

150 UL 3271 / 3289

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

- The <u>Original</u> 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 !



	Nom. Conductor	Nom. Insulation	Nom. Finished	Nom. Finished	
Conductor	Diameter	Thickness	Diameter	Weight	Ampacity
Tinned Copper	in. mm.	in. mm.	in. mm.	(lbs/mft)	(40°C Free Air)
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
1816/30)	.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 (275/24)	.392 9.96	.080 2.03	.552 14.02	421.0	339
2/0 (323/24)	.440 11.18	.080 2.03	.600 15.14	507.2	390
3/0 (450/24)	.545 13.84	.080 2.03	.705 17.90	627.2	451
4/0 (550/24)	.570 14.47	.080 2.03	.730 18.53	776.8	529
260 MCM (646/24)	.642 16.31	.095 2.41	.832 21.12	932.0	585







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PROPERTIES	EXAR [®] 150	
Approvals / Listings:		
UL		STYLE 3271 / 3289
CSA		AWM 150°C 600V
Dhusiaal		CL1251 CL1503
Physical:		150.80
Temperature Rating		150 °C
Voltage Rating (Vrms)		600VAC / 750VDC Passes
Flexibility - 7 days @ 180 °C		Passes
Cold Bend - 4h @ -65°C	100 106 10 0	
Room Temperature UL Abrasion Shore "A" Hardness	ISO 19642-3	3817 cycles (16 AWG) 95
Shore "D" Hardness		42
Shore D Hardness Bend Radius		42 3 X overall diameter
		3 X overall diameter
Tensile Strength:		0000 001
		2000 PSI
Retention after 7 days @ 180 °C		Passes (100%)
Elongation:		050%
		250%
Retention after 7 days @ 180 °C	95%	
Flame Test:		D
UL VW-1		Passes
IEEE Std. 383-1974		Passes
Chemical Resistance		F 1077
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
Electrical:		
Dielectric Constant	3.1	
Dielectric breakdown strength (Vrms)	21,000	
Oxygen Index:		24
Gamma Radiation Resistance - Total:		
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 for loss and damage arising from the handling and use of our products whether used alone or in combination with other products



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