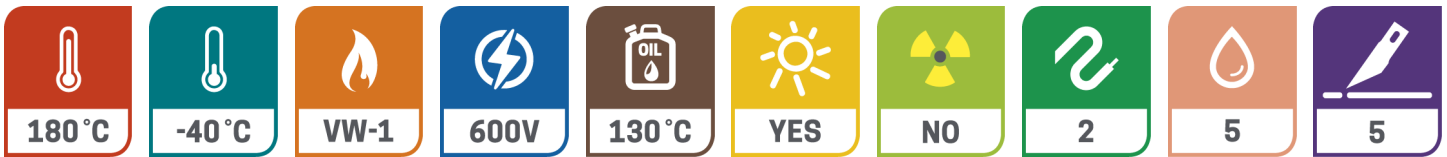


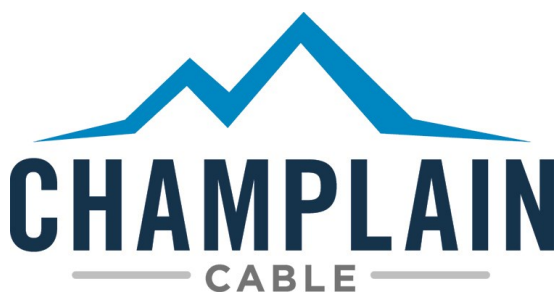


# 180 UL 3740 / AWM

- First 180°C Irradiated Class H Lead Wire
- Exceptional Chemical and Fluid Resistance
- UL / CSA 180°C, 600V, RoHS3
- Very Thin OD, and Extremely Tough
- Won't Melt, Creep or Flow
- Potential Cost Savings vs. 200°C Wires



Product Number	Standard Conductors Tinned Copper	Nom. Conductor Diameter		Nom. Insulation Thickness		Nom. Finished Diameter		Nom Finished Weight (lbs/mft)	Ampacity (40°C, Free Air)
		in.	mm.	in.	mm.	in.	mm.		
180-24/XX-E0	24 (19/36)	.024	.61	.016	.41	.057	1.45	2.5	8
180-22/XX-B0	22 (7/30)	.030	.76	.016	.41	.062	1.58	3.4	15
180-22/XX-E0	22 (19/34)	.031	.79	.016	.41	.063	1.60	3.5	15
180-20/XX-B0	20 (7/28)	.038	.97	.016	.41	.070	1.78	4.9	19
180-20/XX-E0	20 (19/32)	.038	.97	.016	.41	.071	1.80	5.1	19
180-18/XX-B0	18 (7/.0152)	.045	1.14	.016	.41	.077	1.96	6.5	26
180-18/XX-D0	18 (19/.0092)	.045	1.14	.016	.41	.077	1.96	6.4	26
180-16/XX-F0	16 (19/.0117)	.058	1.47	.016	.41	.092	2.34	10	33
180-14/XX-H0	14 (41/30)	.071	1.85	.016	.41	.107	2.72	15	50
180-12/XX-J0	12 (65/30)	.089	2.26	.016	.41	.121	3.07	23	64
180-10/XX-J0	10 (65/28)	.111	2.81	.017	.43	.145	3.68	34	85
180-08/XX-X0	8 (84/27)	.147	3.73	.024	.61	.195	4.95	64	115
180-06/XX-X0	6 (84/25)	.183	4.65	.024	.61	.231	5.87	97	160
180-04/XX-L0	4 (133/25)	.263	6.68	.024	.61	.311	7.90	150	205
180-02/XX-M0	2 (259/26)	.323	8.20	.024	.61	.371	9.42	231	274
180-01/XX-M0	1 (259/25)	.372	9.44	.030	.76	.432	10.97	295	319



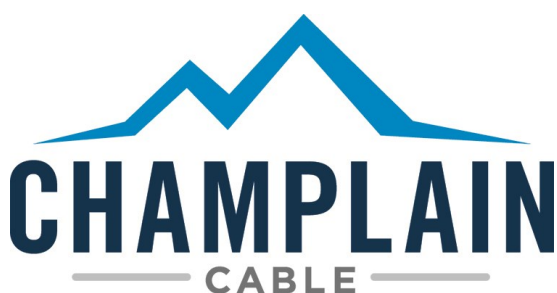


# 180

## UL 3740 / AWM

PROPERTIES	EXAR 180
<b>Approvals / Listings:</b>	
UL	UL STYLE 3740
CSA	AWM I A/B
<b>Physical Properties:</b>	
Temperature Rating (UL 3740)	180°C
Voltage Rating (Vrms)	600V
Scrape Abrasion Resistance	818 cycles
Shore "A" Hardness	NA
Shore "D" Hardness	80
Cold Bend - 4h @ -40°C	Passes
Bend Radius	5- 9 Overall Diameter
<b>Tensile Strength:</b>	
Unaged	6,050 psi
Retention after 7 days @ 210°C	Pass (> 85%)
<b>Elongation:</b>	
Unaged	410%
Retention after 7 days @ 210°C	Pass (> 110%)
<b>Flame Test:</b>	
VW-1 / FT1	Passes
<b>Oil Resistance 135°C maximum.</b>	
1500 hrs. @150°C	Tensile -16% Elongation -57%
<b>Chemical Resistance</b>	
Acetone	Swell @23°C** 0%
Acid - H2SO4 S.G. 1.260 5%	Swell @23°C** 0%
Engine Oil - ASTM D-471 IRM-902	Swell @50°C** 0%
Benzene	Swell @23°C/24h 0%
Epoxy	Swell @23°C/24h <1%
Gasoline - ASTM D-471 Fuel C	Swell @23°C** 0%
Methanol	Swell @23°C/24h 0%
Toluene	Swell @23°C/24h 0%
Xylene	Swell @23°C/24h 0%
<b>Electrical:</b>	
Dielectric Constant	7.4
Dielectric Breakdown Strength (Vrms)	19,000
<b>Oxygen Index:</b>	42

We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purpose. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss and damage arising from the handling and use of our products whether used alone or in combination with other products



**Manufacturing Locations:**  
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[www.champcable.com](http://www.champcable.com)