SIMpull® RWU90 Copper 1000 Volt

Single Copper Conductors, XLPE Insulation, 1000V / -40ºC MIN, 90ºC MAX, Sunlight Resistant. SIMpull® technology on sizes #8 and larger. Cable can be installed in conduit without the aid of lubrication. For Direct Burial

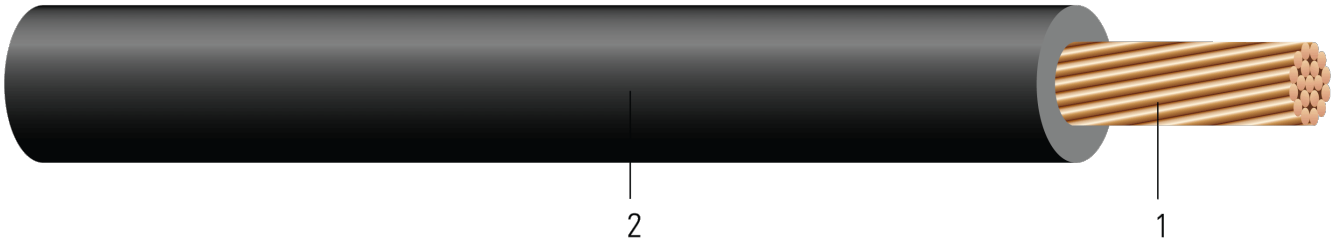

Image not to scale. See Table 1 for dimensions.

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. SIMpull® 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{R} XX AWG {NOLUBE}{R} {SIMPULL} RWU90{TM} LL90458 {CSA} (33.6{MM2}) CU RWU90 XLPE 1000 VOLTS -40{D}C SR - PAT www.patentSW.com - RWU90 XXX AWG

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Table 1 – Weights and Measurements

Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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	GN	0.193	24	0.800	32	2.631	3.170	0.058	25
563253	14	7	60	WE	0.193	24	0.800	32	2.631	3.170	0.058	25
646740	14	7	60	RD	0.193	24	0.800	32	2.631	3.170	0.058	25
647607	14	7	60	BE	0.193	24	0.800	32	2.631	3.170	0.058	25
566577	14	7	60	YW	0.193	24	0.800	32	2.631	3.170	0.058	25
556978◊	14	7	60	BK	0.197	24	0.800	32	2.631	3.170	0.058	25
556603	12	7	60	GY	0.217	34	0.800	52	1.662	2.002	0.054	30
556982	12	7	60	WE	0.217	34	0.800	52	1.662	2.002	0.054	30
556981	12	7	60	RD	0.217	34	0.800	52	1.662	2.002	0.054	30
556604	12	7	60	PE	0.217	34	0.800	52	1.662	2.002	0.054	30
556601	12	7	60	OE	0.217	34	0.800	52	1.662	2.002	0.054	30
556980	12	7	60	GN	0.217	34	0.800	52	1.662	2.002	0.054	30
556602	12	7	60	BN	0.217	34	0.800	52	1.662	2.002	0.054	30
556600	12	7	60	BE	0.217	34	0.800	52	1.662	2.002	0.054	30
556979	12	7	60	BK	0.217	34	0.800	52	1.662	2.002	0.054	30
557932	10	Solid	60	WE	0.227	45	0.900	83	1.040	1.253	0.050	40
556983	10	7	60	BK	0.239	48	0.900	83	1.040	1.253	0.050	40
579338	10	7	60	YW	0.239	48	0.900	83	1.040	1.253	0.050	40
556984	10	7	60	WE	0.239	48	0.900	83	1.040	1.253	0.050	40
556986	10	7	60	RD	0.239	48	0.900	83	1.040	1.253	0.050	40
556598	10	7	60	GN	0.239	48	0.900	83	1.040	1.253	0.050	40
556987	10	7	60	BE	0.239	48	0.900	83	1.040	1.253	0.050	40
556992◊	8	7	80	BE	0.302	77	1.200	132	0.653	0.786	0.052	55
556990◊	8	7	80	RD	0.312	79	1.200	132	0.653	0.786	0.052	55
556988◊	8	7	80	BK	0.312	79	1.200	132	0.653	0.786	0.052	55
556991◊	8	7	80	GN	0.312	79	1.200	132	0.653	0.786	0.052	55
556989◊	8	7	80	WE	0.312	79	1.200	132	0.653	0.786	0.052	55
556997◊	6	7	80	GN	0.348	114	1.400	209	0.411	0.495	0.051	75
556994◊	6	7	80	BK	0.348	113	1.400	209	0.411	0.495	0.051	75
643550◊	6	7	80	YW	0.348	114	1.400	209	0.411	0.495	0.051	75
556998◊	6	7	80	BE	0.348	114	1.400	209	0.411	0.495	0.051	75
556996◊	6	7	80	RD	0.348	113	1.400	209	0.411	0.495	0.051	75
556995◊	6	7	80	WE	0.348	113	1.400	209	0.411	0.495	0.051	75
557003◊	4	7	80	BE	0.395	168	1.600	333	0.258	0.310	0.048	95
557000◊	4	7	80	WE	0.395	168	1.600	333	0.258	0.310	0.048	95
557001◊	4	7	80	RD	0.395	168	1.600	333	0.258	0.310	0.048	95
557002◊	4	7	80	GN	0.395	168	1.600	333	0.258	0.310	0.048	95
556999◊	4	7	80	BK	0.395	168	1.600	333	0.258	0.310	0.048	95
557004◊	3	7	80	BK	0.422	205	1.700	420	0.205	0.246	0.047	115

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Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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
137969◊	3	7	80	GN	0.422	205	1.700	420	0.205	0.246	0.047	115
641557◊	3	7	80	WE	0.422	205	1.700	420	0.205	0.246	0.047	115
557006◊	2	7	80	WE	0.453	252	1.800	530	0.162	0.195	0.045	130
556596	2	7	80	BE	0.453	252	1.800	530	0.162	0.195	0.045	130
571898◊	2	7	80	GN	0.453	252	1.800	530	0.162	0.195	0.045	130
557005◊	2	7	80	BK	0.453	252	1.800	530	0.162	0.195	0.045	130
557007◊	2	7	80	RD	0.453	252	1.800	530	0.162	0.195	0.045	130
137926◊	1	19	95	BK	0.522	320	2.100	669	0.128	0.154	0.046	145
664805◊	1/0	19	95	GN	0.562	394	2.200	844	0.102	0.122	0.044	170
669505◊	1/0	19	95	WE	0.562	394	2.200	844	0.102	0.122	0.044	170
666075◊	1/0	19	95	RD	0.562	393	2.200	844	0.102	0.122	0.044	170
666074◊	1/0	19	95	BE	0.562	393	2.200	844	0.102	0.122	0.044	170
590651◊	1/0	19	95	BK	0.562	394	2.200	844	0.102	0.122	0.044	170
668802◊	2/0	19	95	BE	0.604	485	2.400	1064	0.081	0.097	0.043	195
668801◊	2/0	19	95	RD	0.604	485	2.400	1064	0.081	0.097	0.043	195
668800◊	2/0	19	95	WE	0.604	485	2.400	1064	0.081	0.097	0.043	195
138905◊	2/0	19	95	GN	0.604	485	2.400	1064	0.081	0.097	0.043	195
590652◊	2/0	19	95	BK	0.606	485	2.400	1064	0.081	0.097	0.043	195
665409◊	3/0	19	95	GN	0.654	600	2.600	1342	0.064	0.078	0.042	225
593060◊	3/0	19	95	BE	0.654	600	2.600	1342	0.064	0.078	0.042	225
593058◊	3/0	19	95	WE	0.654	600	2.600	1342	0.064	0.078	0.042	225
590653◊	3/0	19	95	BK	0.654	600	2.600	1342	0.064	0.078	0.042	225
593059◊	3/0	19	95	RD	0.654	600	2.600	1342	0.064	0.078	0.042	225
668805◊	4/0	19	95	RD	0.698	738	2.800	1692	0.051	0.062	0.041	260
668806◊	4/0	19	95	BE	0.698	739	2.800	1692	0.051	0.062	0.041	260
590654◊	4/0	19	95	BK	0.710	746	2.800	1692	0.051	0.062	0.041	260
583440	4/0	19	95	GN	0.710	744	2.800	1692	0.051	0.062	0.041	260
678382◊	4/0	19	95	WE	0.710	746	2.800	1692	0.051	0.062	0.041	260
590655◊	250	37	110	BK	0.774	875	3.100	2000	0.043	0.053	0.041	290
590658◊	350	37	110	RD	0.873	1198	3.500	2800	0.031	0.039	0.040	350
590656◊	350	37	110	BK	0.873	1198	3.500	2800	0.031	0.039	0.040	350
590657◊	350	37	110	BE	0.873	1208	3.500	2800	0.031	0.039	0.040	350
590659◊	350	37	110	WE	0.893	1211	3.600	2800	0.031	0.039	0.040	350
590662◊	500	37	110	RD	0.998	1680	4.000	4000	0.022	0.029	0.039	430
590661◊	500	37	110	BE	0.998	1681	4.000	4000	0.022	0.029	0.039	430
590663◊	500	37	110	WE	0.998	1680	4.000	4000	0.022	0.029	0.039	430
590660◊	500	37	110	BK	0.998	1680	4.000	4000	0.022	0.029	0.039	430
592347◊	600	61	125	BK	1.104	2017	5.500	4800	0.018	0.025	0.039	475
592350	600	61	125	BE	1.104	2019	5.500	4800	0.018	0.025	0.039	475
592348	600	61	125	RD	1.104	2017	5.500	4800	0.018	0.025	0.039	475
592349	600	61	125	WE	1.104	2018	5.500	4800	0.018	0.025	0.039	475

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Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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
590664◊	750	61	125	BK	1.203	2495	6.000	6000	0.014	0.022	0.038	535
671492◊	1000	61	125	BK	1.381	3319	6.900	8000	0.011	0.018	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)
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.

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Table 2 – Weights and Measurements (Metric)

Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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	GN	4.90	36	20.32	142	8.63	10.40	0.1903	25
563253	14	7	1.52	WE	4.90	36	20.32	142	8.63	10.40	0.1903	25
646740	14	7	1.52	RD	4.90	36	20.32	142	8.63	10.40	0.1903	25
647607	14	7	1.52	BE	4.90	36	20.32	142	8.63	10.40	0.1903	25
566577	14	7	1.52	YW	4.90	36	20.32	142	8.63	10.40	0.1903	25
556978◊	14	7	1.52	BK	5.00	36	20.32	142	8.63	10.40	0.1903	25
556603	12	7	1.52	GY	5.51	51	20.32	231	5.45	6.57	0.1772	30
556982	12	7	1.52	WE	5.51	51	20.32	231	5.45	6.57	0.1772	30
556981	12	7	1.52	RD	5.51	51	20.32	231	5.45	6.57	0.1772	30
556604	12	7	1.52	PE	5.51	51	20.32	231	5.45	6.57	0.1772	30
556601	12	7	1.52	OE	5.51	51	20.32	231	5.45	6.57	0.1772	30
556980	12	7	1.52	GN	5.51	51	20.32	231	5.45	6.57	0.1772	30
556602	12	7	1.52	BN	5.51	51	20.32	231	5.45	6.57	0.1772	30
556600	12	7	1.52	BE	5.51	51	20.32	231	5.45	6.57	0.1772	30
556979	12	7	1.52	BK	5.51	51	20.32	231	5.45	6.57	0.1772	30
557932	10	Solid	1.52	WE	5.77	67	22.86	369	3.41	4.11	0.1640	40
556983	10	7	1.52	BK	6.07	71	22.86	369	3.41	4.11	0.1640	40
579338	10	7	1.52	YW	6.07	71	22.86	369	3.41	4.11	0.1640	40
556984	10	7	1.52	WE	6.07	71	22.86	369	3.41	4.11	0.1640	40
556986	10	7	1.52	RD	6.07	71	22.86	369	3.41	4.11	0.1640	40
556598	10	7	1.52	GN	6.07	71	22.86	369	3.41	4.11	0.1640	40
556987	10	7	1.52	BE	6.07	71	22.86	369	3.41	4.11	0.1640	40
556992◊	8	7	2.03	BE	7.67	115	30.48	587	2.14	2.58	0.1706	55
556990◊	8	7	2.03	RD	7.92	118	30.48	587	2.14	2.58	0.1706	55
556988◊	8	7	2.03	BK	7.92	118	30.48	587	2.14	2.58	0.1706	55
556991◊	8	7	2.03	GN	7.92	118	30.48	587	2.14	2.58	0.1706	55
556989◊	8	7	2.03	WE	7.92	118	30.48	587	2.14	2.58	0.1706	55
556997◊	6	7	2.03	GN	8.84	170	35.56	930	1.35	1.62	0.1673	75
556994◊	6	7	2.03	BK	8.84	168	35.56	930	1.35	1.62	0.1673	75
643550◊	6	7	2.03	YW	8.84	170	35.56	930	1.35	1.62	0.1673	75
556998◊	6	7	2.03	BE	8.84	170	35.56	930	1.35	1.62	0.1673	75
556996◊	6	7	2.03	RD	8.84	168	35.56	930	1.35	1.62	0.1673	75
556995◊	6	7	2.03	WE	8.84	168	35.56	930	1.35	1.62	0.1673	75
557003◊	4	7	2.03	BE	10.03	250	40.64	1482	0.85	1.02	0.1575	95
557000◊	4	7	2.03	WE	10.03	250	40.64	1482	0.85	1.02	0.1575	95
557001◊	4	7	2.03	RD	10.03	250	40.64	1482	0.85	1.02	0.1575	95
557002◊	4	7	2.03	GN	10.03	250	40.64	1482	0.85	1.02	0.1575	95
556999◊	4	7	2.03	BK	10.03	250	40.64	1482	0.85	1.02	0.1575	95
557004◊	3	7	2.03	BK	10.72	305	43.18	1869	0.67	0.81	0.1542	115

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Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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
137969◊	3	7	2.03	GN	10.72	305	43.18	1869	0.67	0.81	0.1542	115
641557◊	3	7	2.03	WE	10.72	305	43.18	1869	0.67	0.81	0.1542	115
557006◊	2	7	2.03	WE	11.51	375	45.72	2359	0.53	0.64	0.1476	130
556596	2	7	2.03	BE	11.51	375	45.72	2359	0.53	0.64	0.1476	130
571898◊	2	7	2.03	GN	11.51	375	45.72	2359	0.53	0.64	0.1476	130
557005◊	2	7	2.03	BK	11.51	375	45.72	2359	0.53	0.64	0.1476	130
557007◊	2	7	2.03	RD	11.51	375	45.72	2359	0.53	0.64	0.1476	130
137926◊	1	19	2.41	BK	13.26	476	53.34	2977	0.42	0.51	0.1509	145
664805◊	1/0	19	2.41	GN	14.27	586	55.88	3756	0.33	0.40	0.1444	170
669505◊	1/0	19	2.41	WE	14.27	586	55.88	3756	0.33	0.40	0.1444	170
666075◊	1/0	19	2.41	RD	14.27	585	55.88	3756	0.33	0.40	0.1444	170
666074◊	1/0	19	2.41	BE	14.27	585	55.88	3756	0.33	0.40	0.1444	170
590651◊	1/0	19	2.41	BK	14.27	586	55.88	3756	0.33	0.40	0.1444	170
668802◊	2/0	19	2.41	BE	15.34	722	60.96	4735	0.27	0.32	0.1411	195
668801◊	2/0	19	2.41	RD	15.34	722	60.96	4735	0.27	0.32	0.1411	195
668800◊	2/0	19	2.41	WE	15.34	722	60.96	4735	0.27	0.32	0.1411	195
138905◊	2/0	19	2.41	GN	15.34	722	60.96	4735	0.27	0.32	0.1411	195
590652◊	2/0	19	2.41	BK	15.39	722	60.96	4735	0.27	0.32	0.1411	195
665409◊	3/0	19	2.41	GN	16.61	893	66.04	5972	0.21	0.26	0.1378	225
593060◊	3/0	19	2.41	BE	16.61	893	66.04	5972	0.21	0.26	0.1378	225
593058◊	3/0	19	2.41	WE	16.61	893	66.04	5972	0.21	0.26	0.1378	225
590653◊	3/0	19	2.41	BK	16.61	893	66.04	5972	0.21	0.26	0.1378	225
593059◊	3/0	19	2.41	RD	16.61	893	66.04	5972	0.21	0.26	0.1378	225
668805◊	4/0	19	2.41	RD	17.73	1098	71.12	7529	0.17	0.20	0.1345	260
668806◊	4/0	19	2.41	BE	17.73	1100	71.12	7529	0.17	0.20	0.1345	260
590654◊	4/0	19	2.41	BK	18.03	1110	71.12	7529	0.17	0.20	0.1345	260
583440	4/0	19	2.41	GN	18.03	1107	71.12	7529	0.17	0.20	0.1345	260
678382◊	4/0	19	2.41	WE	18.03	1110	71.12	7529	0.17	0.20	0.1345	260
590655◊	250	37	2.79	BK	19.66	1302	78.74	8900	0.14	0.17	0.1345	290
590658◊	350	37	2.79	RD	22.17	1783	88.90	12460	0.10	0.13	0.1312	350
590656◊	350	37	2.79	BK	22.17	1783	88.90	12460	0.10	0.13	0.1312	350
590657◊	350	37	2.79	BE	22.17	1798	88.90	12460	0.10	0.13	0.1312	350
590659◊	350	37	2.79	WE	22.68	1802	91.44	12460	0.10	0.13	0.1312	350
590662◊	500	37	2.79	RD	25.35	2500	101.60	17800	0.07	0.10	0.1280	430
590661◊	500	37	2.79	BE	25.35	2502	101.60	17800	0.07	0.10	0.1280	430
590663◊	500	37	2.79	WE	25.35	2500	101.60	17800	0.07	0.10	0.1280	430
590660◊	500	37	2.79	BK	25.35	2500	101.60	17800	0.07	0.10	0.1280	430
592347◊	600	61	3.18	BK	28.04	3002	139.70	21360	0.06	0.08	0.1280	475
592350	600	61	3.18	BE	28.04	3005	139.70	21360	0.06	0.08	0.1280	475
592348	600	61	3.18	RD	28.04	3002	139.70	21360	0.06	0.08	0.1280	475
592349	600	61	3.18	WE	28.04	3003	139.70	21360	0.06	0.08	0.1280	475

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Stock Number	Cond. Size	Strand	Insul. Thickness	Insulation Color	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
590664◊	750	61	3.18	BK	30.56	3713	152.40	26700	0.05	0.07	0.1247	535
671492◊	1000	61	3.18	BK	35.08	4939	175.26	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)
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 3 – Colors

Cond. Size	Stranding	Color									
AWG or kcmil	num	Black	Green	White	Red	Blue	Yellow	Orange	Purple	Brown	Gray
14	7	556978	578364	563253	646740	647607	566577				
12	7	556979	556980	556982	556981	556600		556601	556604	556602	556603
10	1 (solid)			557932							
10	7	556983	556598	556984	556986	556987	579338				
8	7	556991	556991	556989	556990	556992					
6	7	556994	556997	556995	556996	556998	643550				
4	7	556999	557002	557000	557001	557003					
3	7	557004	137969	641557							
2	7	557005	571898	557006	557007	556596					
1	19	137926									
1/0	19	590651	664805	669505	666075	666074					
2/0	19	590652	138905	668800	668801	668802					
3/0	19	590653		593058	593059	593060					
4/0	19	590654	583440	678382	668805	668806					
250	37	590655									
350	37	590656		590659	590658	590657					
500	37	590660		590663	590662	590661					
600	61	592347		592349	592348	592350					
750	61	590664									
1000	61	671492									

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