AL 600V XLPE Insulation RHH/RHW-2/USE-2. CT Rated - Sunlight Resistant - Silicone Free

Power Cable 600Volt Single Conductor Aluminum, Cross Linked Polyethylene (XLPE) insulation RHH/RHW-2/USE-2. CT Rated 1/0 and Larger - Sunlight Resistant - For Direct Burial - Silicone Free

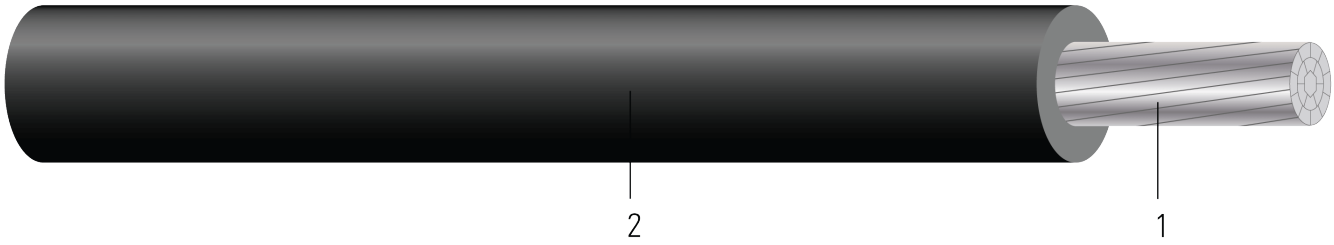


Image not to scale. See Table 1 for dimensions.

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. CT Rated 1/0 and Larger - Sunlight Resistant - For Direct Burial - Silicone Free

SPECIFICATIONS:

- 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 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
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify "Made in the USA Only!" when ordering to ensure your project receives American made products.
- 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]

Copyright © 2024 Southwire Company, LLC. All Rights Reserved

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Approx. OD	Aluminum Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil	inch	lb/1000ft	lb/1000ft
272799	6	7	0.169	60	0.295	24	46
272807	4	7	0.212	60	0.339	39	66
272823	2	6	0.268	60	0.394	62	93
272831	1	8	0.298	80	0.467	78	126
576142	1/0	10	0.336	80	0.504	99	165
272856	2/0	12	0.376	80	0.544	125	182
272864	3/0	15	0.422	80	0.591	158	221
575991	4/0	19	0.474	80	0.643	199	293
576787	250	35	0.520	95	0.720	235	357
575992	300	35	0.569	95	0.770	282	402
576137	350	35	0.615	95	0.816	329	471
272914	400	35	0.659	95	0.859	376	489
567324	500	35	0.735	95	0.936	471	630
576141	600	58	0.812	110	1.037	565	756
596530	700	58	0.877	110	1.157	659	924
576219	750	58	0.908	110	1.140	706	936
TBA	900	58	0.999	110	1.219	847	1046
TBA	1000	58	1.060	110	1.280	941	1151

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

Copyright © 2024 Southwire Company, LLC. All Rights Reserved

Table 2 – Electrical and Engineering Data

Stock Number	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
272799	6	1.1	157	0.674	0.812	0.051	40	50	55
272807	4	1.3	250	0.424	0.510	0.048	55	65	75
272823	2	1.5	398	0.267	0.321	0.045	75	90	100
272831	1	1.8	502	0.211	0.254	0.046	85	100	115
576142	1/0	2.0	633	0.168	0.201	0.044	100	120	135
272856	2/0	2.1	798	0.133	0.160	0.043	115	135	150
272864	3/0	2.3	1006	0.105	0.126	0.042	130	155	175
575991	4/0	2.5	1269	0.084	0.100	0.041	150	180	205
576787	250	2.8	1500	0.071	0.086	0.041	170	205	230
575992	300	3.0	1800	0.059	0.071	0.041	195	230	260
576137	350	3.2	2100	0.050	0.062	0.040	210	250	280
272914	400	3.4	2400	0.044	0.054	0.040	225	270	305
567324	500	3.7	3000	0.035	0.044	0.039	260	310	350
576141	600	5.1	3600	0.029	0.037	0.039	285	340	385
596530	700	5.7	4200	0.025	0.033	0.038	315	375	425
576219	750	5.7	4500	0.024	0.031	0.038	320	385	435
TBA	900	6.0	5400	0.020	0.027	0.037	355	425	480
TBA	1000	6.4	6000	0.018	0.025	0.037	375	445	500

* 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.