



## CU 2000V EPR/LSZH RW90 Traction Cable

2000 Volt Single Conductor Copper, No Lead Ethylene Propylene Rubber (NLEPR) insulation RW90 SOLONON® Low Smoke Zero Halogen (LSZH) Jacket



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Stranded bare or tinned copper per ASTM B3 or B33. 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:** SOLONON® Low Smoke Zero Halogen (LSZH) Jacket

### APPLICATIONS AND FEATURES:

Southwire 2000V EPR/SOLONON Power 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 LSZH XLPO jacket. Meets Flame Spread and Smoke Release requirements of NFPA 130. 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
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors (As Applicable)
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA C22.2 No.230 Tray Cables - Rated TC-ER
- CSA C22.2 No. 2556 / UL 2556 Cable Test Methods
- CSA SUN RES - for Sunlight Resistant rating
- CSA ST1 Smoke Test - marked FT4-ST1 (1/0 and Larger)
- 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)
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)





**SAMPLE PRINT LEGEND:**

{SQMTR} SOUTHWIRE® LL90458 {CSA} XXX KCMIL CU TYPE RW90 -40°C XX MILS EPR XX MILS SOLONON® ST1 FT4 PR I PR II SUN RES OIL RES TC-ER 2000V YEAR OF MANUFACTURE

**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size | Strand Count   | Diameter Over Conductor | Insul. Thickness | Insulation Color | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|--------------|------------|----------------|-------------------------|------------------|------------------|------------------|------------|---------------|----------------|
|              | AWG/Kcmil  | No. of Strands | inch                    | mil              |                  | mil              | inch       | lb/1000ft     | lb/1000ft      |
| TBA          | 1/0        | 19             | 0.361                   | 65               | Black            | 45               | 0.541      | 325           | 391            |
| TBA          | 2/0        | 19             | 0.405                   | 65               | Black            | 45               | 0.585      | 410           | 482            |
| TBA          | 3/0        | 19             | 0.456                   | 65               | Black            | 45               | 0.636      | 518           | 598            |
| TBA          | 4/0        | 19             | 0.512                   | 65               | Black            | 45               | 0.692      | 653           | 741            |
| TBA          | 250        | 37             | 0.558                   | 75               | Black            | 65               | 0.768      | 771           | 884            |
| TBA          | 350        | 37             | 0.661                   | 75               | Black            | 65               | 0.871      | 1081          | 1212           |
| 668908*      | 500        | 37             | 0.789                   | 75               | Black            | 65               | 1.068      | 1543          | 1796           |
| TBA          | 535.5      | 1349           | 0.830                   | 90               | Black            | 65               | 1.164      | 1560          | 1856           |
| 589215       | 535.3      | 1349           | 0.830                   | 120              | Black            | 95               | 1.288      | 1560          | 2010           |
| 669880       | 750        | 61             | 0.968                   | 90               | Black            | 65               | 1.302      | 2315          | 2656           |
| TBA          | 1000       | 61             | 1.117                   | 90               | Black            | 65               | 1.357      | 3088          | 3330           |
| 665061!      | 1000       | 427            | 1.117                   | 90               | Black            | 65               | 1.493      | 3150          | 3543           |
| 669154       | 1500       | 91             | 1.37                    | 115              | Black            | 95               | 1.818      | 4631          | 5277           |
| TBA          | 2000       | 127            | 1.583                   | 115              | Black            | 95               | 1.863      | 6175          | 6569           |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

<sup>1</sup>Thicknesses reported as minimum average

\* Bare copper

! Class G stranding per ASTM B173: Standard Specification for Rope-Lay-Stranded Copper Conductors \* Having Concentric-Stranded Members, for Electrical Conductors

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**

| Stock Number | Cond. Size | Min Bending Radius | Max Pull Tension | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity At 75°C | Allowable Ampacity At 90°C |
|--------------|------------|--------------------|------------------|----------------------|----------------------|----------------------------|----------------------------|----------------------------|
|              | AWG/Kcmil  | inch               | lb               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                        | Amp                        |
| TBA          | 1/0        | 2.1                | 844              | 0.102                | 0.122                | 0.044                      | 150                        | 170                        |
| TBA          | 2/0        | 2.3                | 1064             | 0.081                | 0.097                | 0.043                      | 175                        | 195                        |
| TBA          | 3/0        | 2.5                | 1342             | 0.064                | 0.078                | 0.042                      | 200                        | 225                        |
| TBA          | 4/0        | 2.7                | 1692             | 0.051                | 0.062                | 0.041                      | 230                        | 260                        |
| TBA          | 250        | 3.0                | 2000             | 0.043                | 0.053                | 0.041                      | 255                        | 290                        |
| TBA          | 350        | 3.4                | 2800             | 0.031                | 0.039                | 0.040                      | 310                        | 350                        |
| 668908*      | 500        | 5.3                | 4000             | 0.022                | 0.029                | 0.033                      | 380                        | 430                        |
| TBA          | 535.5      | 5.8                | 4282             | 0.021                | 0.032                | 0.028                      | 394                        | 446                        |
| 589215       | 535.3      | 6.4                | 4282             | 0.021                | 0.032                | 0.028                      | 394                        | 446                        |
| 669880       | 750        | 6.5                | 6000             | 0.014                | 0.022                | 0.038                      | 475                        | 535                        |
| TBA          | 1000       | 6.7                | 8000             | 0.011                | 0.018                | 0.037                      | 545                        | 615                        |
| 665061!      | 1000       | 7.4                | 8000             | 0.011                | 0.018                | 0.037                      | 545                        | 615                        |
| 669154       | 1500       | 9.0                | 12000            | 0.007                | 0.016                | 0.035                      | 625                        | 705                        |
| TBA          | 2000       | 9.3                | 16000            | 0.005                | 0.016                | 0.034                      | 665                        | 750                        |

\* Ampacities derived from the Canadian Electrical Code - Table 2 - for Cable in Conduit. Not more than 3 copper conductors in a conduit and based on an ambient temperature of 30°C.

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

