



# 150

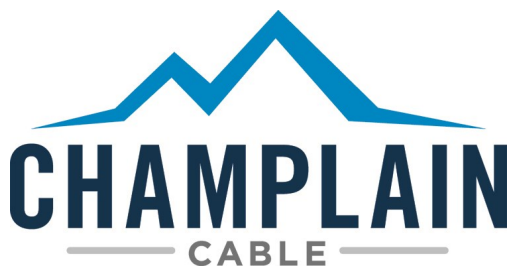
## UL 3271 / 3289

### UL 3271/3289, CSA, 150°C, 600V

- The *Original* EXAR® Irradiation Cross-Linked Polyolefin
- AWM, CL 1251 1503
- Won't Melt, Creep or Flow
- Excellent Oil and Chemical Resistance
- Best-In-Class Varnish Resistance
- Excellent Flame Resistance
- Thin OD, Yet Tougher than Other Motor Leads
- Accept NO Substitute!



Conductor 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.		
22 (7/30)	.031	.79	.030	.76	.095	2.41	5.81	14
20 (7/28)	.038	.97	.030	.76	.103	2.61	7.85	18
18 (19/.0092")	.045	1.14	.030	.76	.106	2.69	9.62	25
18 16/30)	.045	1.14	.030	.76	.105	2.67	9.52	25
16 (26/30)	.058	1.47	.030	.76	.122	3.09	13.3	31
14 (41/30)	.073	1.85	.030	.76	.136	3.45	19.0	46
12 (65/30)	.093	2.36	.030	.76	.150	3.81	27.1	60
10 (65/28)	.111	2.82	.030	.76	.172	4.37	40.5	80
8 (84/27)	.147	3.73	.045	1.14	.238	6.04	69.2	106
6 (84/25)	.183	4.65	.060	1.52	.305	7.75	111.5	155
4 (133/25)	.263	6.68	.060	1.52	.385	9.78	170.9	190
2 (259/26)	.323	8.20	.060	1.52	.445	11.30	254.5	255
1 (259/25)	.372	9.44	.080	2.03	.530	13.46	335.2	293
1/0 (259/24)	.424	10.77	.080	2.03	.588	14.99	421.0	339
2/0 (259/23)	.465	11.81	.080	2.03	.629	15.98	507.2	390
3/0 (259/22)	.520	13.21	.080	2.03	.684	17.37	627.2	451
4/0 (259/21)	.586	14.80	.080	2.03	.750	19.05	776.8	529
260 MCM (646/24)	.642	16.31	.095	2.41	.832	21.12	932.0	585





# 150

## UL 3271 / 3289

PROPERTIES	EXAR® 150	
<b>Approvals / Listings:</b>		
UL	STYLE 3271 / 3289	
CSA	AWM 150°C 600V	
	CL1251 CL1503	
<b>Physical:</b>		
Temperature Rating	150 °C	
Voltage Rating (Vrms)	600V	
Flexibility - 7 days @ 180 °C	Passes	
Cold Bend - 4h @ -65°C	Passes	
Room Temperature UL Abrasion	2400 cycles	
Shore "A" Hardness	95	
Shore "D" Hardness	42	
Bend Radius	3 X overall diameter	
<b>Tensile Strength:</b>		
Unaged	2000 PSI	
Retention after 7 days @ 180 °C	Passes (100%)	
<b>Elongation:</b>		
Unaged	250%	
Retention after 7 days @ 180 °C	95%	
<b>Flame Test:</b>		
UL VW-1	Passes	
IEEE Std. 383-1974	Passes	
<b>Chemical Resistance</b>		
Acetone	Swell @ 23°C/24h	5-10%
Acid - H2SO4 S.G. 1.260 5%	Swell @ 23°C**	<1%
Engine Oil - ASTM D-471 IRM-902	Swell @ 50°C**	1.80%
Benzene	Swell @ 23°C/24h	Not recommended
Epoxy	Swell @ 23°C/24h	<5%
Gasoline - ASTM D-471 Fuel C	Swell @ 23°C**	<1%
Methanol	Swell @ 23°C**	<1%
Toluene	Swell @ 23°C/24h	Not recommended
Xylene	Swell @ 23°C/24h	Not recommended
<b>Electrical:</b>		
Dielectric Constant		3.1
Dielectric breakdown strength (Vrms)		21,000
<b>Oxygen Index:</b>		24
<b>Gamma Radiation Resistance - Total:</b>		
Integral dose (Cobalt 60 @ a rate of less than 1 megarad/hr.)		200 megarads

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

Colchester, Vermont

El Paso, Texas

[www.champcable.com](http://www.champcable.com)

