistance @<br>25°C | AC<br>Resistance @<br>75°C | Inductive<br>Reactance @<br>60Hz | Allowable<br>Ampacity In<br>Raceway 90°C† |
|---------------|--------|---------------------|--------------------------------|---------------|-------------------|--------------------------|---------------------|----------------------------|----------------------------|----------------------------------|---|
| AWG/<br>Kcmil | No.    | mil                 | mil                            | inch          | lb/1000ft         | inch                     | lb                  | Ω/1000ft                   | Ω/1000ft                   | Ω/1000ft                         | Amp                                       |
| 3/0           | 19     | 65                  | 45                             | 0.636         | 598               | 2.5                      | 1342                | 0.064                      | 0.078                      | 0.042                            | 225                                       |

All dimensions are nominal and subject to normal manufacturing tolerances

### **Table 2 – Weights and Measurements (Metric)**

| Cond.<br>Size | Strand | Insul.<br>Thickness | Jacket<br>Thickness <sup>1</sup> | Approx.<br>OD | Approx.<br>Weight | Min<br>Bending<br>Radius | Max Pull<br>Tension | DC<br>Resistance @<br>25°C | AC<br>Resistance @<br>75°C | Inductive<br>Reactance @<br>60Hz | Allowable<br>Ampacity In<br>Raceway 90°C |
|---------------|--------|---------------------|----------------------------------|---------------|-------------------|--------------------------|---------------------|----------------------------|----------------------------|----------------------------------|--|
| AWG/<br>Kcmil | No.    | mm                  | mm                               | mm            | kg/km             | mm                       | newton              | Ω/km                       | Ω/km                       | Ω/km                             | Amp                                      |
| 3/0           | 19     | 1.65                | 1.14                             | 16.15         | 890               | 63.50                    | 5972                | 0.21                       | 0.26                       | 0.1378                           | 225                                      |

All dimensions are nominal and subject to normal manufacturing tolerances







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

<sup>&</sup>lt;sup>1</sup>Thicknesses reported as minimum average

<sup>\*</sup> Bare copper

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