

# Armorlite® Type AC THHN/THWN Circuit Size Copper Conductor 120/208V Colors

14 AWG through 10 AWG THHN/THWN Insulated Singles Wrapped in Moisture-Resistant, Flame-Retardant Paper. 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VV-1. Lightweight Aluminum Interlocked Armor.

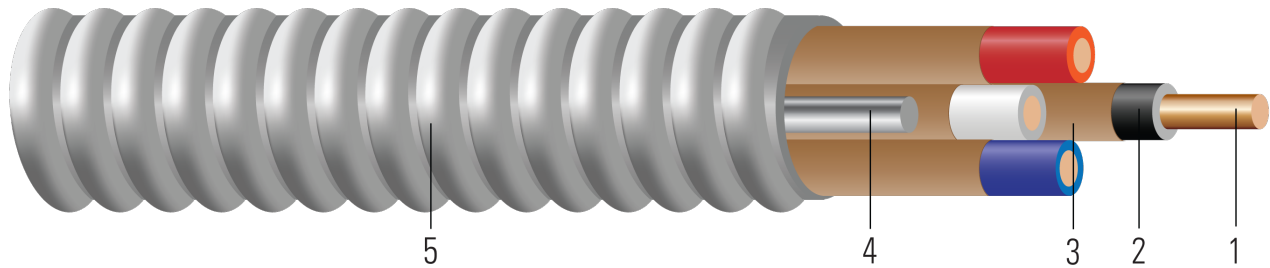


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Paper Covering:** Moisture-resistant, flame-retardant paper covering
4. **Bond Wire:** Solid #16 AWG aluminum
5. **Armor:** Aluminum Interlocked Armor

## APPLICATIONS AND FEATURES:

**Southwire Armorlite® Type AC Cable is suitable for use as follows:**

- Branch and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Dry locations only.
- Environmental air-handling spaces per NEC 300.22 (C).
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC Article 645
- Conductors are individually wrapped with a moisture-resistant, flame-retardant paper covering
- Type THHN/THWN rated 90°C Dry.
- Anti-Short bushing are required

**Southwire Armorlite® Type AC Cable - meets or exceeds the following requirements:**

- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://www.ul.com) )
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 320
- Listed for use in UL 1, 2 and 3 Hour Through Penetration Firestop Systems

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- UL 83 Thermoplastic Insulated Wires and Cables
- UL 4 Armored Cables
- RoHS-2 (European Directive 2011/65/EU)





- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify “Made in the USA Only!” when ordering to ensure your project receives American made products.

**SAMPLE PRINT LEGEND:**

TYPE AC-THH AL ARMOR COPPER THHN CONDUCTORS W/ ALUMINUM BOND WIRE MAXIMUM VOLTS 600V, FOR USE IN CABLE TRAYS-90(D) C - DRY LOCATIONS GAS. & OIL REST.COND.( AL.BOND WIRE)-NOT FOR USE ON DC CIRCUITS

\*CAUTION:NOT TO BE USED WITH SETSCREW CONNECTOR

**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Diameter Over Armor	Copper Weight	Overall Weight
	AWG/ Kcmil			inch		mils	inch	lbs/1000ft	lbs/1000ft
<b>14 AWG   Solid</b>									
610293◇	14	2	BK,WE	0.064	Solid	20	0.468	24	88
610294◇	14	3	BK,RD,WE	0.064	Solid	20	0.488	37	107
610296◇	14	4	BK,RD,BE,WE	0.064	Solid	20	0.520	49	128
<b>12 AWG   Solid</b>									
610231◇	12	2	BK,WE	0.080	Solid	20	0.501	39	108
553270◇	12	2	BN,GY	0.080	Solid	20	0.501	39	108
610232◇	12	3	BK,RD,WE	0.080	Solid	20	0.524	59	136
553276◇	12	3	BN,GY,OE	0.080	Solid	20	0.524	59	136
610297◇	12	4	BK,RD,BE,WE	0.080	Solid	20	0.560	79	165
<b>10 AWG   Solid</b>									
610298◇	10	2	BK,WE	0.101	Solid	25	0.555	61	139
610299◇	10	3	BK,RD,WE	0.101	Solid	25	0.583	91	179
610300◇	10	4	BK,RD,BE,WE	0.101	Solid	25	0.626	122	222

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	Conductor Number	Min. Bend Radius	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/Kcmil		Inches	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
14 AWG   Solid							
14	2	3.3	2.631	3.170	0.058	20	25
14	3	3.4	2.631	3.170	0.058	20	25
14	4	3.6	2.631	3.170	0.058	16	20
12 AWG   Solid							
12	2	3.5	1.662	2.002	0.054	25	30
12	2	3.5	1.662	2.002	0.054	25	30
12	3	3.7	1.662	2.002	0.054	25	30
12	3	3.7	1.662	2.002	0.054	25	30
12	4	3.9	1.662	2.002	0.054	20	24
10 AWG   Solid							
10	2	3.9	1.040	1.253	0.050	35	40
10	3	4.1	1.040	1.253	0.050	35	40
10	4	4.4	1.040	1.253	0.050	28	32

\* 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.

\* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

