

# XHHW-2 vs THHN



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*Ask us about  
 MetroPlex® -  
 Twisted Conductors  
 Pulled as a  
 Single Conductor*

## O.D. Comparison 14 AWG - 750 Kcmil

Size	XHHW-2	THHN	% Difference
	Nominal O.D.	Nominal O.D.	
14	0.139	0.112	19.50%
12	0.158	0.131	17.10%
10	0.182	0.164	9.90%
8	0.242	0.216	10.80%
6	0.28	0.253	9.70%
4	0.328	0.322	1.90%
3	0.355	0.35	1.40%
2	0.389	0.381	2.10%
1	0.434	0.443	-1.10%
1/0	0.473	0.483	-2.10%
2/0	0.517	0.528	-2.10%
3/0	0.567	0.579	-2.10%
4/0	0.623	0.636	-2.10%
250	0.713	0.704	1.30%
300	0.759	0.758	0.02%
350	0.819	0.808	1.40%
400	0.858	0.855	0.04%
500	0.951	0.938	1.40%
600	1.053	1.039	1.30%
750	1.158	1.150	0.70%

NOTE: O.D. may vary with manufacturer.

# XHHW-2 vs THHN

		XHHW-2		THHN	
<b>Insulation</b>		Thermoset <sup>1</sup>		Thermoplastic <sup>2</sup>	
<b>Maximum Temperature<sup>3</sup></b>		90°C Dry, Damp or Wet		90°C Dry and Damp only	
	<b>Size</b>	<b>Insulation</b>	<b>Jacket</b>	<b>Insulation</b>	<b>Jacket</b>
<b>Insulation Thickness</b>	14-12	30 mils	0 mils	15 mils	4 mils
<b>14 AWG - 750 Kcmil</b>	10	30 mils	0 mils	20 mils	4 mils
	8-6	45 mils	0 mils	30 mils	5 mils
	4-2	45 mils	0 mils	40 mils	6 mils
	1-4/0	55 mils	0 mils	50 mils	7 mils
	250-500	65 mils	0 mils	60 mils	8 mils
	600-750	80 mils	0 mils	70 mils	9 mils
<b>Insulation Resistance (Minimum)</b>					
<b>14 AWG - 750 Kcmil<sup>4</sup></b>		2875 megohms - 645 megohms		665 megohms - 225 megohms	
<b>Crush Test Minimum for 14 awg<sup>5</sup></b>		1200 lbs.		225 lbs.	
<b>Sunlight Resistance</b>		14 AWG & Larger		#2 AWG & Larger	
<b>Minimum Temperature<sup>2</sup></b>		-40°C		-10°C	
<b>Dielectric Voltage - Withstand Test, Water</b>					
<b>14 AWG - 750 Kcmil</b>		3.0 Kv - 6.0 Kv		1.5 Kv - 3.5 Kv	

<sup>1</sup> Thermoset: A material that has been vulcanized by heat or other means and is substantially infusible and insoluble.

<sup>2</sup> Thermoplastic: A material that can be softened repeatedly by heating, and that can stiffen at temperatures lower than 10°C. Per NEC 310.13 FPN

• Thermoplastic not recommended for DC applications. Per NEC 310.13 FPN.

<sup>3</sup> Temperature Rating and Limitation: Per NEC 310.8 (A&B) and NEC 310.10.

<sup>4</sup> Insulation Resistance: Based on 1000' in water. A higher resistance is desirable.

<sup>5</sup> Crushing Test: #14 AWG is the size required by UL 1581 for this type of test.

Comparison information gathered from NEC, UL 44, UL 83, and other industry standards.

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