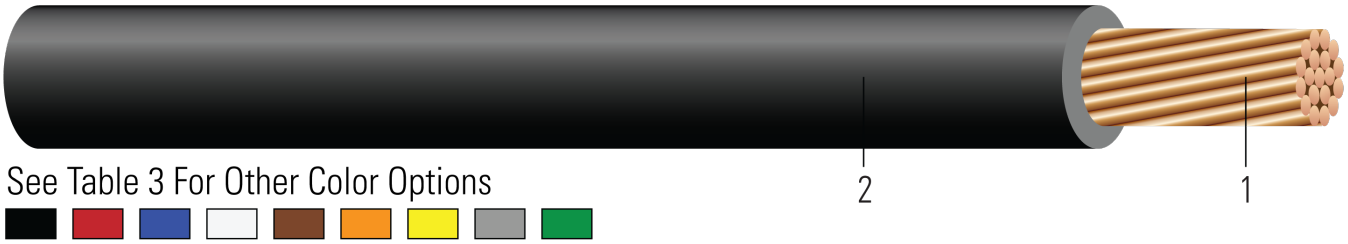
XHHW-2 Copper Circuit Sizes (14, 12 & 10 AWG) Silicone Free

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



See Table 3 For Other Color Options

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
- NEMA 70901-2-2024 Make It American Compliance with Domestic Preference Requirements Pt. 2 Wire & Cable

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	Strand Count	Diameter Over Conductor	Insul. Thickness	Insulation Color	Approx. OD	Copper Weight	Approx. Weight
AWG/Kcmil	No. of Strands	inch	mil		inch	lb/1000ft	lb/1000ft
14	7	0.070	30	PE	0.131	12	17
12	Solid	0.080	30	BK	0.141	19	25
12	7	0.088	30	PE	0.147	20	24
10	Solid	0.101	30	BK	0.162	30	37
10	7	0.113	30	BK	0.173	32	36

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 @ 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
14	0.5	32	2.631	3.170	0.058	20	25
12	0.6	52	1.662	2.002	0.054	25	30
12	0.6	52	1.662	2.002	0.054	25	30
10	0.6	83	1.040	1.253	0.050	35	40
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 center-to-center.

Table 3 - Stock Code Colors

Size (Strand)	Black	Red	Blue	White	Brown	Orange	Yellow	Gray	Purple	Green
12 (Solid)	550220			550221						550223
10 (Solid)	137240	550213	550215	550212						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

Award Winning Patent Pending Building Wire Selector

UPDATED: Aug. 11, 2025, 8:15 p.m.UTC REVISION: 1.000.050