CU 2000V EPR/LSZH RW90 Traction Cable

2000 Volt Single Conductor Copper, No Lead Ethylene Propylene Rubber (NLEPR) insulation RW90 SOLONON® Low Smoke Zero Halogen (LSZH) Jacket

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Stranded bare or tinned copper per ASTM B3 or B33. Center strand embossed with "Southwire, Year, Plant" when required
2. **Binder Tape:** Mylar Tape
3. **Insulation:** No Lead Ethylene Propylene Rubber (EPR) Type RW90
4. **Overall Jacket:** SOLONON® Low Smoke Zero Halogen (LSZH) Jacket

APPLICATIONS AND FEATURES:

Southwire 2000V EPR/SOLONON Power Cable is suited for use in mass transit and general industry applications where flexibility, fire resistance, and low smoke generation are a concern. May be installed in wet or dry locations in cable trays or raceways. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C for normal operation, 130°C for emergency overload conditions, and 250°C for short circuit conditions. Resistance to moisture and most oils, acids, and alkalis with an overall durable LSZH XLPO jacket. Meets Flame Spread and Smoke Release requirements of NFPA 130. Alternate constructions available upon request.

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
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors (As Applicable)
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA C22.2 No.230 Tray Cables - Rated TC-ER
- CSA C22.2 No. 2556 / UL 2556 Cable Test Methods
- CSA SUN RES - for Sunlight Resistant rating
- CSA ST1 Smoke Test - marked FT4-ST1 (1/0 and Larger)
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- Oil Res I & Sun Res - AWG 8 & Larger
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test (1/0 and Larger)
- NFPA 130 Standard for Fixed Guideway Transit and Passenger Rail Systems (500kcmil & Larger)

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SAMPLE PRINT LEGEND:

{SQMTR} SOUTHWIRE® LL90458 {CSA} XXX KCMIL CU TYPE RW90 -40°C XX MILS EPR XX MILS SOLONON® ST1 FT4 PR I PR II SUN RES OIL RES TC-ER 2000V YEAR OF MANUFACTURE

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand Count	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/Kcmil	No. of Strands	inch	mil	mil	inch	lb/1000ft	lb/1000ft
TBA	1/0	19	0.361	65	45	0.541	325	391
TBA	2/0	19	0.405	65	45	0.585	410	482
TBA	3/0	19	0.456	65	45	0.636	518	598
TBA	4/0	19	0.512	65	45	0.692	653	741
TBA	250	37	0.558	75	65	0.768	771	884
TBA	350	37	0.661	75	65	0.871	1081	1212
TBA	500	37	0.789	75	65	0.999	1544	1697
668908*	500	91	0.789	75	65	1.093	1543	1803
655218	535.5	1349	0.830	90	65	1.164	1560	1856
589215	535.3	1349	0.830	120	95	1.288	1560	2010
669880	750	61	0.968	90	65	1.302	2315	2656
TBA	1000	61	1.117	90	65	1.357	3088	3330
665061!	1000	427	1.117	90	65	1.493	3150	3543
597590	1000	61	1.117	120	65	1.513	3087	3536
669154	1500	91	1.37	115	95	1.818	4631	5277
592521	1500	91	1.37	140	125	1.934	4631	5481
TBA	2000	127	1.583	115	95	1.863	6175	6569

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
[1]Thicknesses reported as minimum average
***** Bare copper
! Class G stranding per ASTM B173: Standard Specification for Rope-Lay-Stranded Copper Conductors ***** Having Concentric-Stranded Members, for Electrical Conductors

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
TBA	1/0	2.1	844	0.102	0.122	0.044	150	170
TBA	2/0	2.3	1064	0.081	0.097	0.043	175	195
TBA	3/0	2.5	1342	0.064	0.078	0.042	200	225
TBA	4/0	2.7	1692	0.051	0.062	0.041	230	260
TBA	250	3.0	2000	0.043	0.053	0.041	255	290
TBA	350	3.4	2800	0.031	0.039	0.040	310	350
TBA	500	3.9	4000	0.022	0.029	0.039	380	430
668908*	500	5.4	4000	0.022	0.029	0.039	380	430
655218	535.5	5.8	4282	0.021	0.032	0.028	394	446
589215	535.3	6.4	4282	0.021	0.032	0.028	394	446
669880	750	6.5	6000	0.014	0.022	0.038	475	535
TBA	1000	6.7	8000	0.011	0.018	0.037	545	615
665061!	1000	7.4	8000	0.011	0.018	0.037	545	615
597590	1000	7.5	8000	0.011	0.018	0.037	545	615
669154	1500	9.0	12000	0.007	0.016	0.035	625	705
592521	1500	9.6	12000	0.007	0.016	0.035	625	705
TBA	2000	9.3	16000	0.005	0.016	0.034	665	750

***** Ampacities derived from the Canadian Electrical Code - Table 2 - for Cable in Conduit. Not more than 3 copper conductors in a conduit and based on an ambient temperature of 30°C.

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