



Type Flat NM-B Cable



1. Conductor: Annealed copper, Annealed to ASTM B3.
2. Insulation: PVC, type THHN.
Color for 2 conductors: White, Black;
Color for 3 conductors: White, Black, Red.
3. Wrapping: Kraft paper wrapping over the grounding conductor.
4. Core jacket: Nylon.
5. Assembly: Conductors laid parallel, Kraft paper wrapped.
6. Jacket: PVC, flame retardant, 90° C.

Nominal section (AWG)	Color of jacket
12	Yellow
14	White
10	Orange
8~2	Black

Standards: UL719, UL83, UL1581

UL file No.: E522993

Mark: HT CABLES (UL) E522993 TYPE NM-B 600V AWG XX CU XCDR WITH AWG XX GROUND 2021 ****FT

Size	Number of strands in the conductor	Number of conductors	Insulation Thickness	Min. Thickness of nylon	Size of grounding core	Number of strands in the ground	Jacket thickness	Approx. OD L*H	Weight	Allowable Ampacity
TWO CONDUCTOR										
AWG			mm	mm	AWG		mm	mm	lbs/1000FT	A
14	1	2	0.38	0.1	14	1	0.76	4.5*9.1	66	15
12	1	2	0.38	0.1	12	1	0.76	4.9*10.4	93	20
10	1	2	0.51	0.1	10	1	0.76	5.7*12.5	137	30
8	7	2	0.76	0.13	10	1	0.76	7.4*15.9	201	40
6	7	2	0.76	0.13	10	1	0.76	8.4*17.5	272	55
THREE CONDUCTOR										
14	1	3	0.38	0.1	14	1	0.76	4.5*11.3	87	15
12	1	3	0.38	0.1	12	1	0.76	4.9*13.4	122	20
10	1	3	0.51	0.1	10	1	0.76	5.7*15.9	182	30
8	7	3	0.76	0.13	10	1	0.76	7.4*21.1	273	40
6	7	3	0.76	0.13	10	1	0.76	8.4*23.9	388	55



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PACKAGING OPTIONS:

Packaging sizes available upon request.

Conductors shall be UL-listed Type NM-B. These conductors shall be suitable for operation at 600 volts in all installations as designated in the National Electrical Code.



THHN Wire

600 Volts. Copper Conductor Thermoplastic Insulation Nylon Sheath

THHN / THWN / THWN-2



E522993

APPLICATIONS

THHN or THWN-2 conductors are primarily used in conduit and cable trays for services, feeders, and branch circuits in commercial or industrial applications as specified in the National Electrical Code. Voltage for all applications is 600 volts.

When used as type THHN, conductor is suitable for use in dry locations at temperatures not to exceed 90° C.

When used as type THWN, conductor is suitable for use at temperatures not to exceed 90° C, dry locations or 75° C wet locations or not to exceed 75° C when exposed to oil or coolant.

When used as type THWN-2, conductor is suitable for use in wet and dry locations at temperatures not to exceed 90° C or not to exceed 75°C when exposed to oil or coolant.

Conductor temperatures not to exceed 105° C in dry locations when rated AWM and used as appliance wiring material. Voltage rating for all applications is 600 volts.

SPECIFICATIONS

THHN or THWN-2 complies with:

ASTM - B3, B8 (7,19, 37, 61 Strands), B 787 (19 Wire Combination Unilay Strand)

Technical Compliances:

- UL 83 - Thermoplastic-Insulated Wires and Cables
- CSA C22.2 No. 75-03
- UL 1063 (MTW) - Machine-Tool Wires and Cables (stranded cables only)
- UL 758 (AWM)
- ICEA S-95-658/NEMA WC 70



Cable Construction

Conductor:

Soft annealed bare copper, Class B
stranding per ASTM B8

Insulation:

Tough, heat and moisture resistant Polyvinyl chloride (PVC) insulation over which a nylon jacket is applied.
Color: option

Data sheet

MM2	AWG/Kcmil		Diameter of conductor	No. of strands	Insulation Thickness	Jacket Thickness	Diam.	Nominal Total Weight per 1000 FT.	Allowable Ampacity 90° C
			mm	n	mm	mm	mm	lbs/1000ft	A
2.08	14	AWG	1.63	1	0.38	0.1	2.7	16	15
3.31	12	AWG	2.05	1	0.38	0.1	3.2	24	20
5.26	10	AWG	2.59	1	0.51	0.1	4.0	38	30
2.08	14	AWG	1.85	19	0.38	0.1	2.9	17	15
3.31	12	AWG	2.32	19	0.38	0.1	3.4	25	20
5.26	10	AWG	2.95	19	0.51	0.1	4.3	39	30
8.37	8	AWG	3.71	19	0.76	0.13	5.6	64	55
13.3	6	AWG	4.67	19	0.76	0.13	6.6	96	75
21.2	4	AWG	5.89	19	1.02	0.15	8.4	155	100
26.7	3	AWG	6.6	19	1.02	0.15	9	190	115
33.6	2	AWG	7.42	19	1.02	0.15	9.9	234	130
42.4	1	AWG	8.43	19	1.27	0.18	11.4	300	145
53.5	1/0	AWG	9.45	19	1.27	0.18	12	368	170
67.4	2/0	AWG	10.62	19	1.27	0.18	13.1	456	195
85	3/0	AWG	11.94	19	1.27	0.18	14.3	566	225
107	4/0	AWG	13.41	19	1.27	0.18	15.7	704	260
127	250	Kcmil	14.6	37	1.52	0.2	17.5	843	290
152	300	Kcmil	16	37	1.52	0.2	18.8	999	320
177	350	Kcmil	17.3	37	1.52	0.2	20	1154	350
203	400	Kcmil	18.49	37	1.52	0.2	21.2	1314	380
253	500	Kcmil	20.65	37	1.52	0.2	23.5	1629	430
380	750	Kcmil	25.35	61	1.78	0.23	28.4	2431	535



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PACKAGING OPTION:

Packaging sizes available upon request.

Allowable ampacities shown are for general use as designated by the 2014 Edition of the National Electrical Code Sections 310.15 and 240.4(D).

Unless the equipment is marked for use at higher temperatures the conductor shall be limited to the following per NEC 110.14(C):

60° C - When terminated to equipment for circuits marked for 14 - 1 AWG conductors or rated 100 amperes or less.

75° C - When terminated to equipment for circuits marked for conductors larger than 1 AWG or rated over 100 amperes.

90° C - THWN-2 wet or dry locations and THHN dry locations for ampacity alteration purposes using NEC section 310.15.