

# 1/C CU 600V EPR RHH/RHW-2 USE-2 LSZH-TS Silicone-Free Power Cable

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 Standard Specification for 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 LS FOR CT USE SUN RES 600 VOLTS {YYYY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil	inch	mil	inch	mil	inch	lb/1000ft	lb/1000ft
890658	500	0.789	65	0.919	65	1.049	1544	1770

All dimensions are nominal and subject to normal manufacturing tolerances



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◇ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

**Table 2 – Electrical and Engineering Data**

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°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
890658	500	5.2	4000	0.022	0.028	0.028	320	380	430

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

