Aluminum Service Entrance (SE) Cable

Type SE, Style SER and SEU Service Entrance Cable. 600 Volt. Alumaflex® Brand Aluminum Alloy (AA-8176) Conductors. Individual Conductors Rated XHHW or THHN/THWN Jacket and Inner Conductors are Sunlight Resistant.

APPLICATIONS

Southwire Type SE, service entrance cable is used to convey power from the service drop to the meter base and from the meter base to the distribution panelboard; however, it may be used in all applications where Type SE cable is permitted. SE may be used in wet or dry above ground locations at temperatures not to exceed 90℃. The voltage rating is 600 volts.

STANDARDS & REFERENCES

Southwire Type SE cable complies with the following:

- ASTM- B-800 and B-801
- UL Standard 44 for XHHW-2
- UL Standard 83 for THHN/THWN-2
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70, 2011 Edition
- RoHS

CONSTRUCTION

Southwire Type SE cable is constructed with Alumaflex® AA-8000 series aluminum alloy, compacted stranded conductors. The conductors are covered with a sunlight resistant Type XHHW-2 or Type THHN/THWN-2-insulation. A reinforcement tape is wrapped around the conductors for added strength and conformity. A gray sunlight-resistant polyvinyl chloride (PVC) outer jacket covers the entire assembly. Style SEU cable has two phase conductors surrounded by a concentric neutral while the SER style has two, three or four phase conductors and a bare neutral.

Southwire Style SER Cable's phase conductors are identified by a colored stripe on the insulation.
3 conductor – Black and Black with Red Stripe
4 conductor – Black, Black with White Stripe and Black with Red Stripe
5 conductor – Black, Black with White Stripe, Black with Red Stripe and Black with Blue Stripe

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Conductor	Stranding		Nominal O.D. (Mils)	Allowable Ampacities				Approximate Net Weight Per 1000' (Lbs)	Standard Package
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor		60℃	75℃	90℃	Dwelling		
SER Aluminum Two-Conductor With Bare Ground (Formerly referred to as "EZ-SE")									
6-6-6	7	-	650	40	50	60	-	150	B
4-4-4	7	-	745	55	65	75	-	203	B
4-4-6	7	-	745	55	65	75	-	203	B
2-2-2	7	-	864	75	90	100	100	290	B
SER Aluminum Three Conductor With Bare Ground (Formerly referred to as "Four Conductor")									
8-8-8-8	1	1	612	30	40	45	-	136	B
6-6-6-6	7	7	717	40	50	60	-	196	B
4-4-4-6	7	7	823	55	65	75	-	252	B
2-2-2-4	7	7	956	75	90	100	100	359	B
1-1-1-3	8	7	1079	85	100	115	110	449	C
1/0-1/0-1/0-2	10	1	1168	100	120	135	125	540	C
2/0-2/0-2/0-1	12	1	1264	115	135	150	150	652	C
3/0-3/0-3/0-1/0	16	1	1371	130	155	175	175	786	C
4/0-4/0-4/0-2/0	19	1	1496	150	180	205	200	960	C
250-250-250-3/0	22	1	1839	170	205	230	225	1458	C
SER Aluminum Four Conductor With Bare Ground (Formerly referred to as "Five Conductor")									
2-2-2-2-4	6	7	1059	75	90	100	100	452	B
2/0-2/0-2/0-2/0-1	12	1	1404	115	135	150	150	827	C
4/0-4/0-4/0-4/0-2/0	19	1	1672	150	180	205	200	1228	C
250-250-250-250-3/0	22	1	1847	170	205	230	225		C

Conductor	Stranding		Nominal O.D. (Mils)	Allowable Ampacities				Approximate Net Weight Per 1000' (Lbs)	Standard Package
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor		60℃	75℃	90℃	Dwelling		
SEU Aluminum Two Conductor With Bare Conentric Ground (Formerly referred to as "Three Conductor")									
6-6-6	7	8	430x687	40	50	60	-	145	B,C,E
4-4-4	7	12	499x800	55	65	75	-	198	B
4-4-6	7	15	474x775	55	65	75	-	181	B
2-2-2	7	14	569x925	75	90	100	100	283	B,C,G
2-2-4	7	18	554x910	75	90	100	100	259	B,C,G
2/0-2/0-2/0	18	18	736x1221	115	135	150	150	514	C
2/0-2/0-1	18	14	720x1205	115	135	150	150	468	C
4/0-4/0-4/0	18	18	878x1462	150	180	205	205	765	C
4/0-4/0-2/0	18	18	835x1419	150	180	205	205	691	C

Table values reflect XHHW-2 conductors. Allowable ampacities shown are for general use as specified by the National Electrical Code, 2011 Edition, Section 310.15.
60℃ - When terminated to equipment for circuits rated 100 amperes or less or marked for 14 through 1 AWG conductors. See NEC Article 338.10 (B)(4).
75℃ - When terminated to equipment for circuits rated 100 amperes or marked for conductors larger than 1 AWG conductors. May not apply, see NEC Article 338.10 (B)(4).
90℃ - Wet or dry locations. For ampacity de-rating purposes.
Dwelling - For units, conductors shall be permitted at listed ampacities as 120/240-volt, 3-wire, single-phase services and feeders per NEC Article 310.15.
*For compact-stranded construction, the number of wires, as permitted by UL Standard 854 and ASTM B-801 may be reduced as follows: 19-wire constructions - 18 wires minimum.

Package Codes:
B - 1,000'
C- 500'
E-250'
G-200'

RECOMMENDED SAMPLE SPECIFICATIONS:
SER Sample Specification: Cable shall be UL-listed Type SE, Style SER, suitable for operation at 600 volts or less as specified in the National Electrical Code. Conductors shall be AlumaFlex TM aluminum alloy, weather resistant PVC jacketed, as manufactured by Southwire Company or approved equal. SEU Sample Specification: Cable shall be UL-listed Type SE, Style SEU, suitable for operation at 600 volts or less as specified in the National Electrical Code. Conductors shall be AlumaFlex TM aluminum alloy, weather resistant PVC jacketed, as manufactured by Southwire Company or approved equal.

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Conductor	Stranding		
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor	Stock Numbers
SER Aluminum Two-Conductor With Bare Ground (Formerly referred to as "EZ-SE")			
6-6-6	7	-	**Stock #: 326678**
4-4-4	7	-	**Stock #: 326660**
4-4-6	7	-	**Stock #: 552500**
2-2-2	7	-	**Stock #: N/A**
SER Aluminum Three Conductor With Bare Ground (Formerly referred to as "Four Conductor")			
8-8-8-8	1	1	**Stock #: 130989**
6-6-6-6	7	7	**Stock #: 130997 (T), 592331 (X)**
4-4-4-6	7	7	**Stock #: 131003**
2-2-2-4	7	7	**Stock #: 131029**
1-1-1-3	8	7	**Stock #: 131037**
1/0-1/0-1/0-2	10	1	**Stock #: 131045**
2/0-2/0-2/0-1	12	1	**Stock #: 131052**
3/0-3/0-3/0-1/0	16	1	**Stock #: 131060**
4/0-4/0-4/0-2/0	19	1	**Stock #: 131078**
250-250-250-3/0	22	1	**Stock #: 552504**
SER Aluminum Four Conductor With Bare Ground (Formerly referred to as "Five Conductor")			
2-2-2-2-4	6	7	**Stock #: 277186**
2/0-2/0-2/0-2/0-1	12	1	**Stock #: 327445**
4/0-4/0-4/0-4/0-2/0	19	1	**Stock #: 279968**
250-250-250-250-3/0	22	1	**Stock #: 555869**

Conductor	Stranding		
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor	Stock Numbers
SEU Aluminum Two Conductor With Bare Conentric Ground (Formerly referred to as "Three Conductor")			
6-6-6	7	8	**Stock #: 130864**
4-4-4	7	12	**Stock #: 130872**
4-4-6	7	15	**Stock #: 130948**
2-2-2	7	14	**Stock #: 130880**
2-2-4	7	18	**Stock #: 130955**
2/0-2/0-2/0	18	18	**Stock #: 130914**
2/0-2/0-1	18	14	**Stock #: 130963**
4/0-4/0-4/0	18	18	**Stock #: 130930**
4/0-4/0-2/0	18	18	**Stock #: 130971**

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APPLICATIONS

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STANDARDS & REFERENCES

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Southwire Type SE cable is constructed with Alumaflex® AA-8000 series aluminum alloy, compacted stranded conductors. The conductors are covered with a sunlight resistant Type XHHW-2 or Type THHN/THWN-2-insulation. A reinforcement tape is wrapped around the conductors for added strength and conformity. A gray sunlight-resistant polyvinyl chloride (PVC) outer jacket covers the entire assembly. Style SEU cable has two phase conductors surrounded by a concentric neutral while the SER style has two, three or four phase conductors and a bare neutral.

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SER Aluminum Two-Conductor With Bare Ground (Formerly referred to as "EZ-SE")									
6-6-6	7	-	650	40	50	60	-	150	B
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4-4-6	7	-	**Stock #: 552500**
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4/0-4/0-4/0-4/0-2/0	19	1	**Stock #: 279968**
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Conductor	Stranding		
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor	Stock Numbers
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4-4-4	7	12	**Stock #: 130872**
4-4-6	7	15	**Stock #: 130948**
2-2-2	7	14	**Stock #: 130880**
2-2-4	7	18	**Stock #: 130955**
2/0-2/0-2/0	18	18	**Stock #: 130914**
2/0-2/0-1	18	14	**Stock #: 130963**
4/0-4/0-4/0	18	18	**Stock #: 130930**
4/0-4/0-2/0	18	18	**Stock #: 130971**

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