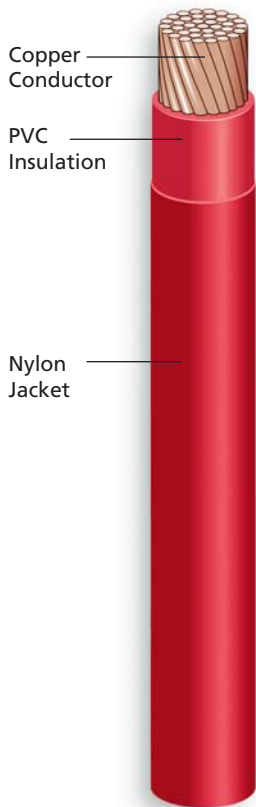


# THHN / MTW / THWN-2 COPPER CONDUCTOR

TYPE THHN / MTW / THWN-2 COPPER CONDUCTOR

800.962.9473



## Engineering Specifications:

### Standards:

Underwriters Laboratories Standard UL-83, UL-1063, UL-758  
 AWM Spec 1316, 1317, 1318, 1319, 1320, 1321  
 ASTM Stranding Class B3, B8, B787  
 Federal Specification A-A-59544  
 Canadian Standards Association C22.2 No. 75  
 NEMA WC70/ICEA S-95-658



Listed Solid E-123774  
 Stranded E-156879

### Construction:

#### Conductors:

Solid, uncoated copper conductors per ASTM-B3  
 Stranded, uncoated copper conductors per ASTM-B3, ASTM-B787 and ASTM-B8

#### Insulation:

Color-coded Polyvinyl Chloride (PVC), heat- and moisture-resistant, flame-retardant compound per UL-1063 and UL-83

#### Applications:

Type THHN-THWN-2 building wire is intended for general purpose applications as defined by the National Electrical Code (NEC). Suitable for new construction or rewiring for 600-volt applications. When used as type THHN or THWN-2, the conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C in oil or coolants. When used as type MTW, conductor is suitable for use in dry locations at 90°C, or not to exceed 60°C in wet locations or where exposed to oils or coolants. When used as type AWM temperatures should not exceed 105°C in dry locations.

#### Features:

Slick, Nylon outer jacket for easy pulling. VW-1 rated 14 AWG - 1 AWG. 1/0 AWG and larger is rated for CT use. 6 AWG and larger is rated for sunlight resistance in all colors. All sizes are rated "Gasoline and oil resistant II."

#### Jacket:

A tough, polyamide, Nylon outer covering per UL-1063 and UL-83.

Size (AWG or kcmil)	Number of Strands	Conductor Size (mm <sup>2</sup> )	Insulation Thickness (inches)		Outside Diameter		Allowable Ampacities*			Approx. Net Weight (lbs./1000 ft.)	Standard Packaging
			PVC	Nylon	(inches)	(mm)	60°C	75°C	90°C		
14	Solid	2.08	.015	.004	.101	2.57	15	15	15	15	2000 carton (4x500), 2500' reels
12	Solid	3.31	.015	.004	.120	3.05	20	20	20	23	2000 carton (4x500), 2500' reels
10	Solid	5.26	.020	.004	.149	3.78	30	30	30	37	1000 carton (2x500), 2500' reels
14	19	2.08	.015	.004	.109	2.77	15	15	15	17	2000 carton (4x500), 2500' reels
12	19	3.31	.015	.004	.127	3.23	20	20	20	24	2000 carton (4x500), 2500' reels
10	19	5.26	.020	.004	.160	4.07	30	30	30	38	1000 carton (2x500), 2500' reels
8	19	8.37	.030	.005	.212	5.39	40	50	55	63	500' 1000' 2500' 5000' reels
6	19	13.3	.030	.005	.248	6.30	55	65	75	95	500' 1000' 2500' 5000' 25,000' reels
4	19	21.2	.040	.006	.317	8.06	70	85	95	153	500' 1000' 2500' 5000' 20,000' reels
3	19	26.7	.040	.006	.344	8.74	85	100	110	189	500' 1000' 2500' 5000' 15,000' reels
2	19	33.6	.040	.006	.375	9.53	95	115	130	234	500' 1000' 2500' 5000' 14,000' reels
1	19	42.4	.050	.007	.435	11.05	110	130	150	299	500' 1000' 2500' 5000' 22,000' reels
1/0	19	53.5	.050	.007	.474	12.04	125	150	170	372	500' 1000' 2500' 5000' 16,000' reels
2/0	19	67.4	.050	.007	.518	13.16	145	175	195	462	500' 1000' 2500' 5000' 14,000' reels
3/0	19	85.0	.050	.007	.568	14.43	165	200	225	572	500' 1000' 2500' 5000' 12,000' reels
4/0	19	107	.050	.007	.624	15.85	195	230	260	712	500' 1000' 2500' 5000' 9000' reels
250	37	127	.060	.008	.678	17.23	215	255	290	851	500' 1000' 2500' 4000' 8500' reels
300	37	152	.060	.008	.730	18.55	240	285	320	1010	500' 1000' 3500' 7500' reels
350	37	177	.060	.008	.777	19.74	260	310	350	1170	500' 1000' 3000' 6000' reels
400	37	203	.060	.008	.821	20.86	280	335	380	1330	500' 1000' 3000' 5000' reels
500	37	253	.060	.008	.902	22.91	320	380	430	1650	500' 1000' 2500' 4000' reels
600	61	304	.070	.009	1.051	26.70	355	420	475	1985	500' 1000' 2000' 3000' reels
750	61	380	.070	.009	1.156	29.37	400	475	535	2455	500' 1000' 1500' 2500' reels
1000	61	507	.070	.009	1.310	33.28	455	545	615	3252	500' 1000' 2000' reels

\*Allowable ampacity shown above is per the National Electrical Code. The above data is approximate and subject to normal manufacturing tolerances.

#### PRINT LEGEND:

SOLID CONDUCTOR SIZES 14 AWG THROUGH 10 AWG: E123774 (size) AWG TYPE THHN OR THWN-2 GR II VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1. DATE/TIME/OPER/QC  
 STRANDED CONDUCTOR SIZES 14 AWG THROUGH 8 AWG: E156879 (size) AWG TYPE MTW OR THHN OR THWN-2 GR II VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR TWN 75 FT1 DATE/TIME/OPER/QC  
 STRANDED CONDUCTORS-SIZES 6 AWG THROUGH 1 AWG: E156879 (size) TYPE MTW OR THHN OR THWN-2 GR II SUN RES VW-1 600 VOLTS (UL) OR AWM OR C(UL) TYPE T90 NYLON OR TWN 75 FT1 DATE/TIME/OPER/QC  
 CONDUCTOR SIZES 1/0 AWG THROUGH 1000 KCMIL: E156879 (size) TYPE MTW OR THHN OR THWN-2 GR II SUN-RES FOR CT USE (UL) OR C(UL) TYPE T90 NYLON OR TWN 75 FT1 DATE/TIME/OPER/QC