



CWC LowFriction UL Type THHN / THWN-2, Aluminum Conductor, 90°C Dry or Wet, 75°C in Oil, Rated 600 V

APPLICATIONS

CWC LowFriction UL Type THHN / THWN-2 conductors are primarily used in conduit and cable trays for services, feeders, and branch circuits in commercial or industrial applications in accordance with the NEC. When used as UL Type THHN, the conductor is suitable for use in dry locations at temperatures not to exceed 90°C. When used as UL Type THWN-2, the conductor is suitable for use in dry or wet locations at temperatures not to exceed 90°C or 75°C when exposed to oil or coolant. The conductor is rated 600 V. Although this product may be installed without the application of pulling lubricant, a good quality pulling lubricant is recommended.

CONSTRUCTION

Conductor: Annealed compact stranded AA-8000 series Aluminum Conductor Material (ACM).

Insulation: Low coefficient of friction, abrasion, moisture, and heat resistant colored polyvinyl chloride (PVC).

Covering: Low coefficient of friction, abrasion, moisture, and heat resistant translucent Nylon polyamide.

CONDUCTOR IDENTIFICATION

Colored PVC

VOLTAGE RATING: 600 V

TEMPERATURE RATING

Dry or Wet	90°C
Exposed to Oil	75°C

MINIMUM BENDING RADIUS

Overall Diameter: Less than or Equal to:	1.000 in
Not Under Tension:	4x outer diameter
Under Tension (During Pull):	6x outer diameter
Overall Diameter:	Greater than 1.000 in
Not Under Tension:	5x outer diameter
Under Tension (During Pull):	7.5x outer diameter

RATINGS AND MARKINGS

Marked VW-1

Sizes 6 AWG and larger sunlight resistant and marked

Sizes 1/0 AWG and larger marked "FOR CT USE"

RoHS Compliant

STANDARDS

These cables are manufactured and tested to meet or exceed the following standards:

- ASTM B800 – 8000 Series Aluminum Alloy Wire for Electrical Purposes— Annealed and Intermediate Tempers
- ASTM B801 – Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy for Subsequent Covering or Insulation
- UL 83 – Thermoplastic-Insulated Wires and Cables
- ICEA S-95-658 / NEMA WC70 – Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- Federal Specification AA-59544

LISTINGS AND CERTIFICATIONS

UL listed as Type THHN / THWN-2 – File E487847

PACKAGING

250 ft reel

500 ft reel

1000 ft reel

Master reel

Coil

Item Number	Conductor Size (AWG or kcmil)	Conductor Diameter (in)	Insulation Thickness (in)	Covering Thickness (in)	Overall Diameter (in)	Al Weight (lb/1000 ft)	Net Weight (lb/1000 ft)
A8-01THHN	8	0.134	0.030	0.005	0.204	15.5	24
A6-01THHN	6	0.169	0.030	0.005	0.239	24.7	35
A4-01THHN	4	0.213	0.040	0.006	0.305	39.3	56.5
A3-01THHN	3	0.238	0.040	0.006	0.330	49.5	68.4
A2-01THHN	2	0.268	0.040	0.006	0.360	62.5	83.4
A1-01THHN	1	0.299	0.050	0.007	0.413	78.8	108
A1/0-01THHN	1/0	0.336	0.050	0.007	0.450	99.4	131
A2/0-01THHN	2/0	0.376	0.050	0.007	0.490	125	160
A3/0-01THHN	3/0	0.423	0.050	0.007	0.537	158	197
A4/0-01THHN	4/0	0.475	0.050	0.007	0.589	199	242
A250-01THHN	250	0.520	0.060	0.008	0.656	235	292
A300-01THHN	300	0.570	0.060	0.008	0.706	282	344
A350-01THHN	350	0.616	0.060	0.008	0.752	329	396



CWC LowFriction UL Type THHN / THWN-2, Aluminum Conductor, 90 °C Dry or Wet, 75 °C in Oil, Rated 600 V

Item Number	Conductor Size (AWG or kcmil)	Conductor Diameter (in)	Insulation Thickness (in)	Covering Thickness (in)	Overall Diameter (in)	Al Weight (lb/1000 ft)	Net Weight (lb/1000 ft)
A400-01THHN	400	0.659	0.060	0.008	0.795	376	447
A500-01THHN	500	0.736	0.060	0.008	0.872	471	550
A600-01THHN	600	0.813	0.070	0.009	0.971	565	666
A700-01THHN	700	0.877	0.070	0.009	1.035	659	768
A750-01THHN	750	0.908	0.070	0.009	1.066	706	818
A900-01THHN	900	0.999	0.070	0.009	1.157	847	970
A1000-01THHN	1000	1.060	0.070	0.009	1.218	941	1071

NOTES

- 1) Dimensions and weights are subject to standard manufacturing tolerances and are subject to change without notice.