Southwire® RenewaFLEX™ Power Cables for Battery Energy Storage Systems

Single Conductor Copper 2000V XLPE insulation Type RHH/RHW-2 Flexible Power Cable.

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** 6 - 4/0 AWG: Class K, Flexible stranded bare copper. 250 - 750 kcmil: Class I, Flexible stranded bare copper
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2

APPLICATIONS AND FEATURES:

Southwire's 2000 Volt power cables are suited for use in the internal wiring of Battery Energy Storage Systems (BESS), in wet and dry locations, conduits, ducts, troughs, covered trays, 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, 130°C for emergency overload, and 250°C for short circuit conditions. Gasoline and Oil Resistant. For CT USE sizes 1/0 AWG and larger. Rated 1000 lbs./FT maximum sidewall pressure.

Also available in different colors like: Black, Red, Green, Brown, Yellow, etc.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 Vertical-Tray Fire Propagation and Smoke Release Test
- RoHS-3 Complies with European Directive 2015/863
- Made in America: Compliant with both Buy American and Buy America Act (BAA) requirements per 49 U.S.C. § 5323(j) and the Federal Transit Administration Buy America requirements per 49 C.F.R. part 661

SAMPLE PRINT LEGEND:

For 8-2 AWG: {SQFTG} SOUTHWIRE E30117 {UL} XX AWG CU TYPE RHH OR RHW-2 XX MILS XLP PRI/II GRI/II 2000 VOLTS

For 1/0-4/0 AWG: {SQFTG} SOUTHWIRE E30117 {UL} XX AWG CU TYPE RHH OR RHW-2 XX MILS XLP FOR CT USE PRI/II GRI/II 2000 VOLTS

For 250-750 kcmil: {SQFTG} SOUTHWIRE E30117 {UL} XX kcmil CU TYPE RHH OR RHW-2 XX MILS XLP FOR CT USE PRI/II GRI/II 2000 VOLTS

Table 1 – Weights and Measurements

665422	1/0	1064	0.385	90	0.570	426

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Air 90°C	Allowable Ampacity In Raceway 90°C
AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
1/0	4.5	845	0.105	0.132	0.044	260	170

† Ampacities based upon 2023 NEC Table 310.16 for Raceway, Cable, or Earth.
† NEC Table 310.17 for single conductors in Air.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

Table 3 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Strand	Diameter Over Conductor	Insul. Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	mm	mm	mm	kg/km
665422	1/0	1064	9.78	2.29	14.48	634

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 4 – Electrical and Engineering Data (Metric)

Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Air 90°C	Allowable Ampacity In Raceway 90°C
AWG/ Kcmil	mm	newton	Ω/km	Ω/km	Ω/km	Amp	Amp
1/0	114.30	3760	0.3445	0.43	0.1444	260	170

† Ampacities based upon 2023 NEC Table 310.16 for Raceway, Cable, or Earth.
† NEC Table 310.17 for single conductors in Air.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.