

Exar® SFX

UL 3289 150°C - 600V CSA AWM, CL 1503 Class F (155°C)

Champlain Cable announces **Exar[®]** *SFX*, the latest generation of our Exar family. This innovative new material transforms Exar irradiation cross-linked polyolefin into a rubber-like material. While maintaining the excellent thermal, size, toughness and varnish release advantages of Exar, *SFX* maximizes flexibility over a very broad temperature range. The end result is a wire or cable ideally suited to applications where a combination of flexibility, size and performance is required.

Benefits and Features

UL/CSA unrestricted 150°C – 600V CUL AWM 1 A/B Maximum flexibility Highly cut-through and abrasion resistant UL 758 Horizontal Burn Rating (FT-2) Easier stripping and processing Superior varnish resistance Small diameter

Applications

Including but not limited to:

Motor Lead HID Ballasts
Electric Motors Lighting Devices

Coil Winding Appliances

Electrical Coils Electronic Devices

Transformers Heat Pumps

Generators

Exar[®] *SFX* is available in the standard sizes listed. Extra-flexible stranding is available upon request for even greater flexibility. The product can be customized with many different options that include special print, markings, colors and striping. We can also customize conductor configuration, insulation thickness and packaging as required. Exar *SFX* lead wire also makes an ideal basis for flexible 150°C cables.

Feel the difference – we think you will agree that Exar SFX feels more like rubber than any other XLPE or XLPO on the market.

Please contact us for samples or product information.

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Exar® SFX

Product Information

Standard Conductors Tinned Copper		Conductor Resistance*	Insulation Wall	Nominal O.D.	Finished Weight (lbs/mft)	Ampacity**
22	(7/30)	17.1	.030"	.090"	5.0	11
20	(7/28)	10.7	.030"	.098"	6.6	15
18	(19/.0092)	6.23	.030"	.106"	8.5	21
16	(26/30)	4.69	.030"	.117"	12.1	28
14	(41/30)	2.94	.030"	.132"	17.5	46
12	(65/30)	1.85	.030"	.149"	25.9	60
10	(65/28)	1.15	.030"	.171"	39.0	80
8	(84/27)	0.70	.045"	.237"	67.3	106
6	(84/25)	0.44	.060"	.303"	108	155
4	(133/25)	0.28	.060"	.383"	165	190
2	(259/26)	0.184	.060"	.443"	247	255
1	(259/25)	0.145	.080"	.532"	324	293
1/0	(259/24)	0.113	.080"	.584"	399	339
2/0	(259/23)	0.089	.080"	.625"	492	390
3/0	(259/22)	0.070	.080"	.680"	610	451
4/0	(259/21)	0.056	.080"	.746"	756	529

^{*}Conductor Resistance measured in Ohms/Mft. @20°C **Ampacity – Single insulated conductor in free air at 30°C ambient

Other sizes and conductor designs available on request

Performance Characteristics

(Typical Results from 18 AWG)

Insulation Attributes	Typical Performance			
Tensile Strength	3000 psi			
Elongation	500%			
Hardness	40 Shore "D"			
Thermal Performance	Exceeds all varnish baking cycle requirements			
	4 hours at 240°C / 464°F	100% retention of elongation		
	24 hours at 210°C / 410°F	100% retention of elongation		
	168 hours at 180°C / 356°F	100% retention of elongation		
Dielectric Strength	20,000 Volt Breakdown Voltage			
Abrasion Resistance	Superior to EPDM, Hypalon, Silicone			
Cold Bend	-70°C			
Flame Resistance	Meets UL Horizontal Burn (FT2)			

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.

Exar® is a registered trademark of Champlain Cable Corporation.

