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.

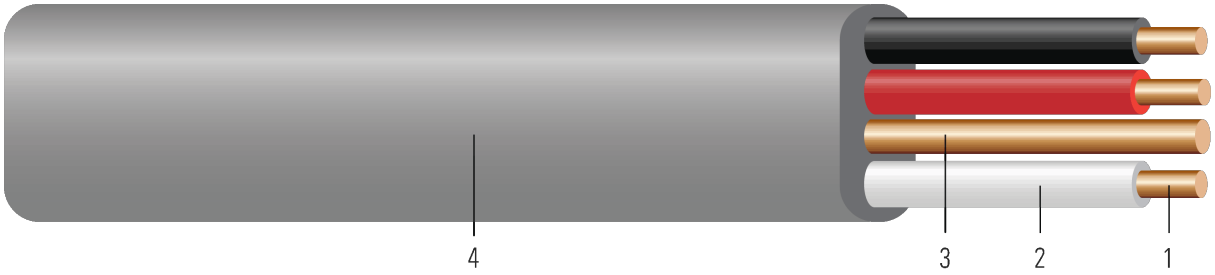

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

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	0.168x0.423	37	70
130575◊	14	3	0.064	Solid	20	1x14	30	0.168x0.581	49	97
12 AWG | Solid										
130492◊	12	2	0.080	Solid	20	None	30	0.183x0.386	39	71
130559◊	12	2	0.080	Solid	20	1x12	30	0.183x0.463	59	96
130526◊	12	3	0.080	Solid	20	None	30	0.183x0.581	59	109
130583◊	12	3	0.080	Solid	20	1x12	30	0.183x0.626	79	131
10 AWG | Solid										
130567◊	10	2	0.101	Solid	25	1x10	30	0.215x0.518	91	138
130591◊	10	3	0.101	Solid	25	1x10	30	0.215x0.727	122	190
208587◊	8	2	0.141	7	35	1x10	45	0.302x0.678	132	222
147835◊	8	3	0.141	7	35	1x10	45	0.319x1.059	183	344
214692◊	6	2	0.177	7	35	1x10	45	0.338x0.770	192	303
147827◊	6	3	0.177	7	35	1x10	45	0.361x1.223	273	479

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
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.

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