

## XLE-200 Thick Wall ISO Battery Cable

## ISO-6722-1, Class F, Thick-Wall, 1000V

- Highly Engineered EXRAD XLE-200 Irradiation Crosslinked Fluoroelastomer
- Withstands Thermal Excursions to 275°C +
- Flexible for Tight Spaces and Routing
- Designed for the Most Demanding Environments
- Smaller and much tougher than Silicone alternatives
- Highly fluid resistant





















Product Number	Std. Conductors	Nominal Conductor OD		Nom. Insulation Thickness		Nom. Finished OD		Min. Static Bend Radius		Finished Weight	Conductor Resistance Ω per KM
	(Bare Copper)	mm.	in.	mm.	in.	mm.	in.	mm.	in.	(Kg/KM)	at 20°C
EXRAD -200K-6	6.0mm² (84/.30)	2.92	.115	1.06	.042	4.80	.189	24	1.0	68	3.01
EXRAD -200K-10	10mm² (80/.40)	3.99	.157	1.06	.042	6.20	.244	31	1.3	112	1.78
EXRAD -200K-12	12mm² (154/.32)	4.88	.192	1.06	.042	7.00	.276	35	1.4	134	1.47
EXRAD -200K-16	16mm² (105/.46)	5.21	.205	1.24	.049	8.00	.314	40	1.6	208	1.13
EXRAD -200K-20	20mm² (247/.32)	6.17	.243	1.24	.049	8.60	.339	43	1.7	216	0.91
EXRAD -200K-25	25mm² (798/.20)	6.85	.269	1.24	.049	9.90	.390	50	2.0	261	0.72
EXRAD -200K-35	35mm² (551/.28)	8.12	.320	1.24	.049	10.60	.417	53	2.1	356	0.52
EXRAD -200K-40	40mm² (494/.32)	8.89	.350	1.27	.050	11.80	.464	59	2.3	419	0.47
EXRAD -200K-50	50mm² (798/.28)	9.91	.385	1.55	.061	12.90	.508	63	2.5	509	0.36
EXRAD -200K-70	70mm² (1140/.28)	11.83	.466	1.55	.061	14.93	.588	87	3.4	711	0.26
EXRAD -200K-95	95mm² (1938/.25)	13.20	.519	1.60	.063	16.40	.646	102	4.1	998	0.19
EXRAD -200K-120	120mm² (2442/.25)	15.24	.600	1.60	.063	18.44	.726	112	4.5	1211	0.15







## XLE-200 Thick Wall ISO Battery Cable

Section	Description	Requirement	Typical Results (25mm <sup>2</sup> Sample)		
5.1	Outside Cable Diameter	8.70 max.	8.61mm	Pass	
5.2	Insulation Thickness	0.52mm min.	0.78mm	Pass	
5.3	Conductor Diameter	7.2mm max.	6.93mm	Pass	
5.4	Conductor Resistance	0.46 mΩ/m @20°C max.	0.45 mΩ/m	Pass	
5.5	Withstand Voltage	600V 5kV for 5 minutes	No Dielectric Breakdown	Pass	
5.6	Insulation Faults	Sparktest @ 12.5kV	No faults	Pass	
5.7	Insulation Volume Resistivity	$10^9 \Omega$ /mm min.	8.52 10 <sup>15</sup> Ω/mm	Pass	
5.8	Pressure at High Temperature	'0.8N @180°C no dielectric breakdown	No breakdown	Pass	
5.9	Strip Force / Adhesion	Per customer agreement	N/A	N/A	
5.10	Low Temperature Winding	3 turns 2.5kg - 40°C no dielectric breakdown	No dielectric breakdown, no	Pass	
5.11	Impact	300gm @-15°C no breakdown	No breakdown,	Pass	
5.12.4.1	Sandpaper Abrasion	N/A	N/A	Pass	
5.12.4.2	Scrape Abrasion	N/A	N/A	Pass	
5.13	Long-Term Heat Aging	200°C 3000 hours	No breakdown, no cracks	Pass	
5.15	Thermal Overload	250°C 6 hours	No breakdown, no cracks,	Pass	
5.16	Shrinkage by heat	2.0mm max. 150°C	No shrinkage,	Pass	
5.17	Fluid Compatibility	Gasoline 15% max.	1.2%	Pass	
		Diesel Fuel 15% max.	0.3%	Pass	
		Engine Oil 15% max.	0.4%	Pass	
		Ethanol 15% max.	0.0%	Pass	
		Power Steering 30% max	0.2%	Pass	
		Automatic Transmission 25% max	0.6%	Pass	
		Engine Coolant 15% max	0.2%	Pass	
		Battery Acid, No Breakdown	No Breakdown	Pass	
5.19	Ozone Resistance	45°C 85% Relative Humidity 70 hours, Ozone 50 +/- 5 pphm 1kV 1 min. (no breakdown)	No Breakdown	Pass	
5.20	Resistance to hot water	not less than $10^{-9}~\Omega$ -mm	5.31x 10- <sup>14</sup> Ω-mm	Pass	
5.21	Temperature and Humidity Cycling	40 x 8 hour cycles -40°C and 125°C, 80 - 100% relative humidity	No dielectric breakdown, no cracking	Pass	
5.22	Resistance to Flame	70 sec. max. 50mm unburned	1.8 sec. after burn	Pass	

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



Manufacturing Locations
Colchester, Vermont
El Paso, Texas
www.champcable.com