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

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

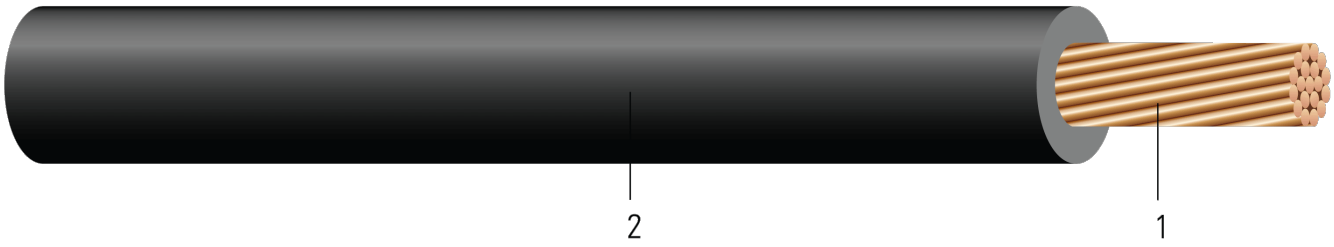



Image not to scale. See Table 1 for dimensions.

## 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 |
| 956151◊ | 10 | 1 | SOLID | 30 | RD | 0.166 | 37 | 0.7 | 83 | 1.04 | 1.291 | 0.05 | 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)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 956151◊ | 10 | 1 | SOLID | 0.76 | RD | 4.22 | 55 | 17.78 | 369 | 3.41 | 4.24 | 0.1640 | 40 |

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



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†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 |


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