

1/C AL 600V XLPE RHH/RHW-2 USE-2 Power Cable

Power Cable 600Volt Single Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation RHH/RHW-2 USE-2



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B836
2. **Insulation:** Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2

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. For uses in Class I, II, and III, Division 2 hazardous locations per NEC Article 501 and 502.

SPECIFICATIONS:

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE EXXXXX #P# (UL) [#AWG Or #kcmil] AL RHH/RHW-2 USE-2 XLPE 600V For CT USE SUN. RES. For DIRECT BURIAL FT4 VW-1YEAR (NESC) [SEQUENTIAL FEET MARKS]



Table 1 – Weights and Measurements

Stock Number	Cond. Size	Diameter Over Conductor	Insul. Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil	inch	mil	inch	lb/1000ft	lb/1000ft
576142	1/0	0.336	80	0.496	99	155
578485	2/0	0.376	80	0.536	125	186
578486	3/0	0.423	80	0.583	158	225
575991	4/0	0.475	80	0.635	199	273
576787	250	0.520	95	0.710	235	332
575992	300	0.570	95	0.760	282	387
576137	350	0.616	95	0.806	329	441
567324	500	0.736	95	0.926	471	602
576141	600	0.813	110	1.033	565	734
576219	750	0.908	110	1.128	706	892
TBA	1000	1.060	110	1.280	941	1155

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 90°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
576142	1/0	2.0	634	0.168	0.211	0.031	100	120	135
578485	2/0	2.1	799	0.133	0.167	0.030	115	135	150
578486	3/0	2.3	1007	0.105	0.132	0.029	130	155	175
575991	4/0	2.5	1270	0.084	0.105	0.028	150	180	205
576787	250	2.8	1500	0.071	0.089	0.029	170	205	230
575992	300	3.0	1800	0.059	0.075	0.028	195	230	260
576137	350	3.2	2100	0.051	0.064	0.028	210	250	280
567324	500	3.7	3000	0.035	0.045	0.027	260	310	350
576141	600	5.2	3600	0.030	0.038	0.027	285	340	385
576219	750	5.6	4500	0.024	0.031	0.027	320	385	435
TBA	1000	6.4	6000	0.018	0.024	0.026	375	445	500

† Ampacities are based on Table 310.16 of the NEC 2020 Edition. Ampacities of insulated conductors rated up to and including 2000 Volts with not more than three current-carrying conductors in raceway, cable or direct buried based on ambient temperature of 30°C (86°F).

