



THHN/THWN-2 High Speed

PVC, Low-Voltage Power

600 V, UL Type THHN/THWN-2, Single Conductor, Copper



Product Construction:

Conductor:

- 14 AWG thru 1000 kcmil bare annealed stranded copper per ASTM B3 and ASTM B8
- 14 AWG thru 10 AWG solid plain copper per ASTM B3

Insulation:

- Color-coded premium-grade flame-retardant, heat- and moisture-resistant Polyvinyl Chloride (PVC)

Jacket:

- Tough Polyamide (Nylon)

Print:

For 14 AWG solid thru 10 AWG solid:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED THHN/THWN-2 (UL) E66903 (SIZE) AWG (SIZE mm²) GRI and GRII 600 V VW-1 OR T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

For 14 AWG strand thru 10 AWG strand:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED MTW OR THHN/THWN-2 (UL) (SIZE) AWG (SIZE mm²) GRI and GRII 600 V VW-1 OR AWM OR T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

Print (cont'd.):

For 8 AWG thru 1 AWG, black only:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED MTW OR THHN/THWN-2 (UL) (SIZE) AWG (SIZE mm²) GRI and GRII SUN RES 600 V VW-1 OR AWM OR T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

For 8 AWG thru 1 AWG, all colors:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED MTW OR THHN/THWN-2 (UL) (SIZE) AWG (SIZE mm²) GRI and GRII 600 V VW-1 OR AWM OR T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

For 1/0 and larger, black only:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED MTW OR THHN/THWN-2 (UL) (SIZE) AWG (SIZE mm²) GRI and GRII SUN RES 600 V FOR CT USE OR AWM T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

For 1/0 and larger, all colors:

- GENERAL CABLE® (PLANT OF MFG) (YEAR OF MFG) HIGH SPEED MTW OR THHN/THWN-2 (UL) (SIZE) AWG (SIZE mm²) GRI and GRII SUN RES 600 V FOR CT USE OR AWM T90 NYLON/TWN 75°C (UL) FT1 (-25°C) MADE IN USA

Applications:

- General purpose building wire for services, feeders and branch circuits
- Conduit and raceways
- 1/0 and larger for cable tray use

Features:

- High Speed cable features a specially designed XLPE insulation that allows for fast and easy cable pulls
- 1/0 AWG and larger are rated for cable tray use
- Rated Gasoline and Oil Resistant II
- Resistant to abrasion, acids, alkalines, ozone, and water
- For THHN/THWN-2 applications, the conductor is appropriate for wet or dry locations not to exceed 90°C
- For MTW applications, the conductor is appropriate for use in dry locations at 90°C or not to exceed 60°C in wet locations or where exposed to oil or coolants (with ampacity limited to that for 75°C conductor temperature) as outlined in NFPA 79 Electrical Standards for Industrial Machinery
- Sequential foot markings every 2 feet on 8 AWG and larger for easy measuring
- Sunlight-resistant for 8 AWG and larger, black only
- Meets cold bend and cold impact tests at -25°C

Compliances:

Industry Compliances:

- ASTM B3 and B8
- UL Standard 83 – THHN/THWN-2
- UL Standard 1063 for machine tool wire (MTW)
- ICEA S-95-658/NEMA WC70
- NEC® Article 310
- RoHS Compliant
- c(UL) – T90 Nylon

Flame Test Compliances:

- UL 2556 VW-1 rated thru 1 AWG
- UL 2556 CT USE 1/0 and larger
- CSA C22.2 No. 0.3-92 FT1 Vertical Flame Test

Packaging:

- Cut-to-length services available for 8 AWG and larger

COLOR CODE CHART

| COLOR CODE | COLOR | COLOR CODE | COLOR |
|------------|--------|------------|--------|
| 1 | Black | 7 | Blue |
| 2 | White | 8 | Orange |
| 3 | Red | 9 | Gray |
| 4 | Green | A | Purple |
| 5 | Yellow | B | Pink |
| 6 | Brown | | |

PACKAGING CODE CHART

| PACKAGING CODE | PACKAGE |
|----------------|--------------|
| 10 | 2 x 500' |
| 20 | 4 x 500' |
| 32 | 500' Reel |
| 33 | 1000' Reel |
| 54 | 2000' Reel |
| 34 | 2500' Reel |
| 55 | 5000' Reel |
| 00 | Cut to Order |
| XX | Master Reel |



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600 V, UL Type THHN/THWN-2, Single Conductor, Copper

| CATALOG NUMBER | SIZE | | NUMBER OF WIRES | INSULATION THICKNESS | | JACKET THICKNESS | | NOMINAL CABLE O.D. | | COPPER WEIGHT | | NET WEIGHT | | AMPACITY (1) 90°C | PACKAGING PUT-UP CODE |
|----------------|--------------|-----------------|-----------------|----------------------|----|------------------|----|--------------------|----|---------------|-------|-------------|-------|-------------------|-----------------------|
| | AWG or kcmil | mm ² | | INCHES | mm | INCHES | mm | INCHES | mm | LBS/1000 FT | kg/km | LBS/1000 FT | kg/km | | |

TYPE THHN/THWN-2 90°C WET OR DRY LOCATIONS

| | | | | | | | | | | | | | | | |
|--------------|------|------|----|-------|------|-------|------|-------|-------|------|------|------|------|-----|----------------|
| 23014 | 14 | 2.08 | 1 | 0.015 | 0.38 | 0.004 | 0.10 | 0.102 | 2.59 | 16 | 23 | 19 | 27 | 25 | 20, 34 |
| 23012 | 12 | 3.31 | 1 | 0.015 | 0.38 | 0.004 | 0.10 | 0.119 | 3.02 | 25 | 37 | 28 | 41 | 30 | 20, 34 |
| 23010 | 10 | 5.26 | 1 | 0.020 | 0.51 | 0.004 | 0.10 | 0.150 | 3.81 | 40 | 58 | 45 | 66 | 40 | 10, 34 |
| 24014 | 14 | 2.08 | 19 | 0.015 | 0.38 | 0.004 | 0.10 | 0.109 | 2.77 | 13 | 18 | 16 | 23 | 25 | 20, 34 |
| 24012 | 12 | 3.31 | 19 | 0.015 | 0.38 | 0.004 | 0.10 | 0.130 | 3.31 | 20 | 29 | 24 | 35 | 30 | 20, 34 |
| 24010 | 10 | 5.26 | 19 | 0.020 | 0.51 | 0.004 | 0.10 | 0.161 | 4.09 | 32 | 47 | 38 | 55 | 40 | 10, 34 |
| 25008 | 8 | 8.37 | 19 | 0.030 | 0.76 | 0.005 | 0.13 | 0.212 | 5.38 | 51 | 74 | 62 | 90 | 55 | 32, 33, XX, 00 |
| 25006 | 6 | 13.3 | 19 | 0.030 | 0.76 | 0.005 | 0.13 | 0.248 | 6.30 | 81 | 118 | 94 | 137 | 75 | 32, 33, XX, 00 |
| 25004 | 4 | 21.2 | 19 | 0.040 | 1.02 | 0.006 | 0.15 | 0.317 | 8.05 | 129 | 188 | 151 | 220 | 95 | 32, 55, XX, 00 |
| 25002 | 2 | 33.6 | 19 | 0.040 | 1.02 | 0.006 | 0.15 | 0.375 | 9.53 | 205 | 298 | 232 | 338 | 130 | 55, XX, 00 |
| 25001 | 1 | 42.4 | 19 | 0.050 | 1.27 | 0.007 | 0.18 | 0.427 | 10.85 | 258 | 375 | 296 | 431 | 145 | 55, XX, 00 |
| 26110 | 1/0 | 53.5 | 19 | 0.050 | 1.27 | 0.007 | 0.18 | 0.466 | 11.84 | 326 | 474 | 368 | 535 | 170 | 55, XX, 00 |
| 26210 | 2/0 | 67.4 | 19 | 0.050 | 1.27 | 0.007 | 0.18 | 0.509 | 12.93 | 411 | 598 | 457 | 665 | 195 | 55, XX, 00 |
| 26310 | 3/0 | 85 | 19 | 0.050 | 1.27 | 0.007 | 0.18 | 0.557 | 14.15 | 518 | 754 | 570 | 829 | 225 | 55, XX, 00 |
| 26410 | 4/0 | 107 | 19 | 0.050 | 1.27 | 0.007 | 0.18 | 0.612 | 15.54 | 653 | 950 | 711 | 1034 | 260 | 55, XX, 00 |
| 27250 | 250 | 124 | 37 | 0.060 | 1.52 | 0.008 | 0.20 | 0.694 | 17.63 | 772 | 1123 | 850 | 1236 | 290 | 55, XX, 00 |
| 27300 | 300 | 152 | 37 | 0.060 | 1.52 | 0.008 | 0.20 | 0.747 | 18.97 | 926 | 1348 | 1011 | 1472 | 320 | 34, XX, 00 |
| 27350 | 350 | 177 | 37 | 0.060 | 1.52 | 0.008 | 0.20 | 0.797 | 20.24 | 1081 | 1573 | 1173 | 1707 | 350 | 34, XX, 00 |
| 27400 | 400 | 203 | 37 | 0.060 | 1.52 | 0.008 | 0.20 | 0.842 | 21.39 | 1235 | 1797 | 1334 | 1941 | 380 | 34, XX, 00 |
| 27500 | 500 | 253 | 37 | 0.060 | 1.52 | 0.008 | 0.20 | 0.925 | 23.50 | 1544 | 2247 | 1656 | 2409 | 430 | 34, XX, 00 |
| 27600 | 600 | 304 | 61 | 0.070 | 1.78 | 0.009 | 0.23 | 1.024 | 26.01 | 1853 | 2696 | 1996 | 2904 | 475 | 54, XX, 00 |
| 27750 | 750 | 380 | 61 | 0.070 | 1.78 | 0.009 | 0.23 | 1.126 | 28.60 | 2316 | 3370 | 2478 | 3607 | 535 | 54, XX, 00 |
| 27100 | 1000 | 507 | 61 | 0.070 | 1.78 | 0.009 | 0.23 | 1.275 | 32.39 | 3088 | 4494 | 3283 | 4777 | 615 | 54, XX, 00 |

Dimensions and weights are nominal; subject to industry tolerances.

(1) Ampacities per 2014 NEC Table 310.15(B)(16).

