



RW90 Copper Circuit Sizes (14, 12 & 10 AWG)

Copper Conductor, 600V, 90°C MAX, -40°C MIN. Sunlight Resistant in Black Only.

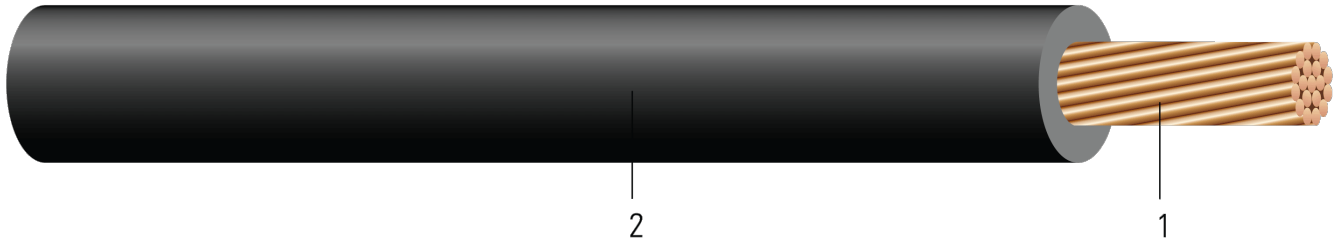


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

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

APPLICATIONS AND FEATURES:

Single copper conductor with low temperature, moisture resisting XLPE (cross linked polyethylene) insulation. Sunlight Resistant in black only. This product meets the current RoHS requirements. No lead is added or used in manufacturing.

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

SAMPLE PRINT LEGEND:

SOUTHWIRE& LL90458 (CSA) 12 AWG CU RW90 XLPE 600 VOLTS (-40°C) SR





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
9561100	14	Solid	30	BK	0.128	16	0.500	32	2.631	3.170	0.058	25
9561770	14	Solid	30	RD	0.128	16	0.500	32	2.631	3.170	0.058	25
5579170	14	Solid	30	OE	0.128	16	0.500	32	2.631	3.170	0.058	25
9561440	14	Solid	30	WE	0.128	16	0.500	32	2.631	3.170	0.058	25
9562500	14	Solid	30	BN	0.128	16	0.500	32	2.631	3.170	0.058	25
9562350	14	Solid	30	BE	0.128	16	0.500	32	2.631	3.170	0.058	25
9562010	14	Solid	30	GN	0.128	16	0.500	32	2.631	3.170	0.058	25
9562760	14	Solid	30	YW	0.128	16	0.500	32	2.631	3.170	0.058	25
9556660	14	7	30	BE	0.135	17	0.500	32	2.631	3.170	0.058	25
9552450	14	7	30	RD	0.135	17	0.500	32	2.631	3.170	0.058	25
9556170	14	7	30	GN	0.135	17	0.500	32	2.631	3.170	0.058	25
9557080	14	7	30	YW	0.135	17	0.500	32	2.631	3.170	0.058	25
9517310	14	7	30	BK	0.135	17	0.500	32	2.631	3.170	0.058	25
5579240	14	7	30	OE	0.135	17	0.500	32	2.631	3.170	0.058	25
9556820	14	7	30	BN	0.135	17	0.500	32	2.631	3.170	0.058	25
9553510	14	7	30	WE	0.135	17	0.5	32	2.631	3.170	0.058	25
9562270	12	Solid	30	BE	0.144	24	0.600	52	1.662	2.002	0.054	30
9562430	12	Solid	30	BN	0.144	24	0.600	52	1.662	2.002	0.054	30
9561690	12	Solid	30	RD	0.144	24	0.600	52	1.662	2.002	0.054	30
9561020	12	Solid	30	BK	0.144	24	0.600	52	1.662	2.002	0.054	30
9562680	12	Solid	30	YW	0.144	24	0.600	52	1.662	2.002	0.054	30
9561360	12	Solid	30	WE	0.144	24	0.600	52	1.662	2.002	0.054	30
9561930	12	Solid	30	GN	0.144	24	0.600	52	1.662	2.002	0.054	30
5578610	12	Solid	30	OE	0.144	24	0.600	52	1.662	2.002	0.054	30
9556900	12	7	30	YW	0.153	25	0.600	52	1.662	2.002	0.054	30
951749	12	7	30	BK	0.153	25	0.600	32	1.662	2.002	0.054	30
9556580	12	7	30	BE	0.153	25	0.600	52	1.662	2.002	0.054	30
9556740	12	7	30	BN	0.153	25	0.600	52	1.662	2.002	0.054	30
9552370	12	7	30	RD	0.153	25	0.600	52	1.662	2.002	0.054	30
5579230	12	7	30	OE	0.153	25	0.600	52	1.662	2.002	0.054	30
9556090	12	7	30	GN	0.153	25	0.600	52	1.662	2.002	0.054	30
9553440	12	7	30	WE	0.153	25	0.6	52	1.662	2.002	0.054	30
5579310	10	Solid	30	YW	0.165	37	0.700	83	1.040	1.253	0.050	40
9562190	10	Solid	30	BE	0.165	37	0.700	83	1.040	1.253	0.050	40
9561850	10	Solid	30	GN	0.165	37	0.700	83	1.040	1.253	0.050	40
9561280	10	Solid	30	WE	0.165	37	0.700	83	1.040	1.253	0.050	40
5579290	10	Solid	30	BN	0.165	37	0.700	83	1.040	1.253	0.050	40
9560940	10	Solid	30	BK	0.165	37	0.700	83	1.040	1.253	0.050	40
5579300	10	Solid	30	OE	0.165	37	0.700	83	1.040	1.253	0.050	40





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
956151◇	10	Solid	30	RD	0.165	37	0.700	83	1.040	1.253	0.050	40
951756	10	7	30	BK	0.175	38	0.700	52	1.040	1.253	0.050	40
955591◇	10	7	30	GN	0.177	39	0.700	83	1.040	1.253	0.050	40
557921◇	10	7	30	OE	0.177	39	0.700	83	1.040	1.253	0.050	40
955641◇	10	7	30	BE	0.177	39	0.700	83	1.040	1.253	0.050	40
557920◇	10	7	30	BN	0.177	39	0.700	83	1.040	1.253	0.050	40
557922◇	10	7	30	YW	0.177	39	0.700	83	1.040	1.253	0.050	40
955229◇	10	7	30	RD	0.177	39	0.700	83	1.040	1.253	0.050	40
955336◇	10	7	30	WE	0.177	39	0.7	83	1.040	1.253	0.050	40

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

†Ampacities derived from the 2015 Canadian Electrical Code - Table 1 - For single conductor in free air and based on an ambient temperature of 30°C. - Table 2 - for Cable in Conduit. Not more than 3 aluminum conductors in a conduit and 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 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
9561100	14	Solid	0.76	BK	3.25	24	12.70	142	8.63	10.40	0.1903	25
9561770	14	Solid	0.76	RD	3.25	24	12.70	142	8.63	10.40	0.1903	25
5579170	14	Solid	0.76	OE	3.25	24	12.70	142	8.63	10.40	0.1903	25
9561440	14	Solid	0.76	WE	3.25	24	12.70	142	8.63	10.40	0.1903	25
9562500	14	Solid	0.76	BN	3.25	24	12.70	142	8.63	10.40	0.1903	25
9562350	14	Solid	0.76	BE	3.25	24	12.70	142	8.63	10.40	0.1903	25
9562010	14	Solid	0.76	GN	3.25	24	12.70	142	8.63	10.40	0.1903	25
9562760	14	Solid	0.76	YW	3.25	24	12.70	142	8.63	10.40	0.1903	25
9556660	14	7	0.76	BE	3.43	25	12.70	142	8.63	10.40	0.1903	25
9552450	14	7	0.76	RD	3.43	25	12.70	142	8.63	10.40	0.1903	25
9556170	14	7	0.76	GN	3.43	25	12.70	142	8.63	10.40	0.1903	25
9557080	14	7	0.76	YW	3.43	25	12.70	142	8.63	10.40	0.1903	25
9517310	14	7	0.76	BK	3.43	25	12.70	142	8.63	10.40	0.1903	25
5579240	14	7	0.76	OE	3.43	25	12.70	142	8.63	10.40	0.1903	25
9556820	14	7	0.76	BN	3.43	25	12.70	142	8.63	10.40	0.1903	25
9553510	14	7	0.76	WE	3.43	25	12.70	142	8.63	10.40	0.1903	25
9562270	12	Solid	0.76	BE	3.66	36	15.24	231	5.45	6.57	0.1772	30
9562430	12	Solid	0.76	BN	3.66	36	15.24	231	5.45	6.57	0.1772	30
9561690	12	Solid	0.76	RD	3.66	36	15.24	231	5.45	6.57	0.1772	30
9561020	12	Solid	0.76	BK	3.66	36	15.24	231	5.45	6.57	0.1772	30
9562680	12	Solid	0.76	YW	3.66	36	15.24	231	5.45	6.57	0.1772	30
9561360	12	Solid	0.76	WE	3.66	36	15.24	231	5.45	6.57	0.1772	30
9561930	12	Solid	0.76	GN	3.66	36	15.24	231	5.45	6.57	0.1772	30
5578610	12	Solid	0.76	OE	3.66	36	15.24	231	5.45	6.57	0.1772	30
9556900	12	7	0.76	YW	3.89	37	15.24	231	5.45	6.57	0.1772	30
951749	12	7	0.76	BK	3.89	37	15.24	142	5.45	6.57	0.1772	30
9556580	12	7	0.76	BE	3.89	37	15.24	231	5.45	6.57	0.1772	30
9556740	12	7	0.76	BN	3.89	37	15.24	231	5.45	6.57	0.1772	30
9552370	12	7	0.76	RD	3.89	37	15.24	231	5.45	6.57	0.1772	30
5579230	12	7	0.76	OE	3.89	37	15.24	231	5.45	6.57	0.1772	30
9556090	12	7	0.76	GN	3.89	37	15.24	231	5.45	6.57	0.1772	30
9553440	12	7	0.76	WE	3.89	37	15.24	231	5.45	6.57	0.1772	30
5579310	10	Solid	0.76	YW	4.19	55	17.78	369	3.41	4.11	0.1640	40
9562190	10	Solid	0.76	BE	4.19	55	17.78	369	3.41	4.11	0.1640	40
9561850	10	Solid	0.76	GN	4.19	55	17.78	369	3.41	4.11	0.1640	40
9561280	10	Solid	0.76	WE	4.19	55	17.78	369	3.41	4.11	0.1640	40
5579290	10	Solid	0.76	BN	4.19	55	17.78	369	3.41	4.11	0.1640	40
9560940	10	Solid	0.76	BK	4.19	55	17.78	369	3.41	4.11	0.1640	40
5579300	10	Solid	0.76	OE	4.19	55	17.78	369	3.41	4.11	0.1640	40





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
956151◇	10	Solid	0.76	RD	4.19	55	17.78	369	3.41	4.11	0.1640	40
951756	10	7	0.76	BK	4.44	57	17.78	231	3.41	4.11	0.1640	40
955591◇	10	7	0.76	GN	4.50	58	17.78	369	3.41	4.11	0.1640	40
557921◇	10	7	0.76	OE	4.50	58	17.78	369	3.41	4.11	0.1640	40
955641◇	10	7	0.76	BE	4.50	58	17.78	369	3.41	4.11	0.1640	40
557920◇	10	7	0.76	BN	4.50	58	17.78	369	3.41	4.11	0.1640	40
557922◇	10	7	0.76	YW	4.50	58	17.78	369	3.41	4.11	0.1640	40
955229◇	10	7	0.76	RD	4.50	58	17.78	369	3.41	4.11	0.1640	40
955336◇	10	7	0.76	WE	4.50	58	17.78	369	3.41	4.11	0.1640	40

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

†Ampacities derived from the 2015 Canadian Electrical Code - Table 1 - For single conductor in free air and based on an ambient temperature of 30°C. - Table 2 - for Cable in Conduit. Not more than 3 aluminum conductors in a conduit and based on an ambient temperature of 30°C.

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Table 3 - Stock Code Colors

Size (Strand)	Black	Red	Blue	White	Brown	Orange	Yellow	Green
14 (Solid)	956110	956177	956235	956144	956250	557917	956276	956201
14 (7)	951731	955245	955666	955351	955682	557924	955708	955617
12 (Solid)	956102	956169	956227	956136	956243	557861	956268	956193
12 (7)	951749	955237	955658	955344	955674	557923	955690	955609
10 (Solid)	956094	956151	956219	956128	557929	557930	557931	956185
10 (7)	951756	955229	955641	955336	557920	557921	557922	955591

