NMD90 Copper SIMpull® Romex® Brand

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

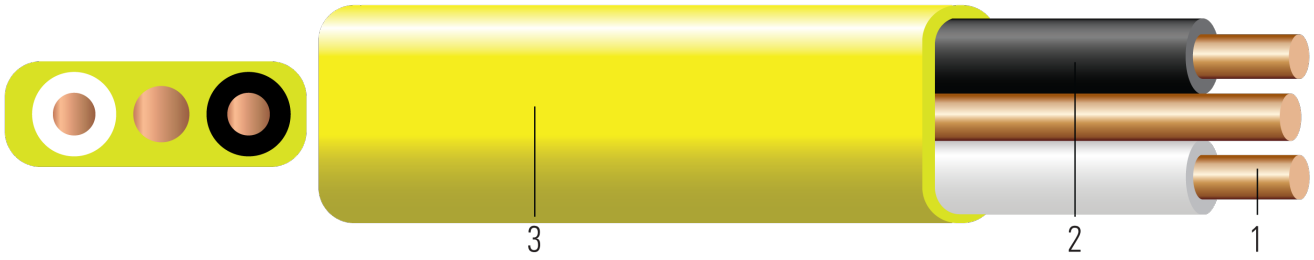

Image not to scale. See Table 1 for dimensions.

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 Color Code:

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

Jacket Color 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 Interupter 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 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Jacket Thickness	Approx. OD	Copper Weight	Overall Weight
	AWG/ Kcmil		inch		mils	No. x AWG	mil	inch	lbs/1000ft	lbs/1000ft
676254◊	3	3	0.252	7	50	1x6	80	1.029	574	822

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

Table 2 – Electrical and Engineering Data

Cond. Size	Conductor Number	Min. Bend Radius	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
3	3	5.100	0.205	0.246	0.047	100	115

* Ampacity values based on Canadian Electrical Code, Part 1 2024 Table 2 and do not take into account the overcurrent protection limitations in CEC Rule 14-104(2) of 15 A for 14 AWG Cu, 20 A for 12 AWG Cu, and 30 A for 10 AWG Cu (independent of the conductor temperature rating and stranding). See also CEC Rules 4-004 and 4-006 for additional requirements.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.