

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

Stock Number	Cond. Size	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
672185	1/0	19	0.362	65	45	0.598	326	428
TBA	2/0	19	0.405	65	45	0.625	410	511
TBA	2/0	259	0.445	65	45	0.678	418	538
TBA	3/0	19	0.456	65	45	0.680	518	620
TBA	4/0	19	0.512	65	45	0.732	653	775
TBA	4/0	133	0.598	65	65	0.873	693	883
TBA	250	37	0.558	75	65	0.782	771	891
664278	250	259	0.610	105	65	0.972	811	1069
TBA	350	37	0.661	75	65	0.945	1081	1265
TBA	500	37	0.789	75	65	1.069	1544	1779
560305	500	259	0.850	75	65	1.150	1548	1820
649417	500	259	0.890	105	65	1.252	1579	1924
TBA	750	61	0.968	90	65	1.278	2316	2626
643881	750	127	0.968	90	65	1.300	2315	2652
TBA	1000	61	1.117	90	65	1.427	3088	3440
653132	1000	127	1.118	90	65	1.450	3088	3468
551380	2000	127	1.583	115	95	2.031	6175	6903

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

Stock Number	Cond. Size	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
672185	1/0	4.7	845	0.102	0.122	0.044	125	150	170
TBA	2/0	5.0	1065	0.081	0.097	0.043	145	175	195
TBA	2/0	5.4	1065	0.081	0.097	0.043	145	175	195
TBA	3/0	5.4	1342	0.064	0.078	0.042	165	200	225
TBA	4/0	5.9	1693	0.051	0.062	0.041	195	230	260
TBA	4/0	7.0	1693	0.051	0.062	0.041	195	230	260
TBA	250	6.3	2000	0.043	0.053	0.041	215	255	290
664278	250	7.8	2000	0.043	0.053	0.041	215	255	290
TBA	350	7.6	2800	0.031	0.039	0.040	260	310	350
TBA	500	8.6	4000	0.022	0.029	0.039	320	380	430
560305	500	9.2	4000	0.022	0.029	0.039	320	380	430
649417	500	10.0	4000	0.022	0.029	0.039	320	380	430
TBA	750	10.2	6000	0.014	0.022	0.038	400	475	535
643881	750	10.4	6000	0.014	0.022	0.038	400	475	535
TBA	1000	11.4	8000	0.011	0.018	0.037	455	545	615
653132	1000	11.6	8000	0.011	0.018	0.037	455	545	615
551380	2000	16.0	10000	0.005	0.016	0.034	555	665	750

* 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.

