



# 150

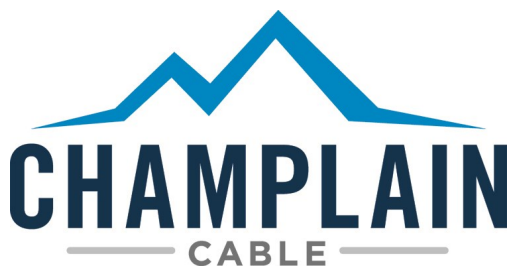
## UL 3271 / 3289

### UL 3271/3289, CSA, 150°C, 600VAC / 750VDC

- 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	Ampacity (40°C Free Air)
	in.	mm.	in.	mm.	in.	mm.	(lbs/mft)	
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 (361/.0135)	.330	8.38	.060	1.52	.450	11.43	254.5	255
1 (361/.0152)	.375	9.52	.080	2.03	.535	13.59	335.2	293
1/0 (361/.0170)	.420	10.67	.080	2.03	.580	14.73	421.0	339
2/0 (361/.0191)	.470	11.94	.080	2.03	.630	16.00	507.2	390
3/0 (361/.0214)	.525	13.33	.080	2.03	.685	17.40	627.2	451
4/0 (361/.0241)	.590	14.99	.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





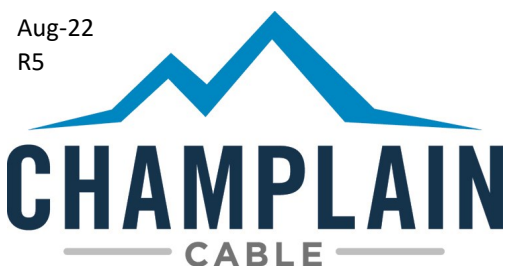
# 150

## 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)		600VAC / 750VDC
Flexibility - 7 days @ 180 °C		Passes
Cold Bend - 4h @ -65°C		Passes
Room Temperature UL Abrasion	ISO 19642-3	3817 cycles (16 AWG)
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

Aug-22  
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### Manufacturing Locations

Colchester, Vermont

El Paso, Texas

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