



Copper XHHW-2 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 (XXXmm²) CU TYPE XHHW-2 600V/1000V OR SIS 600 VOLTS NOM-ANCE





Table 1 – Weights and Measurements

Cond. Size AWG/Kcmil	Strand Count No. of Strands	Diameter Over Conductor inch	Insul. Thickness mil	Approx. OD inch	Copper Weight lb/1000ft	Approx. Weight lb/1000ft
12	Solid	0.080	30	0.141	19	25
10	Solid	0.101	30	0.162	30	37
14	7	0.070	30	0.131	12	17
12	7	0.088	30	0.147	20	24
10	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 AWG/Kcmil	Min Bending Radius inch	Max Pull Tension lb	DC Resistance @ 25°C Ω/1000ft	AC Resistance @ 75°C Ω/1000ft	Inductive Reactance @ 60Hz Ω/1000ft	Allowable Ampacity At 75°C Amp	Allowable Ampacity At 90°C Amp
12	0.6	52	1.662	2.002	0.054	25	30
10	0.6	83	1.040	1.253	0.050	35	40
14	0.5	32	2.631	3.170	0.058	20	25
12	0.6	52	1.662	2.002	0.054	25	30
10	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.

Stock Code Colors and Standard Package

Size	Package	Black	Red	Blue	White	Brown	Orange	Yellow	Gray	Green
14 (7)	Reel: 2500' Spool: 500'	112920	370932	370940	370924	370981	370973	370957	371005	370965
12 (Solid)	Reel: 2500' Spool: 500'	550220	550222	550224	550221	550227	550226	550225		550223
12 (7)	Reel: 2500' Spool: 500'	112938	371039	371047	371021	371088	371070	371054	371104	371062
10 (Solid)	Reel: 2500' Spool: 500'	137240	550213	550215	550212	550218	550217	550216		550214
10 (7)	Reel: 2500' Spool: 500'	112946	371138	371146	371120	371187	371179	371153	371203	371161

