



150 FX

Thin Wall

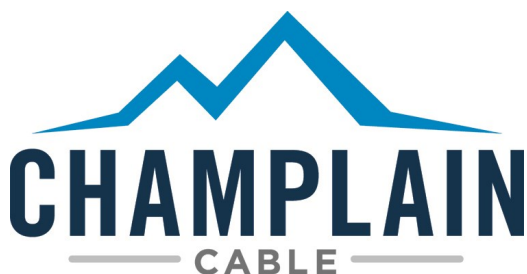
ISO Battery Cable

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

- Highly Engineered EXRAD® 150FX Irradiation Crosslinked Polyolefin
- Meets or Exceeds ISO-6722-1 Requirements
- Flexible, Thin, Fluid Resistant and Tough
- Performs at Higher Temperatures for Longer Periods of Time.
- Withstands Thermal Excursions to 240°C and higher.
- Excellent Low-Temperature Performance



Product Number	Std. Conductors Bare Copper	Nom. Conductor Diameter		Nom. Insulation Thickness		Nom. Finished Diameter		Min. Static Bend Radius		Finished Weight KG/KM	Conductor Resistance Ω per KM at 20°C
		mm.	in.	mm.	in.	mm.	in.	mm.	in.		
600V											
EXRAD--FXT-5	5.0mm ² (37/.40)	2.69	.106	0.57	.022	3.83	.151	20	0.79	48	3.94
EXRAD--FXT-6	6.0mm ² (37/.45)	3.15	.124	0.57	.022	4.29	.169	20	0.80	61	3.14
EXRAD--FXT-8	8.0mm ² (98/.312)	3.66	.144	0.57	.022	4.80	.189	24	0.95	77	2.38
EXRAD--FXT-10	10mm ² (65/.46)	4.36	.172	0.61	.024	5.65	.222	28	1.1	105	1.78
EXRAD--FXT-12	12mm ² (154/.32)	4.88	.192	0.61	.024	6.15	.242	30	1.2	126	1.47
1000V											
EXRAD--FXT-16	16mm ² (105/.46)	5.21	.205	0.76	.030	6.80	.267	34	1.4	193	1.13
EXRAD--FXT-20	20mm ² (247/.32)	6.17	.243	0.76	.030	7.40	.291	37	1.5	201	0.91
EXRAD--FXT-25	25mm ² (154/.46)	6.98	.270	0.76	.030	8.30	.326	42	1.6	243	0.72
EXRAD--FXT-35	35mm ² (551/.28)	8.12	.320	0.86	.034	9.90	.390	59	2.3	343	0.52
EXRAD--FXT-40	40mm ² (494/.32)	8.89	.350	0.86	.034	10.55	.415	63	2.5	395	0.47
EXRAD--FXT-50	50mm ² (798/.28)	9.91	.390	1.00	.040	11.90	.457	71	2.9	487	0.36
EXRAD--FXT-70	70mm ² (1140/.28)	11.83	.466	1.10	.043	14.10	.555	85	3.4	699	0.26
EXRAD--FXT-95	95mm ² (1957/.25)	13.20	.521	1.60	.054	16.40	.646	99	3.9	1170	0.19





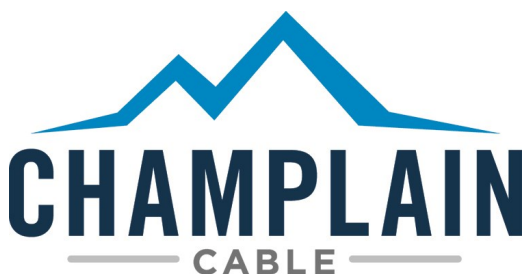
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Section	Description	Requirement	Typical Results (35mm ² Sample)	
5.1	Outside Cable Diameter	10.4 max.	9.98mm	Pass
5.2	Insulation Thickness	0.64mm min.	0.84mm	Pass
5.3	Conductor Diameter	8.50mm max.	8.08mm	Pass
5.4	Conductor Resistance	0.527 mohms/m @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	Sparktest @ 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 tns 2.5kgm - 40°C no breakdown	no dielectric breakdown,	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

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