



THHN/THWN 600v
THWN-2* (see range of sizes)

CATALOG NO. 1000



Application

General purpose, smallest diameter wire available for new construction or rewiring. Primarily used in conduit and cable trays for services, feeders, suitable for lighting and power in residential, commercial and industrial installations.

Description

Single conductor, bare copper, solid or stranded, polyvinyl chloride (PVC) insulation, overall jacket of polyamide nylon.

Specifications

UL listed, Standard 83 (IW), and Standard 1063 (when marking as MTW). Conforms to Federal Specification JC-30-B, ANSI-C 33.80 and requirements of the National Electrical Code (NEC). It is listed by Underwriters Laboratories for use at a maximum voltage of 600 volts and a maximum conductor temperature of 90°C in dry locations, 75°C in wet locations and 75°C when exposed to oil and gasoline in compliance with Underwriters Laboratories Standard for Thermoplastic Insulated Wires. It is also recognized as Type MTW rated 90°C when utilized with industrial machinery per Article 670. Stranded conductors are also recognized for use as appliance wire rated at 105°C in air and 60°C when exposed to oil. Sizes 14, 12 and 10 AWG are recognized for use as appliance wiring material (AWM) rated 90°C and 1000 volts. Sizes 14 through 8 AWG stranded are also recognized for use as Appliance Wiring Material (AWM) rated 90°C in dry locations, 60°C where exposed to oil or coolants per UL requirements, and appliance wire rated at 105°C when exposed to oil and shall comply with the applicable UL requirements. Sizes 1/0 AWG and larger are sunlight resistant for cable tray (CT) use (Black color only). All sizes meet VW-1 Vertical Flame Test. When used as type THWN-2, conductor is suitable for use in wet and dry locations at temperatures not to exceed 90°C. Products marked as THWN-2 are available in sizes 8 AWG and larger, ANY COLOR.

T H H N / T H W N T H W N - 2 C O P P E R

Size AWG/MCM	Number of Strands	Average Overall Diameter		Approximate Weight Lbs/1000 ft	Ampacity* Amps 90°C
		Inches	mm		
14	1	0.11	2.8	16	25
12	1	0.12	3.0	25	30
10	1	0.15	3.8	37	40
14	19	0.11	2.8	17	25
12	19	0.13	3.3	25	30
10	19	0.17	4.3	40	40
8	19	0.22	5.6	65	55
6	19	0.26	6.6	99	75
4	19	0.33	8.4	159	95
3	19	0.36	9.1	203	110
2	19	0.39	9.9	243	130
1	19	0.44	11.2	301	150
1/0	19	0.48	12.2	387	170
2/0	19	0.53	13.5	482	195
3/0	19	0.58	14.7	599	225
4/0	19	0.63	16.0	747	260
250	37	0.71	18.0	891	290
300	37	0.76	19.3	1060	320
350	37	0.81	20.6	1229	350
400	37	0.86	21.8	1396	380
500	37	0.94	23.9	1731	430
600	61	1.04	26.4	2087	475
750	61	1.15	29.2	2588	535
1000	61	1.30	33.0	3732	615

* NEC Table 310-16 not more than three conductors in raceway or cable tray or earth (direct buried) based on ambient temperature of 30°C (86°F). To determine ampacity by conductor size, please consult the National Electrical Code, latest edition. The above data are approximate and subject to normal manufacturing tolerances. THWN-2, sizes 8 and larger, any color.

Union Made

www.cmewire.com

©Copyright 2006 CME Wire and Cable, Inc. All Rights Reserved. For more information feel free to Contact Us
 495 Horizon Drive NE, Suite 100, Suwanee, Georgia 30024 Phone: 770.623.0001 Fax: 678.546.5422