

EXAR® XLE

UL 3657, CSA AWM CL1251 105°C 1000 Volts

Champlain Cable announces **Exar® XLE**, an outstanding flexible **Class B**, 1000 volt, irradiation cross-linked wire. XLE is heavy metal free and is RoHS compliant. Exar XLE is a cost effective alternative to other rubber type insulations like Hypalon®. It has excellent mechanical strength, cut through resistance and outstanding chemical, oil and solvent resistance. Exar XLE can withstand exposure in oil up to 110°C. XLE processes very well on automated high speed cut and strip equipment.

Benefits and Features

Extremely Flexible and Thin
Class B Rating
Superior Processing
Outstanding Chemical and Solvent Resistance
Oil Resistance to 110°C
RoHS / REACH Compliant
Good Over Mold Characteristics
Many colors available

Applications

Including but not limited to:

Motors

Appliances

Transformers

Generators

Panels and Switchgear



Champlain Cable Corporation

Part Number	Standard Conductors				Insulation Thickness		Nom. OD	Finished Weight	Ampacity
	Tinned Copper	in.	mm.	in.	mm.	in.	mm.	(lbs/kft)	
3657-26/XX-B0	26 (7/34)	.019	.48	.031	.79	.081	2.06	3.67	2
3657-24/XX-B0	24 (7/32)	.024	.61	.031	.79	.086	2.18	4.48	5
3657-22/XX-B0	22 (7/30)	.030	.76	.031	.79	.092	2.34	5.59	9
3657-20/XX-B0	20 (7/28)	.038	.97	.031	.79	.100	2.59	7.32	12
3657-18/XX-D0	18 (19/.0092)	.045	1.14	.031	.79	.107	2.72	9.26	18
3657-16/XX-F0	16 (19/.0117)	.058	1.47	.031	.79	.120	3.05	13.04	24
3657-14/XX-H0	14 (41/30)	.071	1.85	.031	.79	.133	3.38	18.5	35
3657-12/XX-J0	12 (65/30)	.089	2.26	.031	.79	.151	3.84	27.0	40
3657-10/XX-J0	10 (65/28)	.111	2.81	.031	.79	.173	4.39	40.4	55
3657-08/XX-X0	8 (84/27)	.147	3.73	.046	1.17	.241	6.12	69.3	80
3657-06/XX-M0	6 (259/30)	.210	5.33	.062	1.57	.334	8.48	105	105
3657-04/XX-O0	4 (413/30)	.265	6.73	.062	1.57	.389	9.88	168	140
3657-02/XX-P0	2 (665/30)	.330	8.38	.062	1.57	.454	11.53	271	190
3657-01/XX-R0	1 (836/30)	.365	9.27	.082	2.08	.529	13.44	335	215
3657-/1/XX-S0	1/0 (1045/30)	.415	10.54	.082	2.08	.579	14.71	406	250
3657-/2/XX-U0	2/0 (1330/30)	.475	12.07	.082	2.08	.639	16.23	506	290
3657-/3/XX-V0	3/0 (1672/30)	.535	13.59	.082	2.08	.699	17.75	623	335
3657-/4/XX-W0	4/0 (2109/30)	.550	13.97	.082	2.08	.714	18.14	763	390

 $^{^{\}star}$ Ampacity 105°C rated single-insulated conductor in free air at 30°C ambient air temperature





PROPERTIES	EXAR [®] XLE		
Approvals / Listings:			
UL		UL 3657	
CSA		AWM A/B CL1251	
Physical: *			
Temperature Rating	105 °C		
Voltage Rating (Vrms)	1000V		
Flexibility - 7 days @ 136 °C	Pass		
Cold Bend - 4h @ -70°C	Pass		
Tensile Strength: *			
Unaged		2123 psi	
Retention after 7 days @ 136 °C		2306 psi	
Elongation: *			
Unaged		254%	
Retention after 7 days @ 136°C		225%	
Flame Test: *			
UL Horizontal –		Pass	
Chemical Resistance			
Acetone	swell@23°C**	Not recommended	
Acid - H2SO4 S.G. 1.260 5%	swell@23°C**	1.5%	
Engine Oil – ASTM D-471 IRM-902	swell@110°C**	3%	
Benzene	swell@23°C/24h	Not recommended	
Ероху	swell@23°C/24h	NA	
Gasoline – ASTM D-471 Fuel C	swell@23°C**	11.1%	
Methanol	swell@23°C/24h	<1%	
Toluene	swell@23°C/24h	Not recommended	
	swell@23°C/24h		
Xylene	Not recommended		
Electrical: *			
Dielectric Constant D150/100MHz	NA		
Dielectric breakdown strength (Vrms)	NA		
Oxygen Index: (D2868 Standard)	NA		

^{*} Properties are tested to UL 758 and UL 1581.

Test data based on 18 AWG sample
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.

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^{**} Percent swell SAE J-1128 TXL