



**Description:** Electrolytic copper conductor with 99.9% purity, soft drawn, solid or stranded concentric class B or C. Thermoplastic-insulated with a nylon covering.

**Applications:**

For general use in commercial and industrial installations:

- Public buildings
- Hotels
- Warehouses
- Chemical plants
- Petrochemical plants

**Features:**

- Resistant to:
  - Heat            -Humidity
  - Solvents      - Oils Resistant (PR I & PR II)
  - Gasoline Resistant (GR I & GR II)
  - Grease        -Chemical Agents
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- Flame retardant PVC
- Smaller outside diameter (-20% vs THHW)
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**Standards & References:**

- ASTM - B3, B8 and B787 (19 Wire Combination Unilay-Stranded)
- UL Standards 83 and 1063
- NOM-ANCE
- VW-1 - Sizes 14 through 1 AWG
- CT Rated in Sizes 1/0 AWG and larger
- National Electrical Code, NFPA 70
- FT1 - All Sizes
- MTW - Stranded Constructions Only
- TWN 75
- T90

**TECHNICAL DATA**

**Maximum Operating Voltage:**

600 volts

**Maximum Operating Temperature:**

- Dry environment: 90°C / 194°F
- Moist and wet environments: 90°C / 194°F

**Rules and registers:**



**Manufacturing Range:**

- wires:            14 AWG to 10 AWG 14
- stranded:      AWG to 1000 kcmil

**Colors:**

- Black            -White
- Grid            -blue
- Purple          -green
- Yellow          -Orange
- brown           -Gray

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size	Cross section Area	number of Strands	Nominal Bare Diameter	Nominal insulation thickness	Nominal Jacket thickness	Overall Cable Diameter	approx. Weight	ohmic Resistance
AWG/kcmil	mm <sup>2</sup>		mils	mils	mils	mils	lbs/1000 ft	ohm/km
14	2.08	1	0.064	0.015	0.004	0.102	16.1	8.280
12	3.31	1	0.081	0.015	0.004	0.119	24.2	5.210
10	5.26	1	0.102	0.020	0.004	0.150	38.3	3,277
14	2.08	7	0.073	0.015	0.004	0.110	16.1	8.400
12	3.31	19	0.090	0.015	0.004	0.128	24.9	5.320
10	5.26	19	0.113	0.020	0.004	0.161	40.3	3.340
8	8.37	19	0.143	0.030	0.005	0.213	65.9	2.100
6	13.30	7	0.184	0.030	0.005	0.254	100.1	1.320
4	21.20	19	0.226	0.040	0.006	0.318	161.3	0.832
2	33.60	19	0.286	0.040	0.006	0.378	245.9	0.543
1/0	53.50	19	0.360	0.050	0.007	0.474	389.1	0.329
2/0	67.40	19	0.404	0.050	0.007	0.518	483.7	0.261
3/0	85.00	19	0.454	0.050	0.007	0.568	600.7	0.207
4/0	107.00	19	0.510	0.050	0.007	0.624	749.2	0.164
250	127.00	37	0.576	0.060	0.008	0.711	893.7	0.139
300	152.00	37	0.630	0.060	0.008	0.766	1068.4	0.116
350	177.00	37	0.681	0.060	0.008	0.816	1236.4	0.099
400	203.00	37	0.728	0.060	0.008	0.863	1391.0	0.087
500	253.00	37	0.814	0.060	0.008	0.949	1740.4	0.069
600	304.00	61	0.893	0.070	0.009	1.051	2096.5	0.058
750	380.00	61	0.998	0.070	0.009	1.156	2580.4	0.046
1000	507.00	61	1.152	0.070	0.009	1.311	3427.0	0.035

# WIRES AND CABLES VINIKAWIRES AND CABLES NYLON TYPE THHN/THWN-2® THHN / THWN-2 CT 600 V 90°C



Electrolytic copper conductor of 99.9% purity in soft, solid or concentric stranding class B or C, with polyvinyl chloride (PVC) insulation and nylon outer sheath.

## APPLICATIONS

For general use in commercial and industrial installations:

- Hotels.
- Cellars.
- Chemical plants.
- Petrochemical plants.

They can also be used in ducts or trays.

## CHARACTERISTICS

- Resistant to:
  - Heat.
  - Humidity.
  - Solvents.
  - Oils (PR-II).
  - Gasoline (GR-II).
  - Fats.
  - Chemical agents.
- Resistant to abrasion and mechanical stress.
- Antiflame
- Smaller outer diameter (20% compared to THHW).
- Low coefficient of friction

## TECHNICAL DATA

**Maximum operating voltage:**  
600 volts

**Temp. max of operation:**  
- Dry environment: 90°C  
- Humid and wet environments: 90°C

**Packing:**  
- Boxes from 100 m 14 AWG to 8 AWG.  
- Coils from 100 m 6 AWG to 4/0 AWG.  
- Reels of 500 m or more.

**Standards and records:**  
- NMX-J-010-ANCE  
- NOM-J-063-SCFI  
- UL 83

**Manufacturing range:**  
wires: 14 AWG to 10 AWG\_  
Cables: 14 AWG to 1000 kcmil

**Colors:**  
- Black, white, red, green, and blue  
  
- Note: Other colors available upon request.

