

CU 600V EPR Insulation Thermoset LSZH-TS Jacket. RHH/RHW-2 Silicone Free

Power Cable 600Volt Single Conductor Copper, Ethylene Propylene Rubber (EPR) insulation RHH/RHW-2 USE-2 Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Jacket



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Binder Tape:** Mylar Tape
- Insulation:** Ethylene Propylene Rubber (EPR) Type RHH/RHW-2 USE-2
- Overall Jacket:** Thermoset SOLONON® Low Smoke Zero Halogen (LSZH-TS) Silicone-Free Jacket

APPLICATIONS AND FEATURES:

Southwire's 600 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, 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 B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- 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
- CT USE Sizes 1/0 AWG and Larger

SAMPLE PRINT LEGEND:

SOUTHWIRE {UL} XXX AWG CU TYPE RHH OR RHW-2 OR USE-2 XX MILS EPR XX MILS SOLONON{R} ST1 FOR CT USE SUN
RES 600 VOLTS {YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET



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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
890660	8	7	0.141	45	15	0.268	50	74
890659	6	7	0.177	45	30	0.338	81	119
TBA	4	7	0.225	45	30	0.471	128	202
551088	2	7	0.282	45	30	0.438	204	258
566010	1	19	0.322	55	45	0.522	258	338
561561	1/0	19	0.361	55	45	0.575	326	418
561560	2/0	19	0.405	55	45	0.617	410	511
581799	3/0	19	0.456	55	45	0.669	518	628
561556	4/0	19	0.512	55	45	0.711	653	770
561554	250	37	0.558	65	65	0.817	771	944
561553	350	37	0.661	65	65	0.916	1080	1280
890658	500	37	0.789	65	65	1.041	1543	1775
566011	600	61	0.865	80	65	1.167	1852	2133
551091	750	61	0.968	80	65	1.275	2315	2633
TBA	1000	61	1.117	80	65	1.573	3088	3624

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
890660	8	1.0	132	0.653	0.786	0.052	40	50	55
890659	6	1.3	209	0.411	0.495	0.051	55	65	75
TBA	4	1.8	333	0.258	0.310	0.048	70	85	95
551088	2	1.7	530	0.162	0.195	0.045	95	115	130
566010	1	2.0	669	0.128	0.154	0.046	110	130	145
561561	1/0	2.3	844	0.102	0.122	0.044	125	150	170
561560	2/0	2.4	1064	0.081	0.097	0.043	145	175	195
581799	3/0	2.6	1342	0.064	0.078	0.042	165	200	225
561556	4/0	2.8	1692	0.051	0.062	0.041	195	230	260
561554	250	3.2	2000	0.043	0.053	0.041	215	255	290
561553	350	3.6	2800	0.031	0.039	0.040	260	310	350
890658	500	5.2	4000	0.022	0.029	0.039	320	380	430
566011	600	5.8	4800	0.018	0.025	0.039	350	420	475
551091	750	6.3	6000	0.014	0.022	0.038	400	475	535
TBA	1000	7.8	8000	0.011	0.018	0.037	455	545	615

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections



310.15 and 110.14(C) for additional requirements.

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

