SPEC 45503 Stock #: TBA

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









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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
AW Kcn		No. of Strands	inch	mil	mil	inch	lb/1000ft	lb/1000ft
2/	0 1	19	0.405	65	45	0.625	410	511

All dimensions are nominal and subject to normal manufacturing tolerances

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 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
2/0	1	5.0	1065	0.081	0.097	0.043	145	175	195

^{*} Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.









[♦] Cable marked with this symbol is a standard stock item

^{*} Inductive Reactance is based on non-ferrous conduit with one diameter spacing.