

600 Volts. Copper Conductor Thermoplastic Insulation Nylon Sheath

THHN / THWN / THWN-2



[ZLGR.E468871](#)

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 comply 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	Min. No of wire	Insulation Thickness	Jacket Thickness	Diam.	Copper Coductor Approx. Wt.	AL Conductor Approx. Wt.
-	-	-	mm	n	mm	mm	mm	Kg/km	Kg/km
2.08	14	AWG	1.85	7	0.38	0.1	2.8	25	11.8
3.31	12	AWG	2.32	7	0.38	0.1	3.3	37	16.3
5.26	10	AWG	2.95	7	0.51	0.1	4.2	59	25.8
8.37	8	AWG	3.71	7	0.76	0.13	5.5	96	43.7
13.3	6	AWG	4.67	7	0.76	0.13	6.5	145	61.5
21.2	4	AWG	5.89	7	1.02	0.15	8.2	232	99.2
33.6	2	AWG	7.42	7	1.02	0.15	9.8	352	118.3
42.4	1	AWG	8.43	19	1.27	0.18	11.3	452	141.9
53.5	1/0	AWG	9.45	19	1.27	0.18	12.4	559	186.4
67.4	2/0	AWG	10.62	19	1.27	0.18	13.5	692	224.0
85	3/0	AWG	11.94	19	1.27	0.18	14.8	860	270.2
107	4/0	AWG	13.41	19	1.27	0.18	16.3	1068	327.6
127	250	Kcmil	14.60	37	1.52	0.2	18.0	1279	398.1
152	300	Kcmil	16.00	37	1.52	0.2	19.4	1516	483.8
177	350	Kcmil	17.30	37	1.52	0.2	20.7	1751	563.8
203	400	Kcmil	18.49	37	1.52	0.2	21.9	1995	642.8
253	500	Kcmil	20.65	37	1.52	0.2	24.1	2463	723.7
279	550	Kcmil	21.72	61	1.78	0.23	25.7	2740.0	801.3
304	600	kcmil	22.68	61	1.78	0.23	26.7	2974.1	878.2
329	650	kcmil	23.60	61	1.78	0.23	27.6	3207.8	993.0
355	700	kcmil	24.49	61	1.78	0.23	28.5	3450.3	1070.5
380	750	kcmil	25.35	61	1.78	0.23	29.4	3683.4	1147.7
405	800	kcmil	26.16	61	1.78	0.23	30.2	3916.0	1227.2
456	900	kcmil	27.79	61	1.78	0.23	31.8	4390.4	1303.8
507	1000	kcmil	29.26	61	1.78	0.23	33.3	4863.1	1379.9

