

SEU Copper Service Entrance

Copper Service Entrance Cable, Type SEU Service Entrance Cable, 600 Volt. Individual Conductors Rated XHHW-2 or THHN/THWN. Jacket and Individual Conductors Sunlight Resistant.



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** All phases are insulated with Cross Linked Polyethylene (XLPE) Type XHHW-2 or Polyvinyl Chloride with Nylon Sheath THHN/THWN
3. **Neutral:** Insulated bare soft annealed neutral
4. **Binder:** Reinforcement binder
5. **Jacket:** Gray Polyvinyl Chloride PVC jacket. Sunlight resistant.

APPLICATIONS AND FEATURES:

Southwire Type SEU, service entrance cable is primarily used to convey power from the service drop to the meter base and from the meter base to the distribution panelboard; however, the cable may be used in all applications where Type SE cable is permitted. SER may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating is 600 volts. SE cables are not permitted underground, with or without a raceway, per NEC 338.12(A)(2).

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 83 Thermoplastic Insulated Wires and Cables
- UL 854 Service Entrance Cable
- RoHS-2 (European Directive 2011/65/EU)
- **CE/RoHS-2 – The CE Marking has been applied solely to express the conformance to the material restrictions identified in the RoHS-2 (2011/65/EU) Directive**
- NEC National Electrical Code NFPA 70
- Federal Specification A-A-59544

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE{R} E32071 {UL} X CDR X AWG X CDR X AWG CU TYPE SE CABLE STYLE SEU TYPE XHHW-2 CDRS
600 VOLTS MADE IN USA





Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Num x Neutral 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										
130757◇	10	2	0.101	Solid	20	1x10	30	0.295x0.449	94	130
130765◇	8	2	0.141	7	30	1x8	30	0.392x0.608	156	216
130815◇	6	2	0.177	7	30	1x8	30	0.433x0.685	223	292
130773◇	6	2	0.177	7	30	1x6	30	0.433x0.685	253	322
130823◇	4	2	0.225	7	45	1x6	30	0.500x0.819	349	431
130781◇	4	2	0.225	7	45	1x4	30	0.529x0.848	411	495
130849◇	2	2	0.282	7	45	1x4	30	0.587x0.964	563	662
130807◇	2	2	0.282	7	45	1x2	30	0.599x0.976	639	738
218289◇	2/0	2	0.405	19	55	1x2/0	30	0.791x1.317	1294	1446

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

* Strand count meets minimum number per ASTM

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 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
10 AWG Solid									
10	2	1.3	166	1.040	1.253	0.050	30	35	40
8	2	1.9	264	0.653	0.786	0.052	40	50	55
6	2	2.2	419	0.411	0.495	0.051	55	65	75
6	2	2.2	419	0.411	0.495	0.051	55	65	75
4	2	2.5	667	0.258	0.310	0.048	70	85	95
4	2	2.5	667	0.258	0.310	0.048	70	85	95
2	2	3.0	1061	0.162	0.195	0.045	95	115	130
2	2	3.0	1061	0.162	0.195	0.045	95	115	130
2/0	2	5.2	2129	0.081	0.097	0.043	145	175	195

* 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.

