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

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

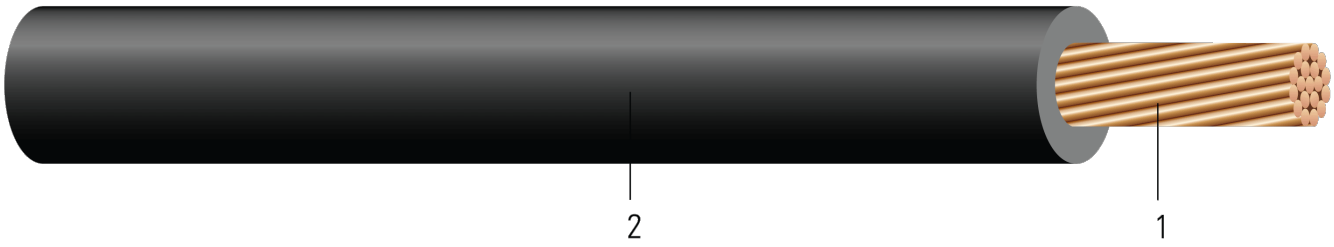

Image not to scale. See Table 1 for dimensions.

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	Cond. Number	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
956102◊	12	1	SOLID	30	BK	0.145	25	0.6	52	1.662	2.063	0.054	30

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)

956102◊	12	1	SOLID	0.76	BK	3.68	37	15.24	231	5.45	6.77	0.1772	30

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

Copyright © 2026 Southwire Company, LLC. All Rights Reserved

†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 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

Copyright © 2026 Southwire Company, LLC. All Rights Reserved