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

USE-2 600 Volts or RHH/RHW-2 1000 Volts. Underground Service Entrance Cable. Copper Conductors. Cross-Linked Polyethylene (XLP) Insulation. High Heat, Moisture and Abrasion Resistant

See Table 3 For Other Color Options

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Bare copper per ASTM B3. Stranding is either Class B compressed per ASTM B8 or combination unilay per ASTM B787
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free, High Heat, Moisture and Abrasion Resistant

APPLICATIONS AND FEATURES:

Southwire's USE-2 600 Volts or RHH/RHW-2 1000 Volts 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
- ASTM B787 19 Wire Combination Unilay-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 600V OR RHH OR RHW-2 1000V XX MILS XLP 90C

Table 1 – Weights and Measurements

Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Insulation Color	Approx. OD	Copper Weight	Approx. Weight
AWG/Kcmil	No. of Strands	inch	mil		inch	lb/1000ft	lb/1000ft
14	7	0.070	45	BK	0.161	12	20
12	Solid	0.080	45	BK	0.174	19	28
12	7	0.088	45	BK	0.179	20	28
10	7	0.113	45	BK	0.203	32	42
8	7	0.141	60	BK	0.259	95	67
6	7	0.177	60	BN	0.300	81	102
4	7	0.225	60	BK	0.345	128	153
3	7	0.252	60	BK	0.378	162	191
2	7	0.282	60	WE	0.403	205	244
1	19	0.322	80	BK	0.481	258	304
1/0	19	0.361	80	BK	0.522	325	390
2/0	19	0.405	80	GN	0.564	410	481
3/0	19	0.456	80	BK	0.616	518	598
4/0	19	0.512	80	GN	0.672	653	742
250	37	0.558	95	BK	0.748	771	884
300	37	0.610	95	BK	0.801	926	1023
350	37	0.661	95	BK	0.851	1081	1213
400	37	0.705	95	BK	0.896	1235	1345
500	37	0.789	95	BN	0.956	1544	1696
600	61	0.865	110	YW	1.085	1853	2028
750	61	0.968	110	GN	1.171	2315	2492
1000	61	1.117	110	BK	1.337	3088	3283

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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 75°C	Allowable Ampacity At 90°C
AWG/ Kcmil	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
14	0.6	32	2.631	3.170	0.058	20	25
12	0.7	52	1.662	2.002	0.054	25	30
12	0.7	52	1.662	2.002	0.054	25	30
10	0.8	83	1.040	1.253	0.050	35	40
8	1.0	132	0.653	0.786	0.052	50	55
6	1.2	209	0.411	0.495	0.051	65	75
4	1.4	333	0.258	0.310	0.048	85	95
3	1.5	420	0.205	0.246	0.047	100	115
2	1.6	530	0.162	0.195	0.045	115	130
1	1.9	669	0.128	0.154	0.046	130	145
1/0	2.1	844	0.102	0.122	0.044	150	170
2/0	2.3	1064	0.081	0.097	0.043	175	195
3/0	2.5	1342	0.064	0.078	0.042	200	225
4/0	2.7	1692	0.051	0.062	0.041	230	260
250	3.0	2000	0.043	0.053	0.041	255	290
300	3.2	2400	0.036	0.045	0.041	285	320
350	3.4	2800	0.031	0.039	0.040	310	350
400	3.6	3200	0.027	0.035	0.040	335	380
500	3.8	4000	0.022	0.029	0.039	380	430
600	5.4	4800	0.018	0.025	0.039	420	475
750	5.9	6000	0.014	0.022	0.038	475	535
1000	6.7	8000	0.011	0.018	0.037	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 center-to-center.

Table 3 - Stock Code Colors

Size (Strand)	Black	Red	Blue	White	Brown	Orange	Yellow	Gray	Green	Purple
12 (Solid)	113399									
12 (7)	113431									
10 (7)	113449			645838						
8 (7)	113456	952689	588683	643957					655993	
6 (7)	113464	620685	959726	640110	646503	646504	646506	646507	640128	
4 (7)	113472	476549	643577	476565		588746	588747		952663	
3 (7)	113480								587189	
2 (7)	113498	476531	643544	476523	620746	616347	616346	620747	958009	
1 (19)	113506				647620	647621	647622			
1/0 (19)	113514			643973						
2/0 (19)	113522	666096							591255	
3/0 (19)	113530									
4/0 (19)	113548	647337	647338	564225						
250 (37)	113555									
300 (37)	113563									
350 (37)	113571	666097								
400 (37)	113589									
500 (37)	113597	678973		678974	580165	580166	580168	580169		139530
600 (61)	113605				139369	139370	139371			
750 (61)	113613				139351	139352	139353		139354	
1000 (61)	113647									

Award Winning Patent Pending Building Wire Selector