



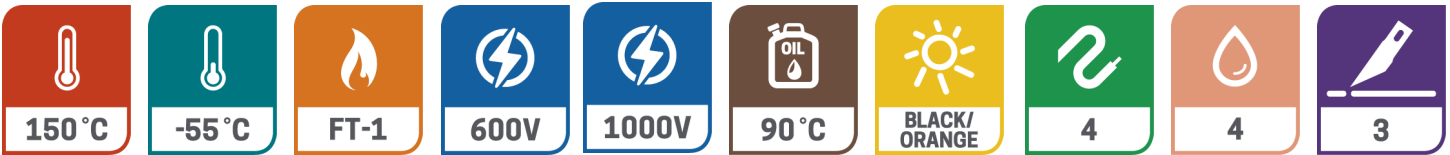
150 HVFX-XLE

ISO Thin Wall

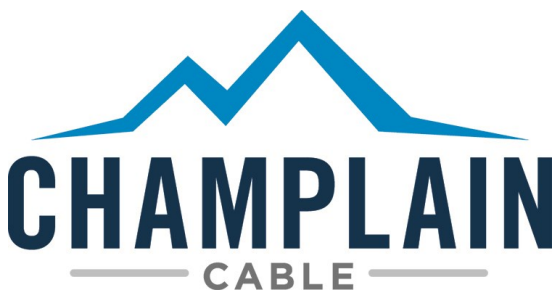
Shielded Battery Cable

600V / 1000V, 150°C, ISO-6722-1, Class D

- Highly Engineered EXRAD[®] Irradiation Crosslinked Insulation and Jacket
- Very Flexible for Tight Spaces and Easy Routing
- Smaller and Tougher than Silicone or EPDM alternatives
- Withstands Thermal Excursions to 240°C +
- Highly Oil Resistant with Excellent Low-Temperature Performance
- UV Resistant Outer Jacket



Product Number	Standard Conductor Bare Copper	Nom. Conductor Diameter mm.	Nom Primary Diameter mm.	Nom. Shield Diameter mm.	Nom. Shield Coverage	Nom. Final Diameter mm.	Min. Static Bend Radius mm.	Nom. Finished Weight (kg/KM)	Conductor Resistance Ω per KM
600V									
EXRAD -HV/XLE-6	6mm ² (84/.30)	3.09	4.15	4.61	95%	5.7	17	90	3.01
1000V									
EXRAD -HV/XLE-10	10mm ² (80/.40)	3.99	5.65	6.22	95%	7.8	24	105	1.78
EXRAD -HV/XLE-12	12mm ² (154/.32)	4.88	6.15	6.72	95%	8.3	25	177	1.47
EXRAD -HV/XLE-16	16mm ² (105/.45)	5.21	6.8	7.37	95%	9.3	28	249	1.13
EXRAD -HV/XLE-20	20mm ² (247/.32)	6.02	7.4	7.97	95%	9.9	30	261	0.91
EXRAD -HV/XLE-25	25mm ² (798/.20)	6.98	8.3	8.87	95%	11	33	312	0.72
EXRAD -HV/XLE-35	35mm ² (551/.28)	8.13	9.9	10.64	95%	12.8	39	446	0.52
EXRAD -HV/XLE-40	40mm ² (494/.32)	8.89	10.55	11.12	95%	13.6	47	474	0.47
EXRAD -HV/XLE-50	50mm ² (798/.28)	9.91	11.9	12.61	95%	15.5	62	647	0.36





150 HVFX-XLE

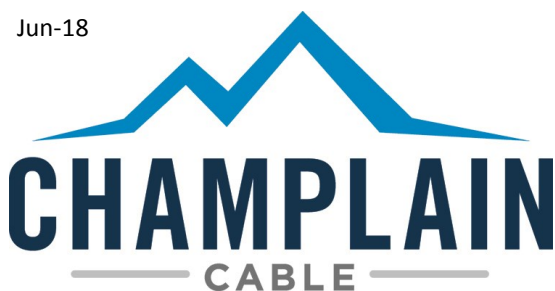
ISO Thin Wall

Shielded Battery Cable

Section	Description	Requirement	Typical Results (35mm ² Sample)	
5.1	Outside Cable Diameter	10.40 max.	9.98mm	Pass
5.2	Insulation Thickness	0.64mm min.	0.84mm	Pass
5.3	Conductor Diameter	8.50mm max.	8.08mm	Pass
5.4	Conductor Resistance	0.527 mohms/m @20°C max.	0.521 mohms/m	Pass
5.5	Withstand Voltage	600V 5kV for 5 minutes	no dielectric breakdown	Pass
5.6	Insulation Faults	Spark test @ 12.5kV	no faults	Pass
5.7	Insulation Volume Resistivity	10 ⁹ Ω /mm min.	1.66 10 ¹⁶ Ω /mm	Pass
5.8	Pressure at High Temperature	0.8N @150°C no dielectric breakdown	no breakdown	Pass
5.9	Strip Force / Adhesion	Per customer agreement	NA	NA
5.10	Low Temperature Winding	3 turns 2.5kg - 40°C no dielectric breakdown	No dielectric breakdown, no cracking,	Pass
5.11	Impact	300gm @-40°C no breakdown	no breakdown,	Pass
5.12.4.1	Sandpaper Abrasion	NA	NA	Pass
5.12.4.2	Scrape Abrasion	NA	NA	Pass
5.13	Long-Term Heat Aging	150°C 3000 hours	no breakdown, no cracks	Pass
5.15	Thermal Overload	200°C 6 hours	no breakdown, no cracks,	Pass
5.16	Shrinkage by heat	2mm max. 150°C	no shrinkage,	Pass
5.17	Fluid Compatibility	Gasoline 15% max.	7.5%	Pass
		Diesel Fuel 15% max.	2.7%	Pass
		Engine Oil 15% max.	3.2%	Pass
		Ethanol 15% max.	4.7%	Pass
		Power Steering 30% max	4.1%	Pass
		Automatic Transmission 25% max	3.2%	Pass
		Engine Coolant 15% max	0.4%	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 10-5 ohm-mm	10-14 ohm-mm	Pass
5.21	Temperature and Humidity Cycling	40 - 8 hours 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 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

Jun-18



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