

# 1/C CU 1000V RWU90 SIMpull®

Single Copper Conductors, XLPE Insulation, 1000V / -40°C MIN, 90°C MAX, Sunlight Resistant. SIMpull® 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:

- Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- 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® LL90458 {CSA} XXX AWG (XXX{mm2}) 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/<br>Kcmil | No.    | mil              | inch       | Lb/1000ft      | inch               | lb               | Ω/1000ft             | Ω/1000ft             | Ω/1000ft                   | Amp                                 |
| 590661◇      | 500           | 37     | 110              | 0.998      | 1681           | 4.0                | 4000             | 0.022                | 0.029                | 0.039                      | 430                                 |

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/<br>Kcmil | No.    | mm               | mm         | kg/km          | mm                 | newton           | Ω/km                 | Ω/km                 | Ω/km                       | Amp                                |
| 590661◇      | 500           | 37     | 2.79             | 25.35      | 2502           | 101.60             | 17800            | 0.07                 | 0.10                 | 0.1280                     | 430                                |

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) |        |        |        |        |        |        |        |        |
|---------------------|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                     | Green                | White  | Red    | Blue   | Yellow | Orange | Brown  | Gray   | Purple |
| 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 |        |        |        |        |        |        |        |

