Romex® Brand SIMpull® Copper Type NM-B-PCS DUO™ Cable

Nonmetallic-Sheathed Cable with both Power Conductors and Control/Signal Conductors. 600 Volts. Copper Conductors. PVC Insulation/Nylon Sheath. Color-Coded PVC Jacket with SIMpull® Technology for Easier Pulling.

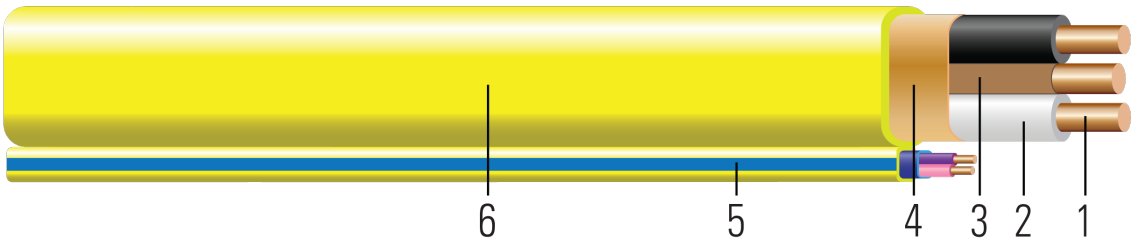

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Solid copper per ASTM B3
2. **Insulation:** All phases and neutral are insulated with Polyvinyl Chloride (PVC) with Nylon Sheath
3. **Ground:** Solid soft drawn bare copper with kraft paper wrap
4. **Binder:** Kraft paper
5. **Control/Signal Conductors:** 16 AWG Copper TFN Insulated Singles Colored Pink, Purple. Overall light blue jacket over the signal conductors
6. **Jacket:** Polyvinyl Chloride (PVC) jacket utilizing SIMpull® Technology.
   Color Code: White 14 AWG, Yellow 12 AWG, Orange 10 AWG. Blue stripe over control/signal component

APPLICATIONS AND FEATURES:

Southwire Romex® Brand SIMpull® Type NM-B-PCS DUO™ cable nonmetallic-sheathed cable may be used for both exposed and concealed work in dry locations as specified in the National Electrical Code. NM-B-PCS cable is primarily used in residential wiring for SMART home applications such as 0-10V DC dimming controls for LED lighting. NM-B-PCS 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-PCS cable is 600 volts. All conductors are rated 600 volts. Complies with the Class 2/Class 3 circuit separation requirements of NEC 725.136(I)(1) and 725.136(I)(2)."

CAUTION: Do note use the control/signal component to make connections to 120V AC line voltage.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- UL 719 Nonmetallic-Sheathed Cables
- RoHS-2 (European Directive 2011/65/EU)
- Federal Specification A-A-59544

SAMPLE PRINT LEGEND:

E18679 (UL) ROMEX® SIMpull{TM} XX AWG CU X CDR WITH XX AWG GROUND TYPE NM-B-PCS 600 VOLTS - PATENT PENDING

Signal/Control

CONDUCTORS UNDER THIS JACKET ARE ONLY FOR SIGNAL/CONTROL CONNECTIONS, NOT FOR CIRCUIT POWER

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
678071	14	2	Solid	0.064	20	1 x 14	28	0.213x0.637	52	109
679628	12	2	Solid	0.080	20	1 x 12	28	0.213x0.687	74	135
679630	10	2	Solid	0.101	25	1 x 10	28	0.213x0.767	107	169
679629	12	3	Solid	0.080	20	1 x 12	28	0.213x0.806	94	163

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

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
678071	14	2	2.5	65	2.631	3.170	0.058	20	25
679628	12	2	2.7	104	1.662	2.002	0.054	25	30
679630	10	2	3.1	166	1.040	1.253	0.050	35	40
679629	12	3	3.2	156	1.662	2.002	0.054	25	30

Ampacities based upon 2023 NEC Table 310.16. Also, see NEC sections 310.15 for additional requirements.