



## XHHW-2 Copper Circuit Sizes (14, 12 & 10 AWG)

Power Cable 600 or 1000 Volt Single Conductor Copper, Cross Linked Polyethylene (XLPE).

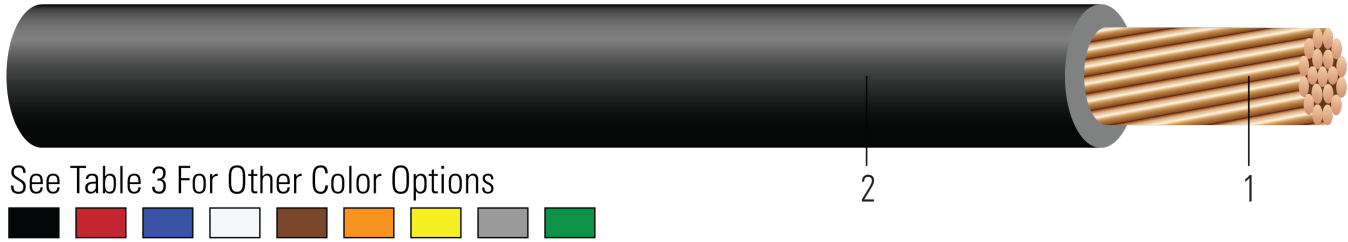


Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Solid or Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE)

### APPLICATIONS AND FEATURES:

#### APPLICATION

Southwire XHHW-2 copper conductors circuit sizes are primarily used in conduit, or other recognized raceways, and branch circuit wiring, as specified in the National Electrical Code. XHHW-2 copper conductors may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating for XHHW-2 conductors is 600 volts or 1000 volts. Suitable for use in Health Care Facilities per Section 517.160 of the National Electrical Code where a dielectric constant of less than 3.5 maybe specified.

#### FEATURES

- SIS - Sizes 14 AWG through 10 AWG
- RoHS Compliant

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- 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
- Federal Specification A-A-59544
- NMX-J-451-ANCE Thermoset insulated wires and cables
- NOM-063-SCFI Electrical Products – Conductors – Safety Requirements

### SAMPLE PRINT LEGEND:

#### 14 AWG thru 10 AWG

SOUTHWIRE E30117 (UL) XX AWG (XXXmm<sup>2</sup>) CU TYPE XHHW-2 600V/1000V OR SIS 600 VOLTS NOM-ANCE





**Table 1 – Weights and Measurements**

| Cond. Size | Cond. Number | 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      |
| 12         | 1            | Solid          | 0.080                   | 30               | 0.141      | 19            | 25             |
| 10         | 1            | Solid          | 0.101                   | 30               | 0.162      | 30            | 37             |
| 14         | 1            | 7              | 0.070                   | 30               | 0.131      | 12            | 17             |
| 12         | 1            | 7              | 0.088                   | 30               | 0.147      | 20            | 24             |
| 10         | 1            | 7              | 0.113                   | 30               | 0.173      | 32            | 36             |

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**

| 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                        |
| 12         | 1            | 0.6                | 52               | 1.662                | 2.002                | 0.054                      | 25                         | 30                         |
| 10         | 1            | 0.6                | 83               | 1.040                | 1.253                | 0.050                      | 35                         | 40                         |
| 14         | 1            | 0.5                | 32               | 2.631                | 3.170                | 0.058                      | 20                         | 25                         |
| 12         | 1            | 0.6                | 52               | 1.662                | 2.002                | 0.054                      | 25                         | 30                         |
| 10         | 1            | 0.7                | 83               | 1.040                | 1.253                | 0.050                      | 35                         | 40                         |

\* 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   | Purple | Green  |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 12 (Solid)    | 550220 | 550222 | 550224 | 550221 | 550227 | 550226 | 550225 |        |        | 550223 |
| 10 (Solid)    | 137240 | 550213 | 550215 | 550212 | 550218 | 550217 | 550216 |        |        | 550214 |
| 14 (7)        | 112920 | 370932 | 370940 | 370924 | 370981 | 370973 | 370957 | 371005 | 370999 | 370965 |
| 12 (7)        | 112938 | 371039 | 371047 | 371021 | 371088 | 371070 | 371054 | 371104 | 371096 | 371062 |
| 10 (7)        | 112946 | 371138 | 371146 | 371120 | 371187 | 371179 | 371153 | 371203 |        | 371161 |

