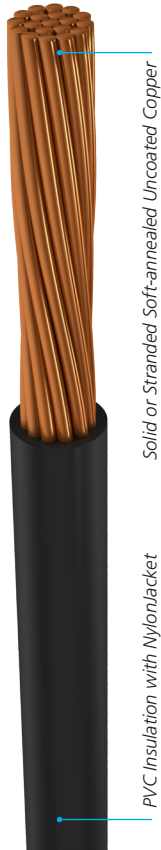




IUSA WIRE

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



Solid or Stranded Soft-annealed Uncoated Copper

PVC Insulation with Nylon Jacket

APPLICATIONS

Type THHN/THWN conductors are primarily used in conduit for services, feeder, and branch circuits in commercial or industrial applications as specified in the National Electrical Code. When used as type THHN, conductor is suitable for use in dry locations at temperatures not to exceed 90 °C. When used as type THWN, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90 °C dry locations or 75 °C wet locations or not to exceed 75 °C when exposed to oil or coolant. When used as type THWN-2, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90 °C both dry and wet locations or not to exceed 75 °C when exposed to oil or coolant. When used as type MTW conductor is suitable for use in wet locations or when exposed to oil or coolant at temperatures not to exceed 60 °C or dry locations at temperatures not to exceed 90 °C (with ampacity limited to that for 75 °C conductors per NFPA79). Conductor temperatures not to exceed 105 °C in dry locations when rated AWM and used as appliance wiring material. Voltage rating for all applications is 600 volts.

CONSTRUCTION

Type THHN or THWN or MTW are copper conductors that are soft annealed copper, insulated with a tough, heat and moisture resistant, lead-free polyvinyl chloride (PVC) over which a nylon (polyamide) or UL listed equivalent jacket is applied. All THHN products have a friction reducing nylon for ease of installation. Available in black, white, red, blue, green, yellow, brown, orange, purple, pink, or gray.

SPECIFICATIONS

Type THHN or THWN or MTW (also AWM) meets or exceeds all applicable ASTM Specifications, UL Standard 83, UL Standard 1063 (MTW), UL Standard 758 (AWM), Federal Specification A-A-59544, NEMA WC 70/CEA S-95-658 and the requirements of the National Electrical Code® (NFPA70).



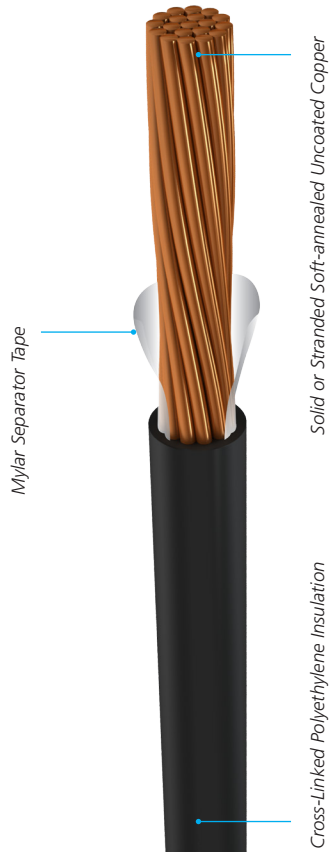
Size (AWG or kcmil)	No. of Strands	PVC insulation thickness (conductor)		Nylon jacket thickness		Outside Diameter		Approximate net weight		Allowable Ampacity (Amps)		
		(mm)	(in)	(mm)	(in)	(mm)	(in)	(kg/km)	(lbs/1000ft)	60 °C	75 °C	90 °C
14*	19	0.38	0.015	0.10	0.004	2.77	0.109	25	16	15	20	25
12*	19	0.38	0.015	0.10	0.004	3.25	0.128	36	23	20	25	30
10*	19	0.51	0.020	0.10	0.004	4.09	0.161	57	38	30	35	40
8	19	0.76	0.030	0.13	0.005	5.41	0.213	94	62	40	50	55
6	19	0.76	0.030	0.13	0.005	6.32	0.249	141	94	55	65	75
4	19	1.02	0.040	0.15	0.006	8.08	0.318	228	153	70	85	95
3	19	1.02	0.040	0.15	0.006	8.79	0.346	281	189	85	100	115
2	19	1.02	0.040	0.15	0.006	9.60	0.378	348	233	95	115	130
1	19	1.27	0.050	0.18	0.007	11.05	0.435	445	298	110	130	145
1/0	19	1.27	0.050	0.18	0.007	12.04	0.474	554	372	125	150	170
2/0	19	1.27	0.050	0.18	0.007	13.16	0.518	687	462	145	175	195
3/0	19	1.27	0.050	0.18	0.007	14.43	0.568	851	572	165	200	225
4/0	19	1.27	0.050	0.18	0.007	15.85	0.624	1059	712	195	230	260
250	37	1.52	0.060	0.20	0.008	17.22	0.678	1266	849	215	255	290
300	37	1.52	0.060	0.20	0.008	18.54	0.730	1503	1010	240	285	320
350	37	1.52	0.060	0.20	0.008	19.74	0.777	1741	1170	260	310	350
400	37	1.52	0.060	0.20	0.008	20.85	0.821	1979	1330	280	335	380
500	37	1.52	0.060	0.20	0.008	22.91	0.902	2455	1650	320	380	430
600	61	1.78	0.070	0.23	0.009	26.70	1.051	3004	2019	350	420	475
750	61	1.78	0.070	0.23	0.009	29.36	1.156	3670	2466	400	475	535

*14 AWG - 10 AWG also available in solid conductors



IUSA WIRE

TYPE XHHW-2 / RW90 COPPER CONDUCTOR 600V



APPLICATIONS

Type XHHW-2 conductors are primarily used in conduit or other recognized raceways for services, feeders, and branch circuit wiring, as specified in the National Electrical Code. Type XHHW-2 conductors may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating for XHHW-2 conductors is 600 volts.

CONSTRUCTION

Type XHHW-2 copper conductors are annealed (soft) copper. Insulation is an abrasion, moisture, and heat resistant cross-linked polyethylene (XLP). Conductor sizes 2 AWG and larger listed and marked sunlight resistant in black only.

SPECIFICATIONS

Type XHHW-2 conductors meet or exceed all applicable ASTM Specifications, UL Standard 44, Federal Specification A-A-59544, NEMA WC 70 (ICEA S-95-658) and requirements of the National Electrical Code® (NFPA 70).



Size (AWG or kcmil)	No. of Strands	XLPE Insulation Thickness		Outsider diameter		Approximate net weight		Allowable Ampacity (Amps)		
		(mm)	(in)	(mm)	(in)	(mm)	(in)	60 °C	75 °C	90 °C
14	19	0.76	0.030	3.33	0.131	25	17	15	20	25
12	19	0.76	0.030	3.81	0.150	37	25	20	25	30
10	19	0.76	0.030	4.39	0.173	57	38	30	35	40
8	19	1.14	0.045	5.99	0.236	94	63	40	50	55
6	19	1.14	0.045	6.96	0.274	150	101	55	65	75
4	19	1.14	0.045	8.18	0.322	228	153	70	85	95
3	19	1.14	0.045	8.89	0.350	280	188	85	100	115
2	19	1.14	0.045	9.70	0.382	348	234	95	115	130
1	19	1.40	0.055	10.95	0.431	451	303	110	130	145
1/0	19	1.40	0.055	11.94	0.470	557	374	125	150	170
2/0	19	1.40	0.055	13.06	0.514	690	464	145	175	195
3/0	19	1.40	0.055	14.33	0.564	859	577	165	200	225
4/0	19	1.40	0.055	15.75	0.620	1068	718	195	230	260
250	37	1.65	0.065	17.07	0.672	1229	826	215	255	290
300	37	1.65	0.065	18.39	0.724	1466	985	240	285	320
350	37	1.65	0.065	19.58	0.771	1702	1144	260	310	350
400	37	1.65	0.065	20.70	0.815	1937	1302	280	335	380
500	37	1.65	0.065	22.76	0.896	2408	1618	320	380	430
600	61	2.03	0.080	26.75	1.053	2929	1969	350	420	475
750	61	2.03	0.080	29.41	1.158	3588	2411	400	475	535