

TYPE THW-2 COPPER CONDUCTOR - 600V

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standard UL-83, UL-1581, UL-2556; Federal Specification A-A-59544; NEMA WC70/ICEA S-95-658; NFPA 70 (NEC®) Article 310; Canadian Standard Association C22.2 No. 127; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-123774



Listed E-123774



CONSTRUCTION

Conductors

Stranded, uncoated bare copper per ASTM-B3, ASTM-B8 and ASTM-B787

Insulation

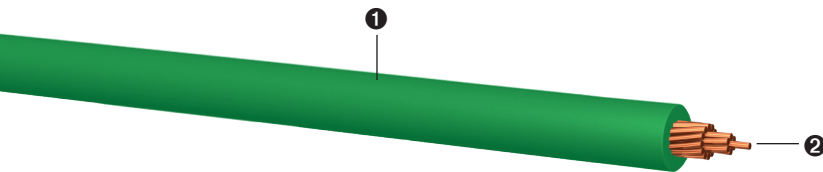
Color-coded Polyvinyl Chloride (PVC), heat and moisture-resistant, flame retardant compound

APPLICATIONS

Type THW-2 conductor is intended for general purpose applications utilized in raceways for services, feeders, and branch-circuit wiring as specified in the National Electrical Code (NEC). May be used in wet or dry locations at temperatures not to exceed 90°C. Type THW-2 is permitted for 600-volt applications.

FEATURES

Sunlight-resistant in all colors for 6 AWG and larger. Sequential foot markings every foot on 250 KCMIL and larger. For 1 AWG through 4/0 AWG, sequential foot markings on master reels only unless otherwise specified. Rated VW-1. Conductors 1/0 AWG and larger may be used in cable trays in accordance with the NEC.



- 1 PVC Insulation
- 2 Stranded Copper Conductor

Size (AWG or KCMIL)	No. of Strands	PVC Insulation Thickness		Outside Diameter		Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps) ¹		Standard Packaging (ft)
		(mm)	(in)	(mm)	(in)		75°C	90°C	
14	19	0.76	0.030	3.33	0.131	21	20	25	2000' Carton (4x500) 2500' Reels
12	19	0.76	0.030	3.81	0.150	29	25	30	500' 2500' Reels
10	19	0.76	0.030	4.39	0.173	45	35	40	500' 2500' Reels
8	7	1.14	0.045	5.99	0.236	70	50	55	500' 1000' 2500' 5000' Reels
6	7	1.52	0.060	7.72	0.304	115	65	75	500' 1000' 2500' 5000' Reels
4	7	1.52	0.060	8.94	0.352	164	85	95	500' 1000' 2500' 5000' Reels
3	7	1.52	0.060	9.65	0.380	206	100	115	500' 1000' 2500' 5000' Reels
2	7	1.52	0.060	10.46	0.412	235	115	130	500' 1000' 2500' 5000' Reels
1	19	2.03	0.080	12.22	0.481	320	130	145	500' 1000' 2500' 5000' Reels
1/0	19	2.03	0.080	13.21	0.520	365	150	170	500' 1000' 2500' 5000' Reels
2/0	19	2.03	0.080	14.33	0.564	440	175	195	500' 1000' 2500' 5000' Reels
3/0	19	2.03	0.080	15.60	0.614	620	200	225	500' 1000' 2500' 5000' Reels
4/0	19	2.03	0.080	17.02	0.670	770	230	260	500' 1000' 2500' 5000' Reels
250	37	2.41	0.095	18.59	0.732	894	255	290	500' 1000' 2500' Reels
300	37	2.41	0.095	19.91	0.784	1010	285	320	500' 1000' 3500' Reels
350	37	2.41	0.095	21.11	0.831	1231	310	350	500' 1000' 3000' Reels
400	37	2.41	0.095	22.23	0.875	1350	335	380	500' 1000' 3000' Reels
500	37	2.41	0.095	24.28	0.956	1720	380	430	500' 1000' 2500' Reels
600	61	2.79	0.110	28.27	1.113	2028	420	475	500' 1000' 2000' Reels
750	61	2.79	0.110	30.94	1.218	2511	475	535	500' 1000' 1500' Reels
1000	61	2.79	0.110	34.85	1.372	3288	545	615	500' 1000' Reels

¹ 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:

14 AWG – 8 AWG: ENCORE WIRE CORP (SIZE) TYPE THW-2 GR1 VW-1 600V (UL) DATE/TIME/OPER/QC
 6 AWG – 1 AWG: ENCORE WIRE CORP (SIZE) TYPE THW-2 GR1 SUN-RES VW-1 600V (UL) DATE/TIME/OPER/QC
 1/0 AWG – 1000 KCMIL: ENCORE WIRE CORP (SIZE) TYPE THW-2 GR1 SUN-RES VW-1 FOR CT USE 600V (UL) DATE/TIME/OPER/QC

Standard Conductor Colors

Green, Black