

## Exar<sup>®</sup> 400 LOCA Class 1E UL 3266 125°C - 300V CSA AWM

**Exar® 400** is a LOCA qualified irradiation cross-linked polymeric insulation possessing remarkable mechanical and electrical properties along with excellent radiation, water, steam, temperature and flame resistance. Specially developed for meeting high safety standards for nuclear and fossil fuel power plants, Exar 400 processes extremely well on the latest high speed cut and strip machines. This product has unusually high chemical resistance including many potting compounds, toners and solvents. An excellent primary and jacket insulation for flexible control cables used in environmentally tough conditions. Save money by avoiding costly scrap, rework and untimely replacement.

## **Benefits and Features**

LOCA qualified Class 1E ICEA 40 years at 90°C and 200 megarads Resistant to radiation exposure Resistant to water and steam IEEE 383 and VW-1 Flame Rating Meets 10 CFR 50 Appendix B Quality Assurance for Nuclear Power Plants UL/CSA AWM 125°C – 300V

## **Applications**

Including but not limited to: Nuclear and Fossil Fuel Power Plants Power and Control Cables Switch Board Equipment Office Equipment Underground conduit or raceway Wet Locations Motors

Part Number	Standard Conductors		Dia of luctor		llation kness		om. )D	Finished Weight	Ampacity
	Tinned Copper	in.	mm.	in.	mm.	in.	mm.	(lbs/mft)	
15-11738	22 (19/34)	.031	.79	.016	.41	.063	1.60	3.62	9
15-11735	20 (19/32)	.038	.97	.016	.41	.071	1.80	5.21	12
15-11739	18 (19/.0092)	.045	1.14	.016	.41	.077	1.96	6.82	18
15-11731	16 (26/30)	.058	1.47	.016	.41	.092	2.34	10.43	24
15-11730	14 (41/30)	.073	1.85	.016	.41	.107	2.72	15.57	35
15-11741	14 (413/40)	.083	1.92	.016	.41	.115	2.92	15.81	35
15-11729	12 (65/30)	.093	2.36	.016	.41	.121	3.07	23.71	40
15-11710	10 (105/30)	.111	2.82	.016	.41	.145	3.68	37.50	55

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

Call 800-451-5162 for more information, or email us at <u>sales@champcable.com</u> Champlain Cable Corporation 175 Hercules Drive, Colchester, Vermont 05446

PROPERTIES	<b>EXAR<sup>®</sup> 400</b>		
Approvals / Listings:			
LOCA	Class 1E		
UL	<b>STYLE 3266</b>		
CSA	AWM 125°C 300V		
Physical: *			
Temperature Rating	125°C		
Voltage Rating (Vrms)	300V		
Cold Bend $- 4h @ -65^{\circ}C$	Passes		
Shore "A" Hardness	89		
Shore "D" Hardness	38		
Room Temperature UL Abrasion (cycles)	5000		
Bend Radius	3 X overall diameter		
Tensile Strength: *			
Unaged	2000 PSI		
Retention after 7 days @ 158 °C	90%		
Retention after 90 days @ 136 °C	85%		
Retention arter 90 days @ 150°C			
Elongation: *	250%		
Unaged	90%		
Retention after 7 days @ 158 °C	70%		
Retention after 90 days @ 136 °C	70%		
Water Absorption			
ICEA-S-66-524	Passes		
Flame Test: *			
IPEA S-19-81	Passes		
UL VW-1	Passes		
IEEE Std. 383-1974	Passes		
	1 45505		
Electrical: *			
Dielectric Constant	2.72		
Dielectric breakdown strength (Vrms)	12,000		
Oxygen Index:	28		
Gamma Radiation Resistance – Total:			
Integral dose (Cobalt 60 @ a rate of less than 1 megarad/hr.)	200 megarads		
	-		
Ultraviolet Light Resistance:	5000 hrs.		
Per ASTM G-23 Type H	5000 ms.		

\* Properties are tested to UL 758 and UL 1581.

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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