Copper Service Entrance (SE) Cable

Service Entrance Cable, Type SE, Style SER and SE Stype U. Service Entrance Cable, 600 Volt. Individual Conductors Rated XHHW-2 or THHN/THWN. Jacket and Individual Conductors Sunlight Resistant.

APPLICATIONS

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.

STANDARDS & REFERENCES

Southwire® Type SE cable complies with:

- ASTM- All applicable standards
- UL Standard 44 for XHHW-2 conductors
- UL Standard 83 for THHN/THWN conductors
- UL Standard 854
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70. 2011 Edition
- RoHS/ REACH

CONSTRUCTION

Southwire® Type SE cable is constructed with sunlight resistant Type XHHW-2 conductors or Type THHN/THWN conductors. Copper conductors are annealed (soft) copper. Cable assembly plus reinforcement tape are jacketed with sunlight resistant gray polyvinyl chloride (PVC). Available as 1 conductor with a concentric ground, 2 conductor with a round or concentric ground, or 3 conductor with a bare ground. SE cable is jacketed with gray sunlight resistant polyvinyl chloride (PVC).





Conductor	Stranding				Allowable	Ampacitie	S	Approximat	
Size/Const. AWG or kcmil	Phase Conductor & Neutral	Equipment Ground Conductor	Nominal O.D. (Mils)	60°C	75°C	90 <i>°</i> C	Dwelling	e Net	Standard Package
SER Two Conductor With Bare Contentric Ground (Formerly referred to as "Three Conductor")									
8-8-8	7		586	40	50	55		231	В
6-6-6	7		669	55	65	75		338	В
4-4-4	7		764	70	85	95	100	498	В
3-3-3	7		829	85	100	110	110	611	В
2-2-2	7		896	95	115	130	125	752	В
1-1-1	19		1021	110	130	150	150	948	С
1/0-1/0-1/0	19		1114	125	150	170	175	1169	С
2/0-2/0-2/0	19		1209	145	175	195	200	1444	С
3/0-3/0-3/0	19		1317	165	200	225	225	1792	С
4/0-4/0-4/0	19		1438	195	230	260	250	2226	С
SER Three Conductor With Bare Ground (Formerly referred to as "Four Conductor")									
8-8-8-8	7	7	645	40	50	55		286	В
6-6-6-6	7	7	738	55	65	75		424	В
4-4-4-6	7	7	844	70	85	95	100	585	В
3-3-3-5	7	7	910	85	100	110	110	719	В
2-2-2-4	7	7	984	95	115	130	125	887	В
1-1-1-3	19	7	1132	110	130	150	150	1117	С
1/0-1/0-1/0-2	19	19	1235	125	150	170	175	1382	С
2/0-2/0-2/0-1	19	19	1342	145	175	195	200	1713	С
3/0-3/0-3/0-1/0	19	19	1462	165	200	225	225	2129	С
4/0-4/0-2/0	19	19	1598	195	230	260	250	2650	С
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 and 240.4(D). Unless the is marked for use at higher temperatures the conductor ampacities shall be limited to the following per NEC 110.14(C) 60 °C When terminated to equipment for circuits rated 100 amperes or less or marked for 14 - 1 AWG conductors. 75 °C When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90 °C XHHW wet or Dry locations for ampacity adjustment purposes using NEC section 310.15 For dwelling ampacity use section 310.15(B)(7)							Package Code: A-250' B-500' C-1,000' D-100' E- 150'		



Conductor	Stranding			Allowable Ampacities A			Approximate		
Size/Const.	Phase	Equipment	Nominal O.D.					Net Weight	Standard
AWG or kcmil	Conductor	Ground	(Mils)	60 <i>°</i> C	75°C	90 <i>°</i> C	Dwelling		Package
	& Neutral	Conductor						(Lbs)	
SEU Two Conductor With Bare Concentric Ground (Formerly referred to as "Three Conductor")									
10-10-10	1	12	428 X 283	30	30	30		127	ABC
8-8-8	7	8	587 X 380	40	50	60		211	ABC
6-6-6	7	12	659 X 416	55	65	75		308	BCE
4-4-4	7	12	815 X 506	70	85	95	100	471	BCE
3-3-3	7	12	883 X 548	85	100	110	110	583	В
2-2-2	7	15	994 X 578	95	115	130	125	718	BD
1-1-1	19	14	1093 X 664	110	130	150	150	904	В
1/0-1/0-1/0	19	18	1179 X 707	125	150	170	175	1123	BC
2/0-2/0-2/0	19	18	1283 X 767	145	175	195	200	1379	BC
3/0-3/0-3/0	19	14	1429 X 862	165	200	225	225	1712	BD
4/0-4/0-4/0	19	18	1541 X 918	195	230	260	250	2146	BC
SEU Two C	onductor Wi	th Bare Cond	entric Ground (Formerly	referred to	o as "Thre	e Conduct	tor") (Reduced	d Neutral)
6-6-8	7	8	659 X 416	55	65	75		281	BC
4-4-6	7	12	790 X 481	70	85	95	100	420	BC
3-3-5	7	15	843 X 508	85	100	110	110	515	BC
2-2-4	7	12	929 X 563	95	115	130	125	639	BC
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 and 240.4(D). Unless the is marked for use at higher temperatures the conductor ampacities shall be limited to the following per NEC 110.14(C) 60 °C When terminated to equipment for circuits rated 100 amperes or less or marked for 14 - 1 AWG conductors. 75 °C When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90 °C XHHW wet or Dry locations for ampacity adjustment purposes using NEC section 310.15 For dwelling ampacity use section 310.15(B)(7)								Package Code: A-250' B-500' C-1,000' D-100' E- 150'	

RECOMMENDED SAMPLE SPECIFICATIONS:

Cable shall be UL-listed Type SE, suitable for operation at 600 volts. Conductors shall be annealed copper, weather resistant PVC jacketed, as manufactured by Southwire Company or approved equal.



Conductor	Stranding						
Size/Const. AWG or kcmil	Phase Conduct or & Neutral	Equipment Ground Conductor	Stock Numbers				
SER Two Conductor With Bare Contentric Ground (Formerly referred to as "Three Conducto							
8-8-8	7		Stock #: N/A				
6-6-6	7		Stock #: N/A				
4-4-4	7		Stock #: N/A				
3-3-3	7		Stock #: N/A				
2-2-2	7		Stock #: N/A				
1-1-1	19		Stock #: N/A				
1/0-1/0-1/0	19		Stock #: N/A				
2/0-2/0-2/0	19		Stock #: N/A				
3/0-3/0-3/0	19		Stock #: N/A				
4/0-4/0-4/0	19		Stock #: N/A				
SER Thre	SER Three Conductor With Bare Ground (Formerly referred to as "Four Conductor")						
8-8-8-8	7	7	Stock #: N/A				
6-6-6-6	7	7	Stock #: 281642				
4-4-4-6	7	7	Stock #: 263483				
3-3-3-5	7	7	Stock #: 277574				
2-2-2-4	7	7	Stock #: 267013				
1-1-1-3	19	7	Stock #: 270827				
1/0-1/0-1/0-2	19	19	Stock #: 277558				
2/0-2/0-2/0-1	19	19	Stock #: 270835				
3/0-3/0-3/0-1/0	19	19	Stock #: 270843				
4/0-4/0-2/0	19	19	Stock #: 640359				

Conductor	Stranding					
Size/Const. AWG or kcmil	Phase Conductor & Neutral		Stock Numbers			
SEU Two Conductor With Bare Concentric Ground (Formerly referred to as "Three Conductor")						
10-10-10	1	12	Stock #: 130757			
8-8-8	7	8	Stock #: 130765			
6-6-6	7	12	Stock #: 130773			
4-4-4	7	12	Stock #: 130781			
3-3-3	7	12	Stock #: 130799			
2-2-2	7	15	Stock #: 130807			
1-1-1	19	14	Stock #: 218263			
1/0-1/0-1/0	19	18	Stock #: 218271			
2/0-2/0-2/0	19	18	Stock #: 218289			
3/0-3/0-3/0	19	14	Stock #: 218297			
4/0-4/0-4/0	19	18	Stock #: 218305			
SEU Two Conductor With Bare Concentric Ground (Formerly referred to as "Three Conductor") (Reduced Neutral)						
6-6-8	7	8	Stock #: 130815			
4-4-6	7	12	Stock #: 130823			
3-3-5	7	15	Stock #: 130831			
2-2-4	7	12	Stock #: 130849			

