Duraclad® Type AC THHN/THWN Intermediate Size Copper Conductor 120/208V Colors

8 AWG through 2 AWG THHN/THWN Insulated Singles Wrapped in Moisture-Resistant, Flame-Retardant Paper. 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Galvanized Steel Interlocking Armor.

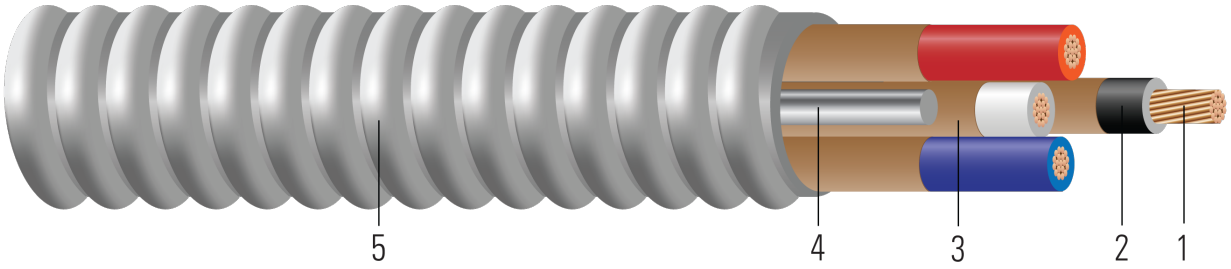

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN
3. **Bond Wire:** Solid #16 AWG aluminum
4. **Binder:** Moisture-resistant, flame-retardant paper covering
5. **Armor:** Galvanized Steel Interlocking 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 90ºC 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)
- 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-THHN ST ARMOR COPPER THHN CONDUCTORS W/ ALUMINUM BOND WIRE MAXIMUM VOLTS 600V ,FOR USE IN CABLE TRAYS-90(D) C - DRY LOCATIONS(AL.BOND WIRE)

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
553369◊	8	2	BK,WE	0.143	19	35	0.695	101	360
552784◊	8	3	BK,RD,WE	0.143	19	35	0.828	152	540
553371◊	8	4	BK,RD,BE,WE	0.143	19	35	0.888	203	635
553367◊	6	2	BK,WE	0.179	19	35	0.862	162	567
552759◊	6	3	BK,RD,WE	0.179	19	35	0.905	243	694
553368◊	6	4	BK,RD,BE,WE	0.179	19	35	0.975	324	828
552803◊	4	3	BK,RD,WE	0.226	19	50	1.054	386	940
553366◊	4	4	BK,RD,BE,WE	0.226	19	50	1.142	515	1132
552793◊	2	3	BK,RD,WE	0.286	19	50	1.184	614	1256
553365◊	2	4	BK,RD,BE,WE	0.286	19	50	1.286	819	1557

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	Conductor Number	Min. Bend Radius	Max Pull Tension	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	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
8	2	4.8	264	0.653	0.786	0.052	50	55
8	3	5.7	396	0.653	0.786	0.052	50	55
8	4	6.1	422	0.653	0.786	0.052	40	44
6	2	6.0	419	0.411	0.495	0.051	65	75
6	3	6.3	629	0.411	0.495	0.051	65	75
6	4	6.8	671	0.411	0.495	0.051	52	60
4	3	7.4	1001	0.258	0.310	0.048	85	95
4	4	8.0	1068	0.258	0.310	0.048	68	76
2	3	8.3	1592	0.162	0.195	0.045	115	130
2	4	9.0	1698	0.162	0.195	0.045	92	104

***** 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.