

Copper Silicone-Free RHH/RHW-2/USE-2

600 Volts. Underground Service Entrance Cable. Copper Conductors. Cross-Linked Polyethylene (XLP) Insulation. High-Heat, Moisture, and Sunlight Resistant.

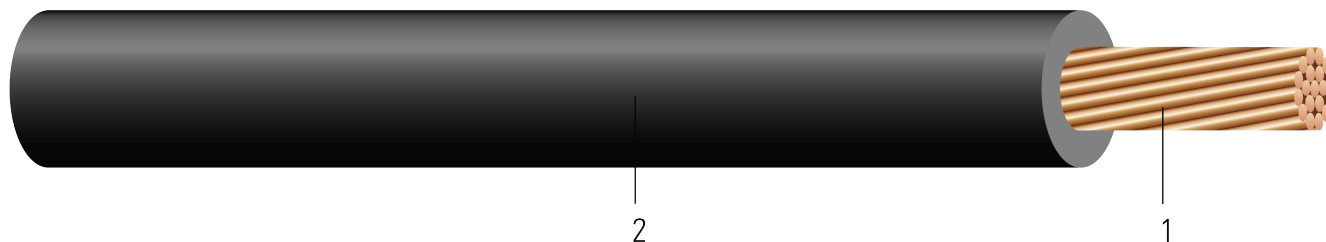


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free

APPLICATIONS AND FEATURES:

Southwire's 600 Volt power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- RoHS-2 (European Directive 2011/65/EU)

SAMPLE PRINT LEGEND:

{SQFTG} SOUTHWIRE E32071 {UL} XXX AWG (XX.X{mm²}) CU TYPE USE-2 OR RHH OR RHW-2 OR SIS XX MILS XLP 600 VOLTS



Table 1 – Weights and Measurements

Cond. Size AWG/Kcmil	Strand Count No. of Strands	Diameter Over Conductor inch	Insul. Thickness mil	Approx. OD inch	Copper Weight lb/1000ft	Approx. Weight lb/1000ft
14	7	0.071	45	0.161	12	20
12	7	0.089	45	0.179	20	28
10	7	0.113	45	0.203	32	42
8	7	0.142	60	0.259	95	67
6	7	0.178	60	0.304	81	109
4	7	0.225	60	0.345	128	153
2	7	0.283	60	0.403	205	244
1	19	0.322	80	0.481	258	304
1/0	19	0.362	80	0.522	325	390
2/0	19	0.405	80	0.564	410	481
3/0	19	0.456	80	0.616	518	598
4/0	19	0.512	80	0.672	653	742
250	37	0.558	95	0.748	771	884
300	37	0.611	95	0.801	926	1023
350	37	0.661	95	0.851	1081	1213
400	37	0.706	95	0.896	1235	1345
500	37	0.789	95	0.956	1544	1696
600	61	0.866	110	1.085	1853	2028
750	61	0.968	110	1.188	2316	2534
1000	61	1.117	110	1.337	3088	3283

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item



Table 2 – Electrical and Engineering Data

Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
14	0.6	32	2.631	3.170	0.058	15	20	25
12	0.7	52	1.662	2.002	0.054	20	25	30
10	0.8	83	1.040	1.253	0.050	30	35	40
8	1.0	132	0.653	0.786	0.052	40	50	55
6	1.2	209	0.411	0.495	0.051	55	65	75
4	1.3	333	0.258	0.310	0.048	70	85	95
2	1.6	530	0.162	0.195	0.045	95	115	130
1	1.9	669	0.128	0.154	0.046	110	130	145
1/0	2.0	844	0.102	0.122	0.044	125	150	170
2/0	2.2	1064	0.081	0.097	0.043	145	175	195
3/0	2.4	1342	0.064	0.078	0.042	165	200	225
4/0	2.6	1692	0.051	0.062	0.041	195	230	260
250	2.9	2000	0.043	0.053	0.041	215	255	290
300	3.2	2400	0.036	0.045	0.041	240	285	320
350	3.4	2800	0.031	0.039	0.040	260	310	350
400	3.5	3200	0.027	0.035	0.040	280	335	380
500	3.8	4000	0.022	0.029	0.039	320	380	430
600	5.4	4800	0.018	0.025	0.039	350	420	475
750	5.9	6000	0.014	0.022	0.038	400	475	535
1000	6.6	8000	0.011	0.018	0.037	455	545	615

* 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.

* Inductive Reactance is based on non-ferrous conduit with one diameter spacing.



Stock Code Colors

Size	Black	Brown	Orange	Yellow	Grey	White	Red	Blue	Green
									
14	890700								
12	113431								678573
10	113449					563196	890146		953539
8	113456					643957	952689	588683	655993
6	113464					640110	952671	959726	640128
4	113472		588746			476565	476549	643577	952663
2	113498					476523	476531	643544	958009
1	113506								
1/0	113514					643973			
2/0	113522						666096		591255
3/0	113530								
4/0	113548								587561
250	113555								
300	113563								
350	113571						666097		
400	113589								
500	113597	580165	580166	580168	580169		678973		
600	113605								
750	113613								
1000	113647								

