



ENGINEERING SPECIFICATIONS:

Standards:

Underwriters Laboratories Standards 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
 Institute of Electrical and Electronics Engineers
 ARRA 2009; Section 1605 "Buy American" Compliant



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). Type THHN/THWN-2 is permitted for new construction or rewiring for 600-volt applications. Applications requiring Type THHN or THWN-2: the conductor is appropriate for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C in oil or coolants. Applications requiring Type MTW: 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 oils or coolants. Applications requiring Type AWM: the conductor is appropriate for use at temperatures to not exceed 105°C in dry locations.

Features:

Slick, Nylon outer jacket for easy pulling. VW-1 rated 14 AWG - 8 AWG. All sizes are rated gasoline and oil-resistant II.

Jacket:

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

Barrel Packs THHN/MTW/THWN-2/T90 Copper Conductor 600V

Conductor Size (AWG)	Type	Insulation Thickness (inches)		Nylon Jacket Thickness		Outside Diameter		Allowable Ampacity (Amps)*			Approximate Net Weight (lbs/1000 ft)	Standard Packaging (ft)	
		(PVC)	(Nylon)	(mm)	(in)	(mm)	(in)	60°C	75°C	90°C		23 x 30.5 (55 gal)	23 x 42 (75 gal)
												Small	Large
18	TFN SOL	0.015	0.004	.100	.004	1.989	0.078	6	6	6	8	20,000'	30,000'
16	TFN SOL	0.015	0.004	.100	.004	2.256	0.089	8	8	8	11	20,000'	30,000'
14	THHN SOL	0.015	0.004	.100	.004	2.593	0.101	15	15	15	15	20,000'	30,000'
12	THHN SOL	0.015	0.004	.100	.004	3.017	0.120	20	20	20	23	16,000'	24,000'
10	THHN SOL	0.020	0.004	.100	.004	3.807	0.149	30	30	30	37	10,000'	15,000'
18	TFFN STD	0.015	0.004	.100	.004	2.235	0.088	6	6	6	8	20,000'	30,000'
16	TFFN STD	0.015	0.004	.100	.004	2.565	0.101	8	8	8	11	20,000'	30,000'
14	THHN STD	0.015	0.004	.100	.004	2.593	0.109	15	15	15	15	20,000'	30,000'
12	THHN STD	0.015	0.004	.100	.004	3.017	0.127	20	20	20	24	16,000'	24,000'
10	THHN STD	0.020	0.004	.100	.004	3.807	0.160	30	30	30	38	10,000'	15,000'
8	THHN STD	0.030	0.005	.130	.005	5.410	0.212	40	50	55	63	7,000'	10,000'

Reference chart on Page 10 for more detailed information.

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

PRINT LEGEND: CONDUCTOR SIZES 18 AWG THROUGH 16 AWG SOLID: ENCORE WIRE CORPORATION (SIZE) AWG TYPE TFN OR AWM OR GR II VW-1 600 VOLTS (UL).

CONDUCTOR SIZES 18 AWG THROUGH 16 AWG STRANDED: ENCORE WIRE CORPORATION (SIZE) AWG TYPE MTW OR TFFN OR AWM GR II VW-1 600 VOLTS (UL) OR AWM OR C (UL) TYPE TEWN FT1.

SOLID CONDUCTOR SIZES 14 AWG THROUGH 10 AWG: ENCORE WIRE CORPORATION (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.

STRANDED CONDUCTOR SIZES 14 AWG THROUGH 8 AWG: ENCORE WIRE CORPORATION (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