



# NMD90 Copper SIMpull® Romex® Brand

300 Volts / -25°C Min, 90°C Max. Copper Conductors

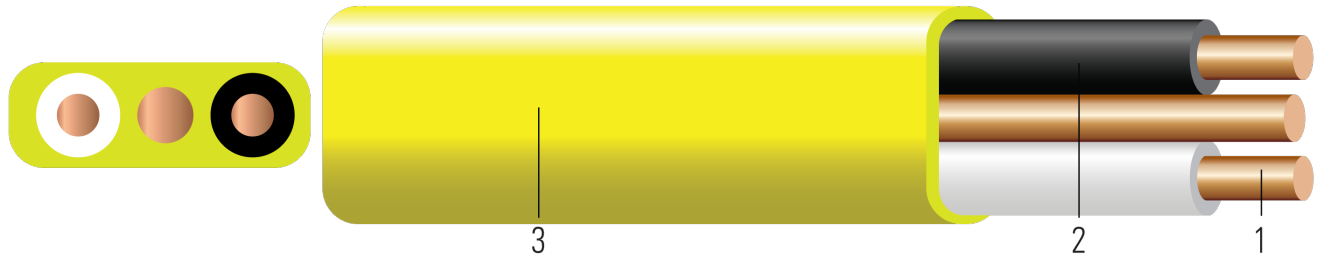


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

1. **Conductor:** Bare copper per ASTM B3. Sizes #14 AWG - #10 AWG are solid. Sizes #8 AWG - #2 AWG are Class B compressed stranded per ASTM B8
2. **Insulation:** All phases are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath
3. **Jacket:** Polyvinyl Chloride (PVC) jacket utilizing SIMpull® Technology.

### Conductor Color Code:

- 2/C: Black, White
- 3/C: Black, White, Red

### Jacket Color Code:

- White: General Residential Wiring
- Red: 2 Black and Red conductors - 208V-240V Circuits (no neutral)
- Orange: No. 10 AWG General Residential Wiring
- Yellow: No. 12 AWG General Residential Wiring
- Blue: No. 14 AWG - 2 black and white conductors - 120V Arc Fault Circuit Interrupter Applications

## APPLICATIONS AND FEATURES:

Southwire's Romex® SIMpull® NMD90 cables may be used for both exposed work in dry locations or concealed work in dry or damp locations.

The maximum allowable conductor temperature is 90°C. The minimum recommended installation temperature is -25°C for two-conductor cables and -10°C for three-conductor cables (with suitable handling procedures). Material should be properly stored above 0°C for 24 hours prior to installation. The maximum voltage rating for all intended applications is 300 volts. Consult the Canadian Electrical Code for further information related to applications.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- CSA C22.2 No. 48 non-metallic sheathed cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- FT1 Flame Test (1,706 BTU/Hr nominal - Vertical Wire Flame Test)





**SAMPLE PRINT LEGEND:**

SOUTHWIRE CSA LL90458 12 AWG 2 CDRS BLACK/WHITE NMD90 NYLON ROMEX(R) BRAND SIMpull (TM) (-25C) 300 VOLTS FT1 COVERED & MADE UNDER U.S. PAT. NOS 7557301 & 7411129. [Jacket Colour is yellow]





**Table 1 – Physical and Electrical Data**

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Cond. | Insul. Thickness | Jacket Thickness | Approx. OD  | Copper Weight | Approx. Weight | DC Resistance @ 25°C | AC Resistance @ 75°C | Inductive Reactance | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C | Jacket Color |
|--------------|------------|--------------|---------------|---------------------|------------------|------------------|-------------|---------------|----------------|----------------------|----------------------|---------------------|--------------------|-------------------------|-------------------------|--------------|
|              | AWG        | No.          | strands       | inch                | mil              | mil              | inch        | lb / 1000ft   | lb / 1000ft    | Ω /1000ft            | Ω /1000ft            | Ω/1000ft            | inch               | Amp                     | Amp                     |              |
| 14 AWG       |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 471748◇      | 14         | 2            | Solid         | 0.064               | 35               | 30               | 0.196x0.396 | 37            | 69             | 2.631                | 3.170                | 0.058               | 1.600              | 20                      | 25                      | V            |
| 672477◇      | 14         | 2            | Solid         | 0.064               | 35               | 30               | 0.196x0.396 | 37            | 69             | 2.631                | 3.170                | 0.058               | 1.600              | 20                      | 25                      | P            |
| 551373◇      | 14         | 2            | Solid         | 0.064               | 35               | 30               | 0.196x0.396 | 37            | 69             | 2.631                | 3.170                | 0.058               | 1.600              | 20                      | 25                      | E            |
| 471797◇      | 14         | 3            | Solid         | 0.064               | 35               | 30               | 0.388       | 50            | 90             | 2.631                | 3.170                | 0.058               | 1.500              | 20                      | 25                      | V            |
| 12 AWG       |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 471755◇      | 12         | 2            | Solid         | 0.080               | 35               | 30               | 0.213x0.430 | 51            | 88             | 1.662                | 2.002                | 0.054               | 1.600              | 25                      | 30                      | Y            |
| 472308◇      | 12         | 2            | Solid         | 0.080               | 35               | 30               | 0.213x0.430 | 51            | 88             | 1.662                | 2.002                | 0.054               | 1.600              | 25                      | 30                      | P            |
| 471805◇      | 12         | 3            | Solid         | 0.080               | 35               | 30               | 0.428       | 72            | 118            | 1.662                | 2.002                | 0.054               | 1.700              | 25                      | 30                      | Y            |
| 10 AWG       |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 472316◇      | 10         | 2            | Solid         | 0.101               | 35               | 30               | 0.234x0.488 | 82            | 124            | 1.040                | 1.253                | 0.050               | 2.000              | 35                      | 40                      | P            |
| 471763◇      | 10         | 2            | Solid         | 0.101               | 35               | 30               | 0.234x0.488 | 82            | 124            | 1.040                | 1.253                | 0.050               | 2.000              | 35                      | 40                      | C            |
| 471813◇      | 10         | 3            | Solid         | 0.101               | 35               | 30               | 0.479       | 115           | 168            | 1.040                | 1.253                | 0.050               | 1.900              | 35                      | 40                      | C            |
| 8 AWG        |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 551038◇      | 8          | 2            | 7             | 0.141               | 40               | 45               | 0.316x0.694 | 133           | 210            | 0.653                | 0.786                | 0.052               | 2.800              | 50                      | 55                      | P            |
| 471821◇      | 8          | 3            | 7             | 0.141               | 40               | 45               | 0.635       | 186           | 283            | 0.653                | 0.786                | 0.052               | 2.500              | 50                      | 55                      | V            |
| 6 AWG        |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 557881◇      | 6          | 2            | 7             | 0.177               | 50               | 45               | 0.374x0.800 | 213           | 339            | 0.411                | 0.495                | 0.051               | 3.200              | 65                      | 75                      | P            |
| 471839◇      | 6          | 3            | 7             | 0.177               | 50               | 45               | 0.775       | 297           | 433            | 0.411                | 0.495                | 0.051               | 3.100              | 65                      | 75                      | V            |
| 4 AWG        |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 557727◇      | 4          | 2            | 7             | 0.225               | 50               | 60               | 0.839       | 311           | 463            | 0.258                | 0.310                | 0.048               | 3.300              | 85                      | 95                      | P            |
| 557882◇      | 3          | 2            | 7             | 0.252               | 50               | 80               | 0.937       | 410           | 610            | 0.205                | 0.246                | 0.047               | 3.700              | 100                     | 115                     | P            |
| 676254◇      | 3          | 3            | 7             | 0.252               | 50               | 80               | 1.029       | 574           | 822            | 0.205                | 0.246                | 0.047               | 5.100              | 100                     | 115                     | V            |
| 2 AWG        |            |              |               |                     |                  |                  |             |               |                |                      |                      |                     |                    |                         |                         |              |
| 557880◇      | 2          | 3            | 7             | 0.282               | 50               | 80               | 0.991       | 702           | 862            | 0.162                | 0.195                | 0.045               | 3.900              | 115                     | 130                     | P            |

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

