ROMEX® SIMpull® NMD90 Copper

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

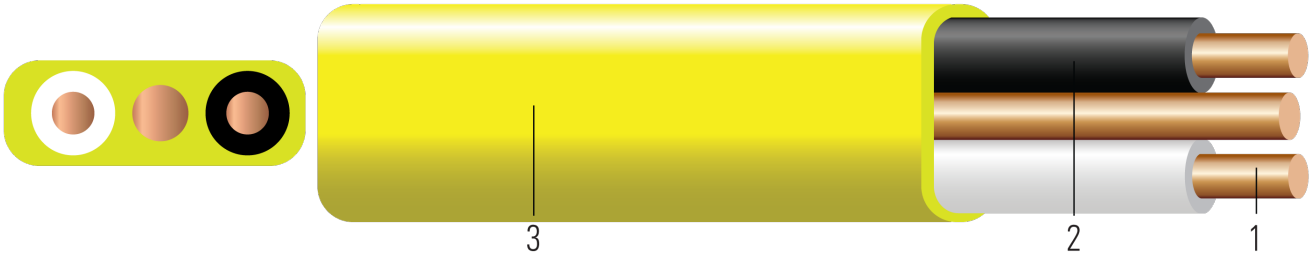

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid per ASTM B3 or Combination unilay-stranded copper conductors per ASTM B787.
2. **Insulation:** All phases are insulated with Polyvinyl Chloride with Nylon Sheath
3. **Jacket:** Polyvinyl Chloride PVC jacket utilizing SIMpull® Technology.

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 Code1 for further information related to applications.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B787 19 Wire Combination Unilay-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
- IEEE 1202/FT4 Flame Test (70,000 BTU/hr) 350kcmil and Larger

SAMPLE PRINT LEGEND:

SOUTHWIRE MASTER-DESIGN 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	Overall Weight
	AWG/ Kcmil		inch		mils	No. x AWG	mil	inch	lbs/1000ft
471748◊	14	2	0.064	Solid	35	1 x 14	30	0.196 x 0.396	69
471797◊	14	3	0.064	Solid	35	1 x 14	30	0.388	90
471755◊	12	2	0.08	Solid	35	1 x 14	30	0.213 x 0.430	88
471805◊	12	3	0.08	Solid	35	1 x 14	30	0.428	118
471763◊	10	2	0.101	Solid	35	1 x 12	30	0.234 x 0.488	124
471813◊	10	3	0.101	Solid	35	1 x 12	30	0.479	168
551038◊	8	2	0.141	7	40	1 x 10	45	0.316 x 0.694	210
471821◊	8	3	0.141	7	40	1 x 10	45	0.635	283
557881◊	6	2	0.177	7	50	1 x 8	45	0.374 x 0.800	339
471839◊	6	3	0.177	7	60	1 x 8	45	0.775	433
557727◊	4	2	0.225	7	50	1 x 8	60	0.839	463
557882◊	3	2	0.252	7	50	1 x 6	80	0.937	610
676254◊	3	3	0.252	7	50	1 x 6	80	1.029	822
557880◊	2	3	0.282	7	50	1 x 6	80	0.991	862

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 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
14	2	1.6	2.631	3.17	0.058	15	20	25
14	3	1.5	2.631	3.17	0.058	15	20	25
12	2	1.6	1.662	2.002	0.054	20	25	30
12	3	1.7	1.662	2.002	0.054	20	25	30
10	2	2	1.04	1.253	0.05	30	35	40
10	3	1.9	1.04	1.253	0.05	30	35	40
8	2	2.8	0.653	0.786	0.052	40	50	55
8	3	2.5	0.653	0.786	0.052	40	50	55
6	2	3.2	0.411	0.495	0.051	55	65	75
6	3	3.1	0.411	0.495	0.051	55	65	75
4	2	3.3	0.258	0.31	0.048	70	85	95
3	2	3.7	0.205	0.246	0.047	85	100	115
3	3	5.1	0.205	0.246	0.047	85	100	115
2	3	3.9	0.162	0.195	0.045	95	115	130

† Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.
† Ampacities have been adjusted for more than Three Current-Carrying Conductors.
* Inductive impedance is based on non-ferrous conduit with one diameter spacing.