

# QI® Type NM-B Non-Metallic Sheathed Cable

600 V Copper, PVC/Nylon, PVC Jacket, 90 °C

**CME**<sup>®</sup>  
wire and cable

A Viakable Company

## Features

UL Listed as NM-B Cable.

Single conductors are dual rated THHN/THWN, meeting 90 °C Dry, 75 °C Wet.

## Application

For used in residential wiring as branch circuits for outlets, switches and other loads.

For both exposed and concealed work in normally dry locations except as prohibited by NEC.

To be installed or fished in air voids in masonry block or tile walls, which are not subject to excessive wetness or dampness.

The allowable ampacity shall not exceed that of a 60 °C rated conductor, in accordance with NEC.

## Standards

UL 719

Nonmetallic-Sheathed Cables.

UL 83

Thermoplastic-Insulated Wires and Cables.

A-A-59544

Federal Specifications Standards and Test Methods.

## Specifications

Maximum operating voltage:

- 600 volts

Maximum conductor operation temperature:

- 90° C Dry, but conductor ampacity is limited to 60 °C, in accordance with NEC.

## Engineering Information

**1. Copper Conductor:** Soft annealed uncoated copper solid wire per ASTM B3; or soft annealed uncoated copper Class B or C concentric stranding or unilay (19 wires) per ASTM B8; or combination unilay per ASTM B787.

**Sizes:** 14 AWG – 2 AWG

Number of Conductors: 2 to 4, or 4 conductor with 2 neutrals.

**2. Insulation:** Flame retardant thermoplastic polyvinyl chloride (PVC) and nylon covering.

Number of Conductors	Color Code			
2 - 2	Blk	Wht	Red	Wht/Red Stripes

**3. Bare Ground:** Soft annealed uncoated copper solid wire per ASTM B3.

**4. Separator:** A suitable paper wrap, applied over the ground.

**5. Assembly:** 2 conductors and ground laid parallel and overall paper wrap or 3 and 4 conductors and ground twisted together.

**6. Jacket:** Flexible, moisture abrasion resistant and flame retardant polyvinyl chloride (PVC), and color coded for ID.



Technical Data

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Conductor					Ground Wire		Cable Dimension	Net Weight
Size AWG	Number of Conductors	Number of Strands	Color	Insulation Thickness	Size	Number of Strands		
				mil	AWG			
Two Conductor (Flat Configuration)								
14	2	1	White	19	14	1	166 x 354	59
12	2	1	Yellow	19	12	1	183 x 388	84
10	2	1	Orange	24	10	1	214 x 440	126
8	2	19	Black	35	10	1	276 x 603	187
6	2	19	Black	35	10	1	313 x 718	259
Three Conductor (Round Configuration)								
14	3	1	Blue	19	14	1	300	75
12	3	1	Purple	19	12	1	339	109
10	3	1	Pink	24	10	1	412	176
8	3	19	Black	35	10	1	558	258
6	3	19	Black	35	10	1	637	362
4	3	19	Black	46	8	1	799	568
2	3	19	Black	46	8	1	934	827
Four Conductor (Round Configuration)								
14	2/2	1	White	19	14	1	331	92
12	2/2	1	Yellow	19	12	1	379	134

The above data are approximate and subject to normal manufacturing tolerances. Where required, the compatibility with glands, connectors and accessories should be verified using actual dimensions of the product. For sizes not listed above, please contact Sales Department.  
**Ampacities:** Refer to beginning of section.

NM-B and UF-B

Conductor Size AWG/kcmil	Ampacity
	60 °C
14	15
12	20
10	30
8	40
6	55
4	70
2	95

NEC Tables are based on Table 310.15(B)(16) (formerly Table 310.16) Allowable Ampacities of Insulated Conductors Rated Up to and Including 2000 Volts, 60 °C Through 90 °C, Not More Than Three Current-Carrying Conductors in Raceway, Cable, or Earth (Directly Buried), Based on Ambient Temperature of 30 °C.