

THHN or THWN or MTW or T90 Nylon or TWN 75 • 14 AWG - 750 KCMIL

600 Volts • Gas and Oil Resistant



DESCRIPTION

Conductor: Bare, soft annealed copper per ASTM B-3.

Sizes 14 - 10 AWG: Solid, bunched, unilay concentric combination unilay or compressed stranded (class C) alternate ASTM B-787, ASTM B-3 or ASTM B-8 and UL-83.

Sizes 8 - 2 AWG: Concentric, compressed stranded (class C) alternate ASTM B-787, ASTM B-8, UL-83 and UL-1063.

Sizes 1 AWG - 750 KCMIL: Concentric, compressed stranded (class B) ASTM B-8, UL-83 and UL-1063.

Insulation: High dielectric polyvinyl chloride (PVC) per UL-83 and UL-1063.

Overall Jacket: Nylon per UL-83 and UL-1063.

Cable Identification:

Ink print on jacket for Sizes 14 - 10 AWG (solid conductors):

"(size) AWG Type THHN or THWN GAS AND OIL RES II 600V (UL) or AWM VW-1---A.I.W. Corp.---C-UL Type T90 NYLON or TWN 75"

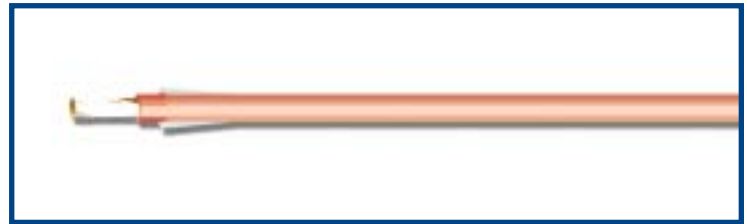
Ink print on jacket for Sizes 14 AWG - 750 KCMIL (stranded):

"(size) AWG (or KCMIL) Type MTW or THHN or THWN or GAS AND OIL RES II 600V (UL) or AWM---A.I.W. Corp.---C-UL Type T90 NYLON or TWN 75." Also "VW-1" and "FT1" on sizes 14 through 6 AWG and "for CT USE SUN RES" on sizes 1/0 AWG and larger in black.

RATINGS

Cables conform to the following standards:

UL-83 for THHN-THWN, UL-1063 for MTW (stranded conductors only), Federal Specification J-C-30B, NEMA WC-5, UL-758 for AWM Styles 1316 through 1321, 1408 through 1414, 1452 and 1453.



Maximum Conductor Temperature and Voltage Rating

TYPE	OIL	WET	DRY	VOLTAGE
THHN-THWN	75 °C	75 °C	90 °C	600V
MTW	60 °C	60 °C	90 °C	600V
AWM 1316 to 1321	80 °C	-	105 °C	600V
AWM 1408 to 1414	60 °C	60 °C	90 °C	600V**
AWM 1452 to 1453*	80 °C	-	90 °C	1000V
T90 NYLON	60 °C	-	90 °C	600V
TWN 75	-	75 °C	-	600V

*14 - 10 AWG only.
**14 - 10 AWG only 2,500 volts peak for electronic use only.

SIZE (AWG OR KCMIL)	STRANDS NO./O.D. (INCHES)	PVC INSUL. THICK. (INCHES)	NYLON JACKET THICK. (INCHES)	APPROX. OUTSIDE DIAMETER (INCHES)	AMPACITY			APPROX. WEIGHT 1000 FT. (LBS)	STANDARD PUT-UPS*
					THWN ¹ 75 °C	THHN ¹ 90 °C	MTW ²		
14	Solid	.015	.004	.104	15	15	-	16	500S/2500R
12	Solid	.015	.004	.121	20	20	-	24	500S/2500R
10	Solid	.020	.004	.152	30	30	-	38	500S/2500R
14	19	.015	.004	.112	15	15	15	17	500S/2500R
12	19	.015	.004	.131	20	20	20	26	500S/2500R
10	19	.020	.004	.164	30	30	30	40	500S/2500R
8	19	.030	.005	.216	50	55	40	66	500S/1000R/5000R
6	19	.030	.005	.253	65	75	55	100	500R/1000R/5000R
4	19	.040	.006	.322	85	95	70	159	500R/1000R/5000R
3	19	.040	.006	.350	100	110	85	191	500R/1000R/5000R
2	19	.040	.006	.381	115	130	95	241	500R/1000R/5000R
1	19	.050	.007	.443	130	150	110	305	500R/1000R/5000R
1/0	19	.050	.007	.483	150	170	125	377	500R/1000R/6000R
2/0	19	.050	.007	.528	175	195	145	468	500R/1000R/6000R
3/0	19	.050	.007	.579	200	225	165	581	500R/1000R/5000R
4/0	19	.050	.007	.636	230	260	195	722	500R/1000R/5000R
250	37	.060	.008	.704	255	290	215	860	500R/1000R/3500R
300	37	.060	.008	.758	285	320	240	1018	500R/1000R/3000R
350	37	.060	.008	.808	310	350	260	1180	500R/1000R/3000R
400	37	.060	.008	.855	335	380	280	1342	500R/1000R/2500R
500	37	.060	.008	.938	380	430	320	1661	500R/1000R/2500R
600	61	.070	.009	1.039	420	475	355	2007	500R/1000R/2000R
750	61	.070	.009	1.143	475	535	400	2497	500R/1000R/2000R

Notes:

¹Allowable ampacity of not more than three conductors in raceway or cable or earth (directly buried), based on ambient temperature of 30 °C (86 °F), per Table 310-16 of the 1999 National Electrical Code (NFPA 70-1999).

²Allowable ampacity of Type MTW conductors in cable or raceway per Table 13-5(a) of the Electrical Standard for Industrial Machinery, NFPA 79-1997 (ANSI).

*Available on 2,500 reels in black only.