



UF-B Copper Cable

Underground Feeder and Branch-Circuit Cable. 600 Volt. Copper Conductors. PVC Insulation/Nylon Sheath. Sunlight, Moisture, and Fungus Resistant Overall PVC Jacket.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

- Conductor:** Solid soft drawn bare copper per ASTM B3 or class B compressed stranded soft drawn bare copper per ASTM B8
- Insulation:** All phases and neutral are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath
- Ground:** Solid soft drawn bare copper
- Jacket:** Gray Polyvinyl Chloride (PVC) jacket. Sunlight, moisture and fungus resistant.

APPLICATIONS AND FEATURES:

Southwire® copper UF-B cable is generally used as a feeder to outside post lamps, pumps, and other loads or apparatuses fed from a distribution point in an existing building as specified in the National Electrical Code®. UF-B cable may be used underground, including direct burial. Multiple conductor UF-B cable may be used for interior branch circuit wiring in residential or agricultural buildings at conductor temperatures not to exceed 90°C (with ampacity limited to that for 60°C conductors) as specified by the National Electrical Code. UF-B can be used in applications permitted for NMC in Section 334.10(B) of the National Electrical Code. Voltage rating for UF-B cable is 600 volts.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 493 Thermoplastic-Insulated Underground Feeder and Branch-Circuit Cables
- RoHS-2 (European Directive 2011/65/EU)
- NEC National Electrical Code NFPA 70

SAMPLE PRINT LEGEND:

SOUTHWIRE E30445 (UL) XX AWG CU X CDR WITH XX AWG GROUND TYPE UF-B 600 VOLTS SUNLIGHT RESISTANT

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Jacket Thickness	Approx. OD	Copper Weight	Overall Weight
	AWG/Kcmil		inch		mils	No. x AWG	mil	inch	lbs/1000ft	lbs/1000ft
10 AWG Solid										
130591◇	10	3	0.101	Solid	25	1x10	30	0.215x0.727	122	190

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	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
10 AWG Solid								
10	3	2.9	249	1.040	1.253	0.050	35	40

* Ampacities based upon 2023 NEC section 340.80 and Table 310.16. See Also NEC section 310.15 for additional requirements.

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