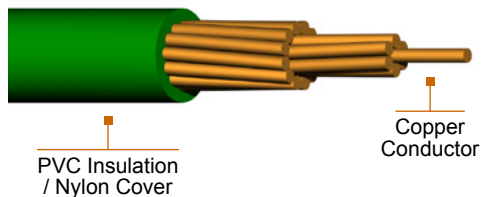


## THHN / THWN / THWN-2

600 V 90°C / 75°C Dry or Wet PVC Insulated and Polyamide (Nylon) Jacketed, Single Core



### Detail Description or Construction

#### Conductor

Annealed copper, solid or stranded sizes 14 AWG up to 1000 MCM

#### Insulation

Premium grade flame retardant Polyvinyl Chloride

#### Jacket

Tough polyamide (nylon)

### Application

General purpose building wire for services, feeders and branch circuits.

Temperature rating not to exceed:

- THHN/THWN: 90°C dry and damp, 600V
- THHN/THWN: 75°C wet or in oil, 600V
- THWN-2: 90°C dry, wet or in oil, 600V

### Standards / Testing Specifications

THHN/THWN-2 conforms to following standards:

- UL83 for Thermoplastic Insulated Wires and Cables (THHN/THWN-2).
- UL758 for Appliance Wiring Materials (AWM).
- UL1063 for Machine Tool Wire (MTW) (stranded conductors only).



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### Marking

- Solid Conductor 14AWG - 8 AWG:  
THHN or THWN (Size) AWG (Size) mm”  
AWM GAS AND OIL RES II 600V UL  
E-66903 VW-1.
- Stranded Conductor 14AWG - 6AWG:  
THHN or THWN (Size) AWG (Size) mm”  
AWM GAS AND OIL RES II 600V UL  
E-66903 VW-1.
- Stranded Conductor 4AWG - 4/0AWG:  
THHN or THWN (Size) AWG (Size) mm”  
AWM OR MTW GAS AND OIL RES II  
VW-1 600V UL E-103886.
- Compress Stranded Conductor  
250MCM - 1000MCM:  
THHN or THWN (Size) AWG (Size) mm”  
AWM OR MTW GAS AND OIL RES II  
VW-1 SUN RES FOR CT USE 600V  
UL E-103886.

### Installation

For installation in conduit and raceways, 1/0 AWG and larger for cable tray use (CT use) and sunlight resistant. Available colors are red, white, blue, green and black, conductors larger than 1/0AWG are manufactured in black color for sun light resistant outside applications.



## THHN / THWN / THWN-2

600 V 90°C / 75°C Dry or Wet PVC Insulated and Polyamide (Nylon) Jacketed, Single Core

Size	No. of Strands	PVC Insulation Thickness	Nylon Jacket Thickness	Approx Outside Diameter	Ampacity			Approx Weight 1000 m	Standard Put-up
					THWN	TMHN	MTW		
AWM / MCM		mm	mm	mm	75°C	90°C	90°C	kg	ft
14	solid	0.38	0.1	2.6	15	15	---	22	S500/R2500
12	solid	0.38	0.1	3.02	20	20	---	34	S500/R2500
10	solid	0.51	0.1	3.81	30	30	---	54	S500/R2500
14	19	0.38	0.1	2.78	15	15	16	23	S500/R2500
12	19	0.38	0.1	3.27	20	20	20	34	S500/R2500
10	19	0.51	0.1	4.11	30	30	30	55	S500/R2500
8	19	0.76	0.13	5.43	50	65	40	90	R500/R1000
6	19	0.76	0.13	6.36	65	75	55	136	R500/R1000
4	19	1.02	0.15	8.11	85	95	70	218	R500/R1000
3	19	1.02	0.15	8.82	100	110	80	270	R500/R1000
2	19	1.02	0.15	9.63	115	130	95	334	R500/R1000
1	19	1.27	0.18	11.09	130	150	110	428	R500/R1000
1/0	19	1.27	0.18	12.08	150	170	125	531	R500/R1000
2/0	19	1.27	0.18	13.34	175	195	145	669	R500/R1000
3/0	19	1.27	0.18	14.64	200	225	165	832	R500/R1000
4/0	19	1.27	0.18	16.04	230	280	185	1,037	R500/R1000
250	37	1.52	0.2	17.79	255	290	215	1,234	R500/R1000
300	37	1.52	0.2	19.09	286	320	240	1,467	R500/R1000
350	37	1.52	0.2	20.39	310	350	280	1,701	R500/R1000
400	37	1.52	0.2	21.49	335	380	280	1,931	R500/R1000
500	37	1.52	0.2	23.59	380	430	320	2,394	R500/R1000
600	61	1.78	0.23	26.17	420	475	355	2,880	R500/R1000
750	61	1.78	0.23	28.77	475	535	400	3,570	R500/R1000
1000	61	1.78	0.23	32.57	545	615	455	4,717	---

S = Packing in carton  
R = Packing in reel