

# TYPE THHN / MTW / THWN-2 / T90 - COPPER CONDUCTOR - SUPERSLICK ELITE - 600V

## ENGINEERING SPECIFICATIONS

### Standards

Underwriters Laboratories Standards UL-83, UL-1063, UL-1581, UL-1685, UL-2556; AWM Spec 1316, 1317, 1318, 1319, 1320, 1321; ASTM Stranding Class B3, B8, B787; Federal Specification A-A-59544; American National Standards Institute; Canadian Standards Association C22.2 No. 75; NEMA WC70/ICEA S-95-658; UL VW-1 Flame Test; UL 1685-FT4/IEEE 1202 (70,000 Btu/hr) Flame Test (1/0 AWG and larger); New York State DOS-16120-87-1222-1048; ICEA T-29-520 (210,000 Btu/hr) Flame Test; NFPA 70 (NEC®) Article 310; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-123774, #E-156878, #E-156879



## CONSTRUCTION

### Conductors

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

### Insulation

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

### Jacket

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

## 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. For 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. For 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.

## FEATURES

A great alternative to eliminate the need for lube. Slick Nylon outer jacket for easy pulling. SuperSlick Elite is available in sizes 14 AWG through 1000 KCMIL. 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 located on master reels only unless otherwise specified. 6 AWG and larger Sunlight Resistant in all colors. For 1/0 AWG and larger conductors are rated for cable tray use and comply with IEEE 1202/FT4 (70,000 Btu/hr.) flame test and ICEA T-29-20 (210,000 Btu/hr.) flame test.



- 1 SuperSlick Elite® Nylon Jacket
- 2 PVC Insulation
- 3 Stranded Copper Conductor

Size (AWG or KCMIL)	No. of Strands	Cross Sect. Area (mm²)	PVC Insulation Thickness (Conductor)		Nylon Jacket Thickness		Outside Diameter		Approximate Net Weight		Allowable Ampacity (Amps) <sup>2</sup>			Standard Packaging (ft)
			(mm)	(in)	(mm)	(in)	(mm)	(in)	(kg/km)	(lbs/1000 ft)	60°C	75°C	90°C	
14	Solid	6.258	0.38	0.015	0.10	0.004	2.593	0.101	22	15	15	15	15	2000' carton (4 x 500'), 2500' Reels
12	Solid	8.581	0.38	0.015	0.10	0.004	3.05	0.120	34	23	20	20	20	2000' carton (4 x 500'), 2500' Reels
10	Solid	13.62	0.51	0.020	0.10	0.004	3.78	0.149	55	37	30	30	30	1000' carton (2x500), 2500' Reels
14	19	6.258	0.38	0.015	0.10	0.004	2.77	0.109	25	16	15	20	25	2000' carton (4 x 500'), 2500' Reels
12	19	8.581	0.38	0.015	0.10	0.004	3.25	0.128	36	23	20	25	30	2000' carton (4 x 500'), 2500' Reels
10	19	13.62	0.51	0.020	0.10	0.004	4.09	0.161	57	38	30	35	40	1000' carton, 2500' Reels
8	19	23.61	0.76	0.030	0.13	0.005	5.41	0.213	94	62	40	50	55	500' 1000' 2500' 5000' Reels
6	19	32.71	0.76	0.030	0.13	0.005	6.32	0.249	141	94	55	65	75	500' 1000' 2500' 5000' Reels
4	19	53.16	1.02	0.040	0.15	0.006	8.08	0.318	228	153	70	85	95	500' 1000' 2500' 5000' 20,000' Reels
3	19	62.77	1.02	0.040	0.15	0.006	8.79	0.346	281	189	85	100	115	500' 1000' 2500' 5000' 15,000' Reels
2	19	74.71	1.02	0.040	0.15	0.006	9.60	0.378	348	233	95	115	130	500' 1000' 2500' 5000' 14,000' Reels
1	19	100.80	1.27	0.050	0.18	0.007	11.05	0.435	445	298	110	130	145	500' 1000' 2500' 5000' 22,000' Reels
1/0	19	119.70	1.27	0.050	0.18	0.007	12.04	0.474	554	372	125	150	170	500' 1000' 2500' 5000' 16,000' Reels
2/0	19	143.40	1.27	0.050	0.18	0.007	13.16	0.518	687	462	145	175	195	500' 1000' 2500' 5000' 14,000' Reels
3/0	19	172.80	1.27	0.050	0.18	0.007	14.43	0.568	851	572	165	200	225	500' 1000' 2500' 5000' 12,000' Reels
4/0	19	208.80	1.27	0.050	0.18	0.007	15.85	0.624	1059	712	195	230	260	500' 1000' 2500' 5000' 9000' Reels
250	37	256.10	1.52	0.060	0.20	0.008	17.22	0.678	1266	849	215	255	290	500' 1000' 2500' 4000' 8500' Reels
300	37	297.30	1.52	0.060	0.20	0.008	18.54	0.730	1503	1010	240	285	320	500' 1000' 3500' 7000' Reels
350	37	338.20	1.52	0.060	0.20	0.008	19.74	0.777	1741	1170	260	310	350	500' 1000' 3000' 6000' Reels
400	37	378.30	1.52	0.060	0.20	0.008	20.85	0.821	1979	1330	280	335	380	500' 1000' 3000' 5000' Reels
500	37	456.30	1.52	0.060	0.20	0.008	22.91	0.902	2455	1650	320	380	430	500' 1000' 2500' 4000' Reels
600	61	559.70	1.78	0.070	0.23	0.009	26.70	1.051	3004	2019	350	420	475	500' 1000' 2000' 3000' Reels
750	61	677.20	1.78	0.070	0.23	0.009	29.36	1.156	3670	2466	400	475	535	500' 1000' 1500' 2500' Reels
1000	61	869.50	1.78	0.070	0.23	0.009	33.27	1.310	4851	3260	455	545	615	500' 1000' Reels

<sup>1</sup> SuperSlick Elite manufactured under Patent No. 8,658,576

<sup>2</sup> Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

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 TWN 75. DATE/TIME/OPER/OC

**14 AWG THROUGH 8 AWG:** ENCORE WIRE CORP (SIZE) TYPE MTW OR THHN OR THWN-2 GR2 VW-1 600V (UL) OR AWM OR C(UL) TYPE T90 NYLON OR TWN 75 SUPERSLICK ELITE

**6 AWG THROUGH 1 AWG:** ENCORE WIRE CORP (SIZE) TYPE MTW OR THHN OR THWN-2 GR2 SUN-RES VW-1 600V (UL) OR AWM OR C(UL) TYPE T90 NYLON OR TWN 75 DATE TIME OPERATOR OC SUPERSLICK ELITE

**1/0 AWG THROUGH 1000 KCMIL:** ENCORE WIRE CORP (SIZE) TYPE MTW OR THHN OR THWN-2 GR2 SUN-RES VW-1 FT4 IEEE 1202 600V FOR CT USE (UL) OR C(UL) TYPE T90 NYLON OR TWN 75 DATE TIME OPERATOR OC SUPERSLICK ELITE

**PACKAGING:** Available in Encore's Cyclone Barrel Packs, Reel Payoff and Reel Deal.