

# Romex<sup>®</sup> Brand SIMpull<sup>®</sup> Copper Type NM-B Cable

Nonmetallic-Sheathed Cable. 600 Volt. Copper Conductor. PVC Insulation/Nylon Sheath. PVC Jacket with SIMpull<sup>®</sup> Technology for Easier Pulling.

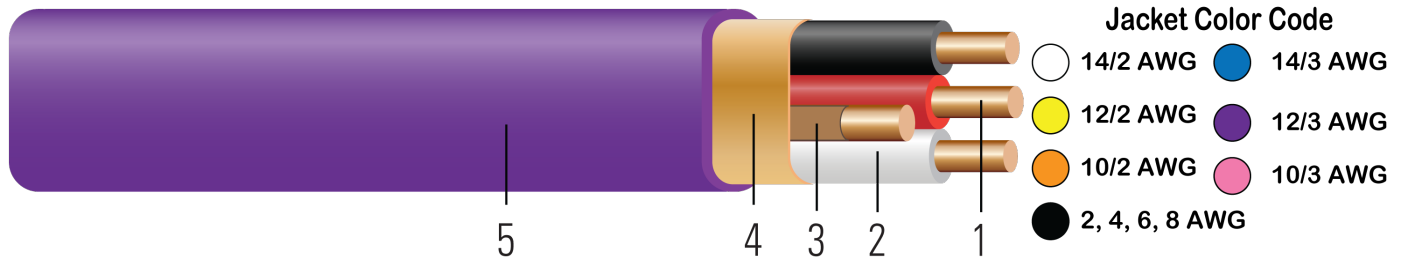


Image not to scale. See Table 1 for dimensions.

## CONSTRUCTION:

- 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
- Insulation:** All phases and neutral(s) are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath  
**Color Code:**  
2/C: Black, White  
3/C: Black, Red, White  
4/C: Black, Red, Blue, White
- Ground:** Solid soft drawn bare copper with kraft paper wrap
- Binder:** Kraft paper
- Jacket:** Polyvinyl Chloride (PVC) jacket utilizing SIMpull<sup>®</sup> Technology

## APPLICATIONS AND FEATURES:

Southwire Romex<sup>®</sup> Brand SIMpull<sup>®</sup> Type NM-B (nonmetallic-sheathed) cable may be used for both exposed and concealed work in dry locations as specified in the National Electrical Code<sup>®</sup>. NM-B cable is primarily used in residential wiring as branch circuits for outlets, switches, and other loads. NM-B cable may be run in air voids of masonry block or tile walls where such walls are not wet or damp locations. Voltage rating for NM-B cable is 600 volts.

## SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 719 Nonmetallic-Sheathed Cables
- RoHS-2 (European Directive 2011/65/EU)
- Federal Specification A-A-59544
- NOM-063-SCFI Electrical Products – Conductors – Safety Requirements

## SAMPLE PRINT LEGEND:

E18679 (UL) ROMEX<sup>®</sup> SIMpull<sup>®</sup>{TM} XX AWG (X.XXmm<sup>2</sup>) CU X CDR WITH XX AWG (mm<sup>2</sup>) GROUND TYPE NM-B 600 VOLTS NOM-ANCE PAT [www.patentSW.com](http://www.patentSW.com)





**Table 1 – Weights and Measurements**

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Ground	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil		No. of Strands	inch	mil	No. x AWG	mil	inch	lb/1000ft	lb/1000ft
288274◇	14	2	Solid	0.064	15	1 x 14	25	0.372x0.176	37	61
639469◇	14	3	Solid	0.064	15	1 x 14	25	0.478x0.176	49	81
550482◇*	14	4	Solid	0.064	20	1 x 14	30	0.350	62	96
550539◇	14	4	Solid	0.064	15	1 x 14	30	0.350	62	95
288282◇	12	2	Solid	0.080	15	1 x 12	25	0.422x0.190	59	87
639478◇	12	3	Solid	0.080	15	1 x 12	25	0.524x0.190	79	115
550542◇	12	4	Solid	0.080	15	1 x 12	30	0.395	99	138
550484◇*	12	4	Solid	0.080	20	1 x 12	30	0.395	99	138
288290◇	10	2	Solid	0.101	20	1 x 10	25	0.505x0.218	91	126
639485◇	10	3	Solid	0.101	20	1 x 10	25	0.630x0.220	122	168
555832◇	10	4	Solid	0.101	20	1 x 10	30	0.479	154	206
551888◇	8	2	7	0.141	30	1 x 10	30	0.628x0.278	132	190
288936◇	8	2	7	0.141	30	1 x 10	30	0.628x0.278	132	190
639492◇	8	3	7	0.141	30	1 x 10	30	0.585	185	260
288944◇	6	2	7	0.177	30	1 x 10	30	0.700x0.314	192	260
639500◇	6	3	7	0.177	30	1 x 10	30	0.672	276	365
639682◇	4	3	7	0.225	40	1 x 8	30	0.843	440	575
639708◇	2	3	7	0.282	40	1 x 8	30	0.887	671	830

All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

\* 2x2 construction





**Table 2 – Electrical and Engineering Data**

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp
288274◇	14	2	0.8	65	2.631	3.170	0.058	20	25
639469◇	14	3	0.9	98	2.631	3.170	0.058	20	25
550482◇*	14	4	1.4	105	2.631	3.170	0.058	16	20
550539◇	14	4	1.4	105	2.631	3.170	0.058	16	20
288282◇	12	2	1.0	104	1.662	2.002	0.054	25	30
639478◇	12	3	1.1	156	1.662	2.002	0.054	25	30
550542◇	12	4	1.6	167	1.662	2.002	0.054	20	24
550484◇*	12	4	1.6	167	1.662	2.002	0.054	20	24
288290◇	10	2	1.2	166	1.040	1.253	0.050	35	40
639485◇	10	3	1.3	249	1.040	1.253	0.050	35	40
555832◇	10	4	1.9	265	1.040	1.253	0.050	28	32
551888◇	8	2	1.7	264	0.653	0.786	0.052	50	55
288936◇	8	2	1.7	264	0.653	0.786	0.052	50	55
639492◇	8	3	2.3	396	0.653	0.786	0.052	50	55
288944◇	6	2	2.0	419	0.411	0.495	0.051	65	75
639500◇	6	3	2.7	629	0.411	0.495	0.051	65	75
639682◇	4	3	3.4	1001	0.258	0.310	0.048	85	95
639708◇	2	3	3.5	1592	0.162	0.195	0.045	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.

\* Inductive impedance is based on non-ferrous conduit with one diameter spacing center-to-center.

