NMD90 Aluminum SIMpull® Romex® Brand

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

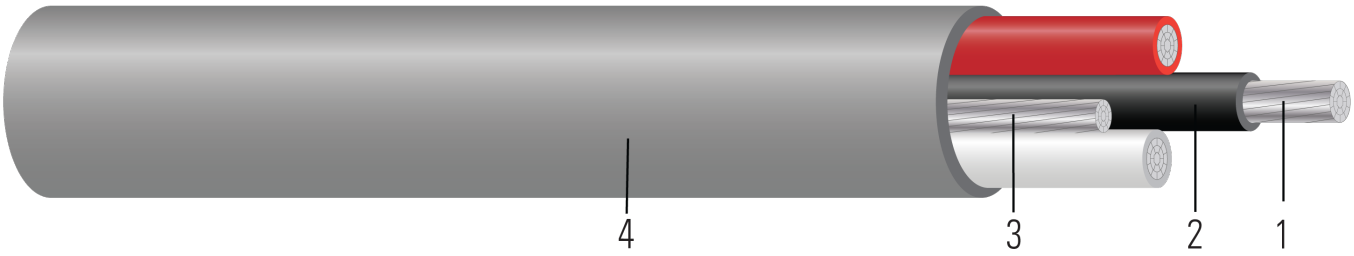

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Compact stranded 8000 series aluminum per ASTM B800 and ASTM B801 or ASTM B836
2. **Insulation:** All phases are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath. Colors: Black, Red, White
3. **Ground:** Compact stranded 8000 series aluminum per ASTM B800 and ASTM B801 or ASTM B836
4. **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 Code for further information related to applications.

SPECIFICATIONS:

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy
- ASTM B836 Compact Rounded Stranded Aluminum 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:

LL90458 MASTER-DESIGN CSA XX AWG 8000AL. --- TRIPLE E ALLOY AA8176 3 CDRS NMD90 NYLON ROMEX{R} BRAND SIMpull{TM} 300 VOLTS FT1 PAT www.patentSW.com

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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
562387◊	6	3	0.169	7	50	1x8	45	0.754	219
586871◊	4	3	0.212	7	50	1x6	80	0.935	359
562388◊	2	3	0.268	6	50	1x6	80	1.068	469

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
* Strand count meets minimum number per ASTM

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
6	3	3	0.674	0.84	0.051	50	55
4	3	3.7	0.424	0.528	0.048	65	75
2	3	5.3	0.266	0.331	0.045	90	100

* Ampacity values based on Canadian Electrical Code, Part 1 2024 Table 4. 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.

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