ROYAL GUARD™ CU 600V EPR Insulation Thermoset CPE-TS Jacket RHH/RHW-2. CT Rated - Sunlight Resistant - For Direct Burial - Silicone Free

Power Cable 600Volt Single Conductor Copper, Lead Free Ethylene Propylene Rubber (EPR) insulation RHH/RHW-2 USE-2 Cross-Linked/Thermoset Chlorinated Polyethylene (CPE-TS) Jacket. CT Rated 1/0 and Larger - For Direct Burial - Sunlight Resistant - Oil Resistant - Silicone Free



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded tinned copper per ASTM B33 and ASTM B8
2. **Binder Tape:** Mylar Tape
3. **Insulation:** Lead Free Ethylene Propylene Rubber (EPR) Type RHH/RHW-2 USE-2
4. **Overall Jacket:** Lead Free & Silicone-Free Cross-Linked/Thermoset Chlorinated Polyethylene (CPE-TS) Jacket

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. CT Rated 1/0 and Larger - Sunlight Resistant - Oil Resistant - Silicone Free.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- 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
- CT USE Sizes 1/0 AWG and Larger
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- VW-1 (Vertical-Wire) Flame Test

SAMPLE PRINT LEGEND:

SOUTHWIRE® ROYAL GUARD® XX AWG ({mm2}) E32071 {UL} RHH/RHW-2 OR USE-2 90°C 600V SUN RES VW-1 PRI PRII -40°C FT4 -- IEEE 1202 {MM/DD/YY} {SEQUENTIAL FOOTAGE MARKS} SEQ FEET

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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Min. Avg. Insul. Thickness	Dia. Over Insulation	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight	Jacket Color
	AWG/ Kcmil	No. of Strands	inch	mil	inch	mil	inch	lb/1000ft	lb/1000ft	
592004	8	7	0.142	45	0.232	15	0.288	51	80	BK
589493	6	7	0.178	45	0.268	30	0.354	81	126	BK
589492	4	7	0.225	45	0.315	30	0.404	129	182	BK
589491	2	7	0.283	45	0.373	30	0.471	205	270	BK
589490	1	19	0.322	55	0.432	45	0.556	258	356	BK
589495◊	1/0	19	0.362	55	0.472	45	0.596	326	433	BK
589496◊	2/0	19	0.405	55	0.515	45	0.642	411	528	BK
592011◊	3/0	19	0.456	55	0.566	45	0.683	518	644	BK
589500◊	4/0	19	0.512	55	0.622	45	0.748	653	795	BK
589497◊	250	37	0.558	65	0.688	65	0.86	772	975	BK
589499◊	350	37	0.661	65	0.791	65	0.963	1081	1313	BK
589501◊	500	37	0.789	65	0.919	65	1.092	1544	1817	BK
595421	600	61	0.866	80	1.026	65	1.239	1853	2200	BK
592017◊	750	61	0.968	80	1.128	65	1.314	2316	2688	BK
589488	1000	91	1.117	80	1.277	65	1.473	3088	3505	BK

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

Stock Number	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
592004	8	1.2	132	0.653	0.81	0.052	50	55
589493	6	1.4	209	0.411	0.51	0.051	65	75
589492	4	1.6	333	0.258	0.32	0.048	85	95
589491	2	1.9	530	0.162	0.201	0.045	115	130
589490	1	2.2	669	0.128	0.159	0.046	130	145
589495◊	1/0	2.4	844	0.102	0.127	0.044	150	170
589496◊	2/0	2.6	1064	0.082	0.102	0.043	175	195
592011◊	3/0	2.7	1342	0.064	0.079	0.042	200	225
589500◊	4/0	3	1692	0.051	0.063	0.041	230	260
589497◊	250	3.4	2000	0.043	0.053	0.041	255	290
589499◊	350	3.9	2800	0.031	0.039	0.04	310	350
589501◊	500	5.5	4000	0.021	0.027	0.039	380	430
595421	600	6.2	4800	0.018	0.024	0.039	420	475
592017◊	750	6.6	6000	0.014	0.019	0.038	475	535
589488	1000	7.4	8000	0.011	0.016	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

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310.15 and 110.14(C) for additional requirements.
***** Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.

Size and Color

Size	GRN
4	652233
2	594504
2/0	594506
4/0	594507

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