



Copper UF-B Cable

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

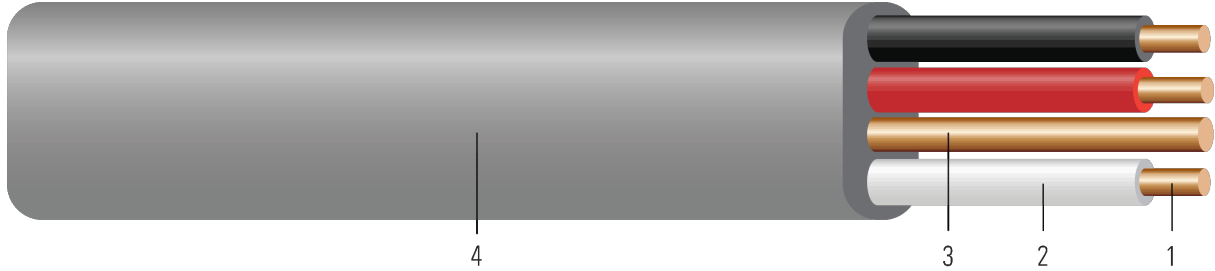


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid soft drawn bare copper per ASTM B3 or class B compressed stranded soft drawn bare copper per ASTM B8
2. **Insulation:** All phases and neutral are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath
3. **Ground:** Solid soft drawn bare copper
4. **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
14 AWG Solid										
130542◇	14	2	0.064	Solid	20	1x14	30	0.168 X 0.423	37	70
130575◇	14	3	0.064	Solid	20	1x14	30	0.168 X 0.581	49	97
12 AWG Solid										
130492◇	12	2	0.080	Solid	20	None	30	0.183 X 0.386	39	71
130559◇	12	2	0.080	Solid	20	1x12	30	0.183 X 0.463	59	96
130526◇	12	3	0.080	Solid	20	None	30	0.183 X 0.581	59	109
130583◇	12	3	0.080	Solid	20	1x12	30	0.183 X 0.626	79	131
10 AWG Solid										
130567◇	10	2	0.101	Solid	25	1x10	30	0.215 X 0.518	91	138
130591◇	10	3	0.101	Solid	25	1x10	30	0.215 X 0.727	122	190
208587◇	8	2	0.141	7	35	1x10	45	0.302 X 0.678	132	222
147835◇	8	3	0.141	7	35	1x10	45	0.319 X 1.059	183	344
214692◇	6	2	0.177	7	35	1x10	45	0.338 X 0.770	192	303
147827◇	6	3	0.177	7	35	1x10	45	0.361 X 1.223	273	479

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
14 AWG Solid								
14	2	1.7	65	2.631	3.170	0.058	20	25
14	3	2.3	98	2.631	3.170	0.058	20	25
12 AWG Solid								
12	2	1.5	104	1.662	2.002	0.054	25	30
12	2	1.9	104	1.662	2.002	0.054	25	30
12	3	2.3	156	1.662	2.002	0.054	25	30
12	3	2.5	156	1.662	2.002	0.054	25	30
10 AWG Solid								
10	2	2.1	166	1.040	1.253	0.050	35	40
10	3	2.9	249	1.040	1.253	0.050	35	40
8	2	2.7	264	0.653	0.786	0.052	50	55
8	3	5.3	396	0.653	0.786	0.052	50	55
6	2	3.1	419	0.411	0.495	0.051	65	75
6	3	6.1	629	0.411	0.495	0.051	65	75

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

