



125 ZH

Irradiation Cross-Linked Polymeric Insulation

UL 3271 125°C 600V
ROHS and CE Compliant

Champlain Cable Exar® 125 ZH is at Halogen Free 125°C UL rated lead wire. Exar 125ZH is an irradiated cross-linked polymeric insulation with UL 125°C and 600 volts. This Halogen free lead is perfect for use in countries or applications which require halogen free rated wire. Exar 125 ZH wire possesses excellent mechanical and electrical properties. Exar® is known for its unparalleled thermal stability, toughness and abrasion resistance. It is compatible with all magnet wire and most varnishes. Irradiation cross-linking assures this insulation will not melt or flow at soldering temperatures. Exar 125 ZH processes very well on automated high speed cut and strip equipment.



Product Number	Standard Conductors Tin Copper	Nom. Dia of Conductor		Insulation Thickness		Nom. OD		Finished Weight (lbs/mft)	Ampacity
		in.	mm.	in.	mm.	in.	mm.		
3271-ZH-22-E0	22 (19/34)	.031	.79	.030	.76	.095	2.41	5.81	14
3271-ZH-20-E0	20 (19/32)	.038	.97	.030	.76	.103	2.61	7.57	16
3271-ZH-18-B0	18 (7/.0152)	.045	1.14	.030	.76	.105	2.67	9.00	24
3271-ZH-18-E0	18 (19/.0092)	.045	1.14	.030	.76	.105	2.67	9.00	24
3271-ZH-16-F0	16 (26/30)	.058	1.47	.030	.76	.122	3.09	11.90	31
3271-ZH-14-H0	14 (41/30)	.073	1.85	.030	.76	.136	3.45	19.00	46
3271-ZH-12-J0	12 (65/30)	.093	2.36	.030	.76	.150	3.81	27.10	60
3271-ZH-10-J0	10 (65/28)	.111	2.82	.030	.76	.172	4.37	40.5	80
3271ZH-08-X0	8 (84/27)	.147	3.73	.045	1.14	.238	6.04	69.20	106
3271-ZH-06-X0	6 (84/25)	.183	4.65	.060	1.52	.305	7.75	111.50	155
3271-ZH-04-L0	4 (133/25)	.263	6.68	.060	1.52	.385	9.78	163.90	190
3271-ZH-02-M0	2 (259/26)	.323	8.20	.060	1.52	.445	11.30	240.40	232
3271-ZH-01-M0	1 (259/25)	.372	9.44	.060	1.52	.492	12.50	315.30	293
3271-ZH-/1-M0	1/0 (259/24)	.424	10.77	.080	2.03	.588	14.99	421.20	339
3271-ZH/2-M0	2/0 (259/23)	.465	11.81	.080	2.03	.629	15.98	507.20	390
3271-ZH/3-M0	3/0 (259/22)	.520	13.21	.080	2.03	.684	17.37	627.90	451
3271-ZH/4-M0	4/0 (259/21)	.586	14.80	.080	2.03	.750	19.05	776.80	529

*Ampacity 150°C rated single-insulated conductor in free air at 40°C ambient air temperature



Manufacturing Locations:
 Colchester, Vermont
 El Paso, Texas
 Leeds, Massachusetts



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Irradiation Cross-Linked Polymeric Insulation

PROPERTIES	EXAR® 125 ZH	
Approvals / Listings:		
UL	UL3271	
Physical: *		
Temperature Rating	150° C	
Voltage Rating (Vrms)	600V	
Shore "D" Hardness	TBD	
Cold Bend - 4h @ -55°C	Pass	
Bend Radius	3 – 5 X overall diameter	
Tensile Strength: *		
Unaged	2149 psi	
Retention after 7 days @ 180 °C	131%	
Elongation: *		
Unaged	317%	
Retention after 7 days @ 180 °C	81%	
Flame Test: *		
UL 758 and FT2 Horizontal Burn	Pass	
Chemical Resistance		
Acetone	swell@23°C**	Not recommended
Acid - H2SO4 S.G. 1.260 5%	swell@23°C**	Pass
Engine Oil – ASTM D-471 IRM-902	swell@50°C**	Pass
Benzene	swell@23°C/24h	Not recommended
Epoxy	swell@23°C/24h	Pass
Gasoline – ASTM D-471 Fuel C	swell@23°C**	Pass
Methanol	swell@23°C/24h	Pass
Toluene	swell@23°C/24h	Not recommended
Xylene	swell@23°C/24h	Not recommended
Electrical: *		
Dielectric Constant	TBD	
Dielectric breakdown strength (Vrms)	TBD	
Insulation Resistance	5 GOhms/1000ft (18 AWG)	
Oxygen Index:	TBD	

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Sales Offices:

