



RHH/RHW/USE-2 Aluminum with AlumaFlex® Brand Conductors Silicone-Free

USE-2 600 Volts or RHH/RHW-2 1000 Volts. Underground Service Entrance Cable. AlumaFlex® Brand Aluminum Alloy (AA-8176) Conductor. Cross-linked Polyethylene (XLP) Insulation. High Heat, Moisture and Abrasion Resistant

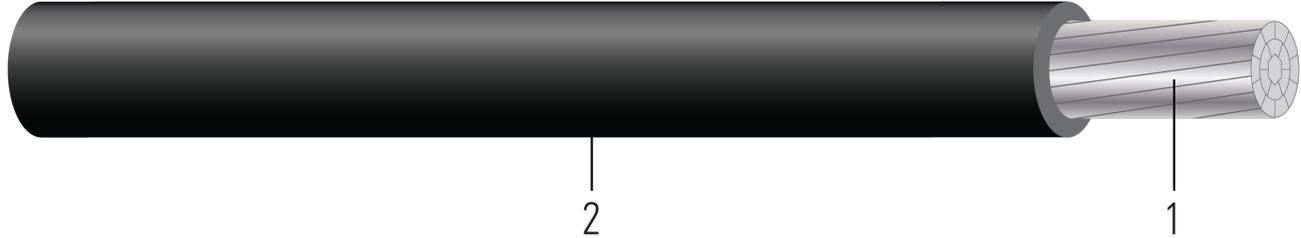


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded bare aluminum per ASTM B800 and ASTM B801 or Single Input Wire (SIW) Compact AL per ASTM B836
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 B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum 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 COMPACT AL. --- {ALUMAFLEX}® AA8176 TYPE USE-2 600V OR RHH OR RHW-2 1000V XX MILS XLP 90C





Table 1 – Weights and Measurements

Cond. Size AWG/Kcmil	Strand Count No. of Strands	Diameter Over Conductor inch	Insul. Thickness mil	Insulation Color	Approx. OD inch	Aluminum Weight lb/1000ft	Approx. Weight lb/1000ft
6	7	0.169	60	BK	0.295	24	46
4	7	0.212	60	RD	0.339	39	65
2	6	0.268	60	BK	0.394	62	93
1	8	0.298	80	BK	0.467	78	126
1/0	10	0.336	80	BK	0.504	99	151
2/0	12	0.376	80	BK	0.544	125	182
3/0	15	0.422	80	BK	0.591	158	221
4/0	19	0.474	80	BK	0.643	199	269
250	22	0.520	95	BK	0.720	235	321
300	35	0.569	95	BK	0.770	282	381
350	35	0.615	95	BK	0.816	329	435
400	35	0.659	95	BK	0.859	376	490
500	34	0.735	95	BK	0.938	471	601
600	58	0.812	110	BK	1.037	565	724
700	58	0.877	110	BK	1.157	659	925
750	61	0.908	110	BK	1.140	706	884

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

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 AWG/ Kcmil	Min Bending Radius inch	Max Pull Tension lb	DC Resistance @ 25°C Ω/1000ft	AC Resistance @ 75°C Ω/1000ft	Inductive Reactance @ 60Hz Ω/1000ft	Allowable Ampacity At 75°C Amp	Allowable Ampacity At 90°C Amp
6	1.2	157	0.674	0.812	0.051	50	55
4	1.4	250	0.424	0.510	0.048	65	75
2	1.6	398	0.267	0.321	0.045	90	100
1	1.9	502	0.211	0.254	0.046	100	115
1/0	2.0	633	0.168	0.201	0.044	120	135
2/0	2.2	798	0.133	0.160	0.043	135	150
3/0	2.4	1006	0.105	0.126	0.042	155	175
4/0	2.6	1269	0.084	0.100	0.041	180	205
250	2.9	1500	0.071	0.086	0.041	205	230
300	3.1	1800	0.059	0.071	0.041	230	260
350	3.3	2100	0.050	0.062	0.040	250	280
400	3.4	2400	0.044	0.054	0.040	270	305
500	3.8	3000	0.035	0.044	0.039	310	350
600	5.2	3600	0.029	0.037	0.039	340	385
700	5.8	4200	0.025	0.033	0.038	375	425
750	5.7	4500	0.024	0.031	0.038	385	435





† 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.

† Ampacities have been adjusted for more than Three Current-Carrying Conductors.

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

Stock Code Colors

Size (Strand)	Black	White	Brown	Orange	Yellow	Green
6 (7)	272799					301572
4 (7)	272807					334680
2 (6)	272823	575240				
1 (8)	272831					
1/0 (10)	272849					
2/0 (12)	272856					
3/0 (15)	272864					
4/0 (19)	272872					
250 (22)	272880					
300 (35)	272898					
350 (35)	272906		138190	138191	138192	
400 (35)	272914					
500 (34)	272922					
600 (58)	272930		138205	560671	138206	
750 (61)	272955					

Award Winning Patent
Pending Building Wire
Selector

