



## 1/C CU 1000V RWU90 SIMpull®

Single Copper Conductors, XLPE Insulation, 1000V / -40°C MIN, 90°C MAX, Sunlight Resistant. SIM technology on sizes #8 and larger. Cable can be installed in conduit without the aid of lubrication.



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Insulation:** Cross Linked Polyethylene (XLPE)

### APPLICATIONS AND FEATURES:

Southwire's RWU90 is designed for direct earth burial (with protection as required by the inspecting authority). For service entrance above or below ground. The minimum recommended installation temperature is minus 40°C (with suitable handling procedures). Maximum conductor temperature is 90°C. Note: Standard black is sunlight resistant and marked "SR". Standard coloured insulation is not sunlight resistant. SIM technology on sizes #8 and larger. Cable can be installed in conduit without the aid of lubrication.

### SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA C22.2 No. 38 Thermoset-insulated wires and cables
- CSA SUN RES - for Sunlight Resistant rating
- CSA AWM I A/B FT1

### SAMPLE PRINT LEGEND:

SOUTHWIRE® LL90458 {CSA} XXX AWG (XXX{mm<sup>2</sup>}) CU RWU90 XLPE 1000 VOLTS -40°C SR





**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/Kcmil	No.	mil	inch	lb/1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
578364	14	7	60	0.193	24	0.8	32	2.631	3.170	0.058	25
563253	14	7	60	0.193	24	0.8	32	2.631	3.170	0.058	25
646740	14	7	60	0.193	24	0.8	32	2.631	3.170	0.058	25
647607	14	7	60	0.193	24	0.8	32	2.631	3.170	0.058	25
566577	14	7	60	0.193	24	0.8	32	2.631	3.170	0.058	25
556600	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556602	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556980	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556603	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556601	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556604	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556981	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556982	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
580822	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556979	12	7	60	0.217	34	0.8	52	1.662	2.002	0.054	30
556987	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
556598	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
556986	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
556984	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
579338	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
556983	10	7	60	0.239	48	0.9	83	1.040	1.253	0.050	40
604517	6	7	80	0.346	110	1.3	209	0.411	0.495	0.051	75
587595	6	7	80	0.346	110	1.3	209	0.411	0.495	0.051	75
604516	6	7	80	0.346	110	1.3	209	0.411	0.495	0.051	75
616682	6	7	80	0.346	110	1.3	209	0.411	0.495	0.051	75
606619	2	7	80	0.451	247	1.8	530	0.162	0.195	0.045	130
556378	1	19	95	0.522	313	2.0	669	0.128	0.154	0.046	145
557008	1/0	19	95	0.552	383	2.2	844	0.102	0.122	0.044	170
556379	1/0	19	95	0.552	383	2.2	844	0.102	0.122	0.044	170
578090	2/0	19	95	0.596	480	2.3	1064	0.081	0.097	0.043	195
557010	2/0	19	95	0.596	480	2.3	1064	0.081	0.097	0.043	195
556380	2/0	19	95	0.596	480	2.3	1064	0.081	0.097	0.043	195
557011	3/0	19	95	0.654	591	2.6	1342	0.064	0.078	0.042	225
556382	3/0	19	95	0.654	591	2.6	1342	0.064	0.078	0.042	225
583440	4/0	19	95	0.710	744	2.8	1692	0.051	0.062	0.041	260
557012	4/0	19	95	0.710	744	2.8	1692	0.051	0.062	0.041	260
556383	4/0	19	95	0.710	744	2.8	1692	0.051	0.062	0.041	260
578307	250	37	110	0.778	867	3.1	2000	0.043	0.053	0.041	290
575227	350	37	110	0.881	1191	3.5	2800	0.031	0.039	0.040	350





Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C†
	AWG/ Kcmil	No.	mil	inch	lb/1000ft	inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp
577680	500	37	110	1.009	1673	5.0	4000	0.022	0.029	0.039	430
577681	600	61	125	1.130	2019	5.6	4800	0.018	0.025	0.039	475
577682	750	61	125	1.218	2489	6.0	6000	0.014	0.022	0.038	535
577683	1000	61	125	1.367	3285	6.8	8000	0.011	0.019	0.037	615

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

\* Ampacities derived from the 2021 Canadian Electrical Code Table 1 for not more than three insulated copper conductors, rated not more than 5000 V and unshielded, in raceway or cable (based on an ambient temperature of 30 °C)





**Table 2 – Weights and Measurements (Metric)**

Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/Kcmil	No.	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
578364	14	7	1.52	4.90	36	20.32	142	8.63	10.40	0.1903	25
563253	14	7	1.52	4.90	36	20.32	142	8.63	10.40	0.1903	25
646740	14	7	1.52	4.90	36	20.32	142	8.63	10.40	0.1903	25
647607	14	7	1.52	4.90	36	20.32	142	8.63	10.40	0.1903	25
566577	14	7	1.52	4.90	36	20.32	142	8.63	10.40	0.1903	25
556600	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556602	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556980	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556603	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556601	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556604	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556981	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556982	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
580822	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556979	12	7	1.52	5.51	51	20.32	231	5.45	6.57	0.1772	30
556987	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
556598	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
556986	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
556984	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
579338	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
556983	10	7	1.52	6.07	71	22.86	369	3.41	4.11	0.1640	40
604517	6	7	2.03	8.79	164	33.02	930	1.35	1.62	0.1673	75
587595	6	7	2.03	8.79	164	33.02	930	1.35	1.62	0.1673	75
604516	6	7	2.03	8.79	164	33.02	930	1.35	1.62	0.1673	75
616682	6	7	2.03	8.79	164	33.02	930	1.35	1.62	0.1673	75
606619	2	7	2.03	11.46	368	45.72	2359	0.53	0.64	0.1476	130
556378	1	19	2.41	13.26	466	50.80	2977	0.42	0.51	0.1509	145
557008	1/0	19	2.41	14.02	570	55.88	3756	0.33	0.40	0.1444	170
556379	1/0	19	2.41	14.02	570	55.88	3756	0.33	0.40	0.1444	170
578090	2/0	19	2.41	15.14	714	58.42	4735	0.27	0.32	0.1411	195
557010	2/0	19	2.41	15.14	714	58.42	4735	0.27	0.32	0.1411	195
556380	2/0	19	2.41	15.14	714	58.42	4735	0.27	0.32	0.1411	195
557011	3/0	19	2.41	16.61	880	66.04	5972	0.21	0.26	0.1378	225
556382	3/0	19	2.41	16.61	880	66.04	5972	0.21	0.26	0.1378	225
583440	4/0	19	2.41	18.03	1107	71.12	7529	0.17	0.20	0.1345	260
557012	4/0	19	2.41	18.03	1107	71.12	7529	0.17	0.20	0.1345	260
556383	4/0	19	2.41	18.03	1107	71.12	7529	0.17	0.20	0.1345	260
578307	250	37	2.79	19.76	1290	78.74	8900	0.14	0.17	0.1345	290
575227	350	37	2.79	22.38	1772	88.90	12460	0.10	0.13	0.1312	350





Stock Number	Cond. Size	Strand	Insul. Thickness	Approx. OD	Approx. Weight	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity In Raceway 90°C
	AWG/ Kcmil	No.	mm	mm	kg/km	mm	newton	Ω/km	Ω/km	Ω/km	Amp
577680	500	37	2.79	25.63	2490	127.00	17800	0.07	0.10	0.1280	430
577681	600	61	3.18	28.70	3005	142.24	21360	0.06	0.08	0.1280	475
577682	750	61	3.18	30.94	3704	152.40	26700	0.05	0.07	0.1247	535
577683	1000	61	3.18	34.72	4889	172.72	35600	0.04	0.06	0.1214	615

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

\* Ampacities derived from the 2021 Canadian Electrical Code Table 1 for not more than three insulated copper conductors, rated not more than 5000 V and unshielded, in raceway or cable (based on an ambient temperature of 30 °C)

**Color Code**

Cond. Size (Strand)	Stock Number (Color)									
14 (7)	578364	563253	646740	647607	566577					
12 (7)	556980	556982	556981	556600	580822	556601	556602	556603	556604	
10 (7)	556598	556984	556986	556987	579338					
6 (7)	604517	604516	587595							
3 (7)	585016									
1/0 (19)		557008								
2/0 (19)	578090	557010								
3/0 (19)		557011								
4/0 (19)	583440	557012								

