



TCU 2000V NLEPR Insulation Thermoset LSZH-TS Jacket. RHH/RHW-2

Power Cable 2000 Volt Single Conductor Copper or Tinned Copper, Ethylene Propylene Rubber (EPR) insulation RHH/RHW-2 Thermoset SOLONON® (LSZH-TS) Jacket



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Stranded tinned copper per ASTM B33
2. **Binder Tape:** Mylar Tape
3. **Insulation:** Ethylene Propylene Rubber (EPR)
4. **Overall Jacket:** Cross-linked/Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket

APPLICATIONS AND FEATURES:

Southwire's 2000 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502.

SPECIFICATIONS:

- 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
- ASTM B173 Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (250kcmil & Larger)
- NFPA 502 Standard for Road Tunnels, Bridges, and Other Limited Access Highways





SAMPLE PRINT LEGEND:

AWG Sizes

{SQFTG} SOUTHWIRE {UL} XX AWG or KCMIL TINNED CU TYPE RHH OR RHW-2 XX MILS EPR XX MILS SOLONON® ST1 FOR CT USE SUN RES 2000V {YYYY}

Kcmil Sizes

{SQFTG} SOUTHWIRE® E30117 {UL} XXX KCMIL RHH OR RHW-2 XX MILS NL-EPR XX MILS SOLONON® PRI/PRII -40°C FT4 ST1 FOR CT USE SUN RES 2000V --- {CSA} 156205 XXX KCMIL RW90 XX MILS NL-EPR XX MILS SOLONON® 90°C DRY 90°C WET TC-ER 2KV -40°C PRI PRII FT4-ST1 SR

Table 1 – Weights and Measurements

| Cond. Size | Cond. Number | Strand Count | Diameter Over Conductor | Min. Avg. Insul. Thickness | Jacket Thickness | Approx. OD | Copper Weight | Approx. Weight |
|---------------|--------------|----------------|-------------------------|----------------------------|------------------|------------|---------------|----------------|
| AWG/ Kcmil | | No. of Strands | inch | mil | mil | inch | lb/1000ft | lb/1000ft |
| 500 | 1 | 37 | 0.789 | 75 | 65 | 1.069 | 1544 | 1779 |

All dimensions are nominal and subject to normal manufacturing tolerances
 ◇ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

| Cond. Size | Cond. Number | 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 |
| 500 | 1 | 8.6 | 4000 | 0.022 | 0.029 | 0.039 | 380 | 430 |

* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.
 * Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.

