



## RHH/RHW-2/USE-2 Copper Silicone-Free.

USE-2 600 Volts or RHH/RHW-2 1000 Volts. Underground Service Entrance Cable. Copper Conductors. Cross-Linked Polyethylene (XLP) Insulation. High Heat, Moisture and Abrasion Resistant



See Table 3 For Other Color Options



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

- Conductor:** Bare copper per ASTM B3. Stranding is either Class B compressed per ASTM B8 or combination unilay per ASTM B787
- Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free, High Heat, Moisture and Abrasion Resistant

### APPLICATIONS AND FEATURES:

Southwire's USE-2 600 Volts or RHH/RHW-2 1000 Volts 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. Rated for 1000 lbs./FT maximum sidewall pressure.

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B787 19 Wire Combination Unilay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- RoHS-2 (European Directive 2011/65/EU)

### SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE E32071 {UL} XXX AWG (XX.X{mm<sup>2</sup>}) CU TYPE USE-2 600V OR RHH OR RHW-2 1000V XX MILS XLP 90C

**Table 1 – Weights and Measurements**

| Cond. Size<br>AWG/Kcmil | Cond. Number | Strand Count<br>No. of Strands | Diameter Over Conductor<br>inch | Insul. Thickness<br>mil | Insulation Color | Approx. OD<br>inch | Copper Weight<br>lb/1000ft | Approx. Weight<br>lb/1000ft |
|-------------------------|--------------|--------------------------------|---------------------------------|-------------------------|------------------|--------------------|----------------------------|-----------------------------|
| 8                       | 1            | 7                              | 0.141                           | 60                      | BK               | 0.259              | 95                         | 67                          |

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 | Cond. Number | 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                        |
| 8          | 1            | 1.0                | 132              | 0.653                | 0.786                | 0.052                      | 50                         | 55                         |

\* 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 center-to-center.

**Table 3 - Stock Code Colors**

| Size (Strand) | Black  | Red    | Blue   | White  | Brown  | Orange | Yellow | Gray   | Green  | Purple |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 12 (Solid)    | 113399 |        |        |        |        |        |        |        |        |        |
| 12 (7)        | 113431 |        |        |        |        |        |        |        |        |        |
| 10 (7)        | 113449 |        |        | 645838 |        |        |        |        |        |        |
| 8 (7)         | 113456 | 952689 | 588683 | 643957 |        |        |        |        | 655993 |        |
| 6 (7)         | 113464 | 620685 | 959726 | 640110 | 646503 | 646504 | 646506 | 646507 | 640128 |        |
| 4 (7)         | 113472 | 476549 | 643577 | 476565 |        | 588746 | 588747 |        | 952663 |        |
| 3 (7)         | 113480 |        |        |        |        |        |        |        | 587189 |        |
| 2 (7)         | 113498 | 476531 | 643544 | 476523 | 620746 | 616347 | 616346 | 620747 | 958009 |        |
| 1 (19)        | 113506 |        |        |        | 647620 | 647621 | 647622 |        |        |        |
| 1/0 (19)      | 113514 |        |        | 643973 |        |        |        |        |        |        |
| 2/0 (19)      | 113522 | 666096 |        |        |        |        |        |        | 591255 |        |
| 3/0 (19)      | 113530 |        |        |        |        |        |        |        |        |        |
| 4/0 (19)      | 113548 | 647337 | 647338 | 564225 |        |        |        |        |        |        |
| 250 (37)      | 113555 |        |        |        |        |        |        |        |        |        |
| 300 (37)      | 113563 |        |        |        |        |        |        |        |        |        |
| 350 (37)      | 113571 | 666097 |        |        |        |        |        |        |        |        |
| 400 (37)      | 113589 |        |        |        |        |        |        |        |        |        |
| 500 (37)      | 113597 | 678973 |        | 678974 | 580165 | 580166 | 580168 | 580169 |        | 139530 |
| 600 (61)      | 113605 |        |        |        | 139369 | 139370 | 139371 |        |        |        |
| 750 (61)      | 113613 |        |        |        | 139351 | 139352 | 139353 |        | 139354 |        |
| 1000 (61)     | 113647 |        |        |        |        |        |        |        |        |        |

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