



## CU 600V XLPE Insulation RHH/RHW-2/USE-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Power Cable 600Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE) insulation RHH/RHW-2/USE-2. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free

### 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. CT Rated 1/0 and Larger - Sunlight Resistant - Silicone Free. Rated for 1000 lbs./FT maximum sidewall pressure.

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test (1/0 and Larger)
- 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
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)
- VW-1 (Vertical-Wire) Flame Test
- PR I/II Oil Resistant
- -40°C Rated

### SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE E32071 {UL} XXX AWG (XX.X{mm<sup>2</sup>}) CU TYPE USE-2 OR RHH OR RHW-2 XX MILS XLP FOR CT USE SUN. RES. VW-1 600 VOLTS {NOM}-ANCE RHH/RHW-2 600V 90C





**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil	inch	lb/1000ft	lb/1000ft
890105◇	1/0	19	0.361	80	0.530	326	396
890106◇	2/0	19	0.405	80	0.572	410	488
890631◇	3/0	19	0.456	80	0.624	518	603
890107◇	4/0	19	0.512	80	0.680	653	748
890632◇	250	37	0.558	95	0.742	771	892
890108◇	350	37	0.661	95	0.861	1080	1223
890109◇	500	37	0.789	95	0.966	1543	1707
890633◇	750	61	0.968	110	1.171	2315	2544

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 75°C	Allowable Ampacity At 90°C
	AWG/Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
890105◇	1/0	2.1	844	0.102	0.122	0.044	150	170
890106◇	2/0	2.2	1064	0.081	0.097	0.043	175	195
890631◇	3/0	2.4	1342	0.064	0.078	0.042	200	225
890107◇	4/0	2.7	1692	0.051	0.062	0.041	230	260
890632◇	250	2.9	2000	0.043	0.053	0.041	255	290
890108◇	350	3.4	2800	0.031	0.039	0.040	310	350
890109◇	500	3.8	4000	0.022	0.029	0.039	380	430
890633◇	750	5.9	6000	0.014	0.022	0.038	475	535

\* 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.

