

Aluminum Service Entrance (SE) Cable Type SER. XHHW-2

Service Entrance Cable, Type SE. Style SER. Service Entrance Cable, 600 Volt. Individual Conductors Rated XHHW-2. Jacket and Individual Conductors Sunlight Resistant.

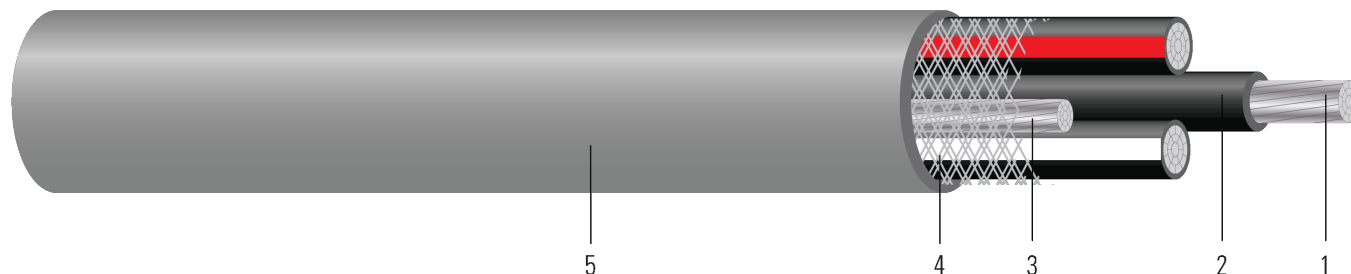


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded bare aluminum Alumaflex® per ASTM B800 and ASTM B801
2. **Insulation:** All phases are insulated with Cross Linked Polyethylene (XLPE) Type XHHW-2
3. **Neutral:** Bare soft annealed aluminum neutral
4. **Binder:** Reinforcement binder
5. **Jacket:** Gray Polyvinyl Chloride PVC jacket. Sunlight resistant.

APPLICATIONS AND FEATURES:

Southwire® Type SE, 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 B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- RoHS-2 (European Directive 2011/65/EU)
- NEC National Electrical Code NFPA 70
- Federal Specification A-A-59544

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE® E32071 {UL} 3 CDR XXX AWG 1 CDR XXX AWG COMPACT AL.--- {ALUMAFLEX}® AA8176 TYPE SE CABLE STYLE SER 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
277186◇	2	4	0.268	7	45	1x4	30	1.067	0	456
131052◇	2/0	3	0.376	19	55	1x1	30	1.277	0	659
327445◇	2/0	4	0.376	19	55	1x1	30	1.418	0	834
131060◇	3/0	3	0.422	19	55	1x1/0	30	1.391	0	801
131078◇	4/0	3	0.474	19	55	1x2/0	30	1.516	0	976
279968◇	4/0	4	0.474	19	55	1x2/0	30	1.685	0	1237
552504◇	250	3	0.52	35	65	1x3/0	30	1.673	0	1168
555869◇	250	4	0.52	35	65	1x3/0	30	1.861	0	1480

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
2	4	5.3	1592	0.267	0.321	0.045	60	72	80
2/0	3	6.3	2395	0.133	0.160	0.043	115	135	150
2/0	4	7.0	3194	0.133	0.160	0.043	92	108	120
3/0	3	6.9	3020	0.105	0.126	0.042	130	155	175
4/0	3	7.5	3808	0.084	0.100	0.041	150	180	205
4/0	4	8.4	5078	0.084	0.100	0.041	120	144	164
250	3	8.3	4500	0.071	0.086	0.041	170	205	230
250	4	9.3	6000	0.071	0.086	0.041	136	164	184

* 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.

Color Code

Conductor Number	Black	Black/White	Black/Red	Black/Blue
				
3	X	X	X	
4	X	X	X	X

