

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.

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

Size (AWG or KCMIL)	Number of Strands	Cross Sect. Area (mm ²)	PVC Insulation Thickness (Conductor)		Nylon Jacket Thickness		Outside Diameter		Approximate Net Weight		Allowable Ampacity (Amps)*			Standard Packaging (ft)
			(mm)	(in)	(mm)	(in)	(mm)	(in)	(kg/km)	(lbs/1000 ft)	60°C	75°C	90°C	
14	Solid	2.08	0.380	0.015	0.100	0.004	2.57	0.101	22	15	15	15	15	2000 carton (4x500), 2500' reels
12	Solid	3.31	0.380	0.015	0.100	0.004	3.05	0.120	34	23	20	20	20	2000 carton (4x500), 2500' reels
10	Solid	5.26	0.510	0.020	0.100	0.004	3.78	0.149	55	37	30	30	30	1000 carton (2x500), 2500' reels
14	19	2.08	0.380	0.015	0.100	0.004	2.77	0.109	25	16	15	15	15	2000 carton (4x500), 2500' reels
12	19	3.31	0.380	0.015	0.100	0.004	3.23	0.127	36	23	20	20	20	2000 carton (4x500), 2500' reels
10	19	5.26	0.510	0.020	0.100	0.004	4.07	0.160	57	38	30	30	30	1000 carton (2x500), 2500' reels
8	19	8.37	0.760	0.030	0.130	0.005	5.39	0.212	94	62	40	50	55	500' 1000' 2500' 5000' reels

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

PRINT LEGEND:

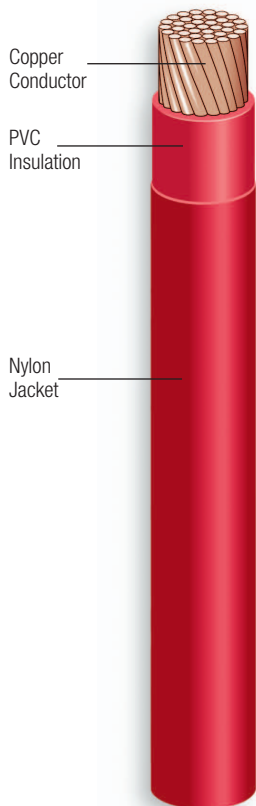
SOLID CONDUCTOR SIZES 14 AWG THROUGH 10 AWG: ENCORE WIRE CORPORATION (size) AWG TYPE THHN OR THWN-2 GR II VW-1 600 VOLTS (UL) OR AWM OR C-(UL) TYPE T90 NYLON OR T90 FT1. DATE/TIME/OPER/QC

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 T90 FT1 DATE/TIME/OPER/QC

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 IEEE 1202/FT4
 ICEA T-29-520 (210,000 Btu/hr) Flame Test
 ARRA 2009; Section 1605 "Buy American" Compliant



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. 6 AWG and larger Sunlight Resistant in all colors. All sizes rated gasoline and oil resistant II. On 250 KCMIL and larger, sequential footage markings located every foot for easy measuring. For 1 AWG through 4/0 AWG sequential foot markings on master reels only unless otherwise specified. 1/0 AWG and larger are rated for cable tray use and comply with IEEE 1202/FT4 (70,000 Btu/hr.) flame test and ICEA T-29-520 (210,000 Btu/hr.) flame test.

Jacket:

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

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

Size (AWG or KCMIL)	Number of Strands	Cross Sect. Area (mm ²)	PVC Insulation Thickness (Conductor)		Nylon Jacket Thickness		Outside Diameter		Approximate Net Weight		Allowable Ampacity (Amps)*			Standard Packaging (ft)
			(mm)	(in)	(mm)	(in)	(mm)	(in)	(kg/km)	(lbs/1000 ft)	60°C	75°C	90°C	
6	19	13.30	0.760	0.030	0.130	0.005	6.30	0.248	141	94	55	65	75	500' 1000' 2500' 5000' 25,000' reels
4	19	21.20	1.020	0.040	0.150	0.006	8.06	0.317	228	153	70	85	95	500' 1000' 2500' 5000' 20,000' reels
3	19	26.70	1.020	0.040	0.150	0.006	8.74	0.344	281	189	85	100	110	500' 1000' 2500' 5000' 15,000' reels
2	19	33.60	1.020	0.040	0.150	0.006	9.53	0.375	348	233	95	115	130	500' 1000' 2500' 5000' 14,000' reels
1	19	42.40	1.270	0.050	0.180	0.007	11.05	0.435	445	298	110	130	150	500' 1000' 2500' 5000' 22,000' reels
1/0	19	53.50	1.270	0.050	0.180	0.007	12.04	0.474	554	372	125	150	170	500' 1000' 2500' 5000' 16,000' reels
2/0	19	67.40	1.270	0.050	0.180	0.007	13.16	0.518	687	462	145	175	195	500' 1000' 2500' 5000' 14,000' reels
3/0	19	85.00	1.270	0.050	0.180	0.007	14.43	0.568	851	572	165	200	225	500' 1000' 2500' 5000' 12,000' reels
4/0	19	107.00	1.270	0.050	0.180	0.007	15.85	0.624	1059	712	195	230	260	500' 1000' 2500' 5000' 9000' reels
250	37	127.00	1.520	0.060	0.200	0.008	17.23	0.678	1266	849	215	255	290	500' 1000' 2500' 4000' 8500' reels
300	37	152.00	1.524	0.060	0.203	0.008	18.54	0.730	1503	1010	240	285	320	500' 1000' 3500' 7000' reels
350	37	177.00	1.520	0.060	0.200	0.008	19.74	0.777	1741	1170	260	310	350	500' 1000' 3000' 6000' reels
400	37	203.00	1.524	0.060	0.203	0.008	20.85	0.821	1979	1330	280	335	380	500' 1000' 3000' 5000' reels
500	37	253.00	1.520	0.060	0.200	0.008	22.91	0.902	2455	1650	320	380	430	500' 1000' 2500' 4000' reels
600	61	304.00	1.778	0.070	0.229	0.009	26.70	1.051	3004	2019	355	420	475	500' 1000' 2000' 3000' reels
750	61	380.00	1.778	0.070	0.229	0.009	29.36	1.156	3670	2466	400	475	535	500' 1000' 1500' 2500' reels
1000	61	507.00	1.778	0.070	0.229	0.009	33.27	1.310	4851	3260	455	545	615	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:

STRANDED CONDUCTORS-SIZES 6 AWG THROUGH 1 AWG: ENCORE WIRE CORPORATION (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 T90 75 FT1 DATE/TIME/OPER/QC

CONDUCTOR SIZES 1/0 AWG THROUGH 1000 KCMIL: ENCORE WIRE CORPORATION (SIZE) TYPE MTW OR THHN OR THWN-2 GR II SUN-RES FOR CT USE (UL) OR C(UL) TYPE T90 NYLON OR T90 75 FT1 DATE/TIME/OPER/QC

FT1 DATE/TIME/OPER/QC