

EXAR® 150-PV

UL 3829 CSA AWM 150°C Dry / 90°C Wet - 600 Volts

Champlain Cable announces **Exar® 150-PV**, **Class H**, 600 volt, irradiated cross-linked wire. Exar 150-PV is a **lower cost**, **thin** and flexible insulated hookup wire. Exar 150-PV can cost effectively **replace** wire with **FEP**, **Tefzel** and **TFE** or **Rubber** insulations. Irradiation cross-linking assures this insulation will not melt or flow at soldering temperatures or during repeated exposure to direct sunlight on hot surfaces. It has excellent mechanical strength, cut through resistance, chemical / solvent resistance and sunlight resistance. Unlike TFE or FEP, Exar 150 is easy to print.

Benefits and Features

Lower Cost Effective Replacement of Fluoropolymer and Rubber Insulation Flexible

Class H Rating, Suitable for Class N Systems

Superior Processing

Outstanding Chemical and Solvent Resistance

Excellent Sunlight (UV) Resistance

Easy to Print and Pot

Applications

Including but not limited to:

Motors Lighting Devices
Appliances Electronic Devices
Heaters Thermal Sensors
Thermal Protectors Medical Electronics

Transformers Generators

Photovoltaic Equipment



Champlain Cable Corporation

Part Number	Standard Conductors		n. Dia of nductor	Insulation Thickness		Nom. OD		Finished Weight	Ampacity
Number	Tinned Copper	in.	mm.	in.	mm.	in.	mm.	(lbs/mft)	Ampuolity
150-28/XX-B0	28 (7/36)	.015	.38	.016	.41	.049	1.25	1.40	1
150-26/XX-B0	26 (7/34)	.019	.48	.016	.41	.051	1.30	1.80	4
180-26/XX-E0	26 (19/38)	.020	.51	.016	.41	.053	1.35	1.87	4
150-24/XX-B0	24 (7/32)	.024	.61	.016	.41	.056	1.42	2.43	8
180-24/XX-E0	24 (19/36)	.024	.61	.016	.41	.057	1.45	2.48	8
150-22/XX-B0	22 (7/30)	.030	.76	.016	.41	.062	1.58	3.40	15
150-22/XX-E0	22 (19/34)	.031	.79	.016	.41	.063	1.60	3.51	15
150-20/XX-B0	20 (7/28)	.038	.97	.016	.41	.070	1.78	4.89	19
150-20/XX-E0	20 (19/32)	.038	.97	.016	.41	.071	1.80	5.10	19
150-18/XX-B0	18 (7/.0152)	.045	1.14	.016	.41	.077	1.96	6.55	26
150-18/XX-D0	18 (19/.0092)	.045	1.14	.016	.41	.077	1.96	6.45	26
150-16/XX-F0	16 (19/.0117)	.058	1.47	.016	.41	.092	2.34	9.99	33
150-14/XX-H0	14 (41/30)	.071	1.85	.016	.41	.107	2.72	15.07	50
150-12/XX-J0	12 (65/30)	.089	2.26	.016	.41	.121	3.07	23.08	64
150-10/XX-J0	10 (65/28)	.111	2.81	.017	.43	.145	3.68	34.25	85
150-08/XX-X0	8 (84/27)	.147	3.73	.024	.61	.195	4.95	64.15	115
150-06/XX-X0	6 (84/25)	.183	4.65	.024	.61	.231	5.87	97.46	160
150-04/XX-L0	4 (133/25)	.263	6.68	.024	.61	.311	7.90	150.00	205
150-02/XX-M0	2 (259/26)	.323	8.20	.024	.61	.371	9.42	231.00	274
150-01/XX-M0	1 (259/25)	.372	9.44	.030	.76	.432	10.97	295.00	319
150-/1/XX-M0	1/0 (259/24)	.424	10.77	.030	.76	.484	12.29	368.00	369
150-/2/XX-M0	2/0 (259/23)	.456	11.81	.030	.76	.515	13.08	458.00	429
150-/3/XX-M0	3/0 (259/22)	.520	13.21	.030	.76	.581	14.78	577.00	498
150-/4/XX-M0	4/0 (259/21)	.586	14.88	.030	.76	.646	16.41	720.00	579

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





Inventing the Future of Wire and Cable

PROPERTIES	EXAR [®] 180		
Approvals / Listings:			
UL		UL 3829	
CSA		AWM 150°C 600V	
Physical: *			
Temperature Rating		150 °C Dry / 90°C Wet	
Voltage Rating (Vrms)	600V		
Flexibility - 7 days @ 213 °C	Pass		
Cold Bend - 4h @ -40°C	Pass		
Sand paper Abrasion (SAE J-1128) 350 mm	1400 mm		
Scrape Abrasion (ISO 6722, 0.45 mm cord)	818 cycle		
Tensile Strength: *		•	
Unaged		6073 PSI	
Retention after 7 days @ 213 °C		85%	
Elongation: *			
Unaged		410%	
Retention after 7 days @ 213 °C		110%	
Flame Test: *			
UL Vertical – VW-1		Pass	
Chemical Resistance			
Acetone	swell@23°C**	0%	
Acid - H2SO4 S.G. 1.260 5%	swell@23°C**	0%	
Engine Oil – ASTM D-471 IRM-902	swell@115°C**	0%	
Benzene	swell@23°C/24h	0%	
Ероху	swell@23°C/24h	<1%	
Gasoline – ASTM D-471 Fuel C	swell@23°C**	0%	
Methanol	swell@23°C/24h	0%	
Toluene	swell@23°C/24h	0%	
Transmission oil	swell@150°C/720h	<2%	
Xylene	swell@23°C/24h	<1%	
Electrical: *			
Dielectric Constant D150/100MHz		3.5	
Dielectric breakdown strength (Vrms)	19,000		
Oxygen Index: (D2868 Standard)	42		
Sunlight Resistance	Sec 1200, UL1581	>=80% Retention	
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^{*} Properties are tested to UL 758 and UL 1581.

Test data based on 18 AWG sample

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