

XLE-200 Thin Wall, 60V ISO Battery Cable

30VAC/60VDC, 200°C, ISO-19642-3, Class F, FLR6Y

- Highly Engineered EXRAD XLE-200 Irradiation Cross-linked 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 (Bare Copper)	Nominal Conductor OD mm. in.	Nom. Insulation Thickness mm. in.	Nom. Finished OD mm. in.	Min. Static Bend Radius mm. in.	Finished Weight (Kg/KM)	Max. Conductor Resistance Ω per KM at 20°C
EXRAD-60V-200TW-5	5.0mm ² (245/.15)	2.87 .113	0.57 .022	4.01 .158	20 0.8	47	3.94
EXRAD-60V-200TW-6	6.0mm² (196/.20)	3.10 .122	0.57 .022	4.15 .163	20 0.8	53	3.14
EXRAD-60V-200TW-8	8.0mm ² (238/.20)	3.88 .153	0.57 .022	4.80 .189	24 1.0	83	2.38
EXRAD-60V-200TW-10	10mm² (322/.20)	4.39 .172	0.63 .025	5.65 .222	28 1.1	134	1.82
EXRAD-60V-200TW-12	12mm² (380/.20)	4.83 .190	0.65 .026	6.13 .241	30 1.2	155	1.52
EXRAD-60V-200TW-16	16mm² (511/.20)	5.50 .217	0.65 .026	6.80 .268	34 1.4	197	1.16
EXRAD-60V-200TW-20	20mm² (610/.20)	6.16 .243	0.65 .026	7.46 .294	37 1.5	219	0.955
EXRAD-60V-200TW-25	25mm² (798/.20)	7.00 .276	0.65 .026	8.30 .327	42 1.6	243	0.743
EXRAD-60V-200TW-35	35mm² (1083/.20)	8.09 .319	0.91 .036	9.90 .390	59 2.3	358	0.527
EXRAD-60V-200TW-40	40mm² (1235/.20)	8.89 .349	0.83 .032	10.55 .415	63 2.5	415	0.473
EXRAD-60V-200TW-50	50mm² (1615/.20)	9.77 .384	1.07 .043	11.60 .457	71 2.9	611	0.368
EXRAD-60V-200TW-70	70mm² (2128/.20)	11.60 .456	1.25 .049	14.10 .555	85 3.4	716	0.259
EXRAD-60V-200TW-95	95mm² (2926/.20)	13.51 .532	1.45 .057	16.40 .646	99 3.9	1178	0.196







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ISO 19642 Section	Description	Requirement	Typical Results (35mm ² Sample)		
5.2.1	Outside Cable Diameter	9.4mm-10.4mm	9.8mm	Pass	
5.2.2	Insulation Thickness	0.64mm min.	0.97mm	Pass	
5.2.3	Conductor Diameter	9.0mm max.	7.87mm	Pass	
5.3.1	Conductor Resistance	0.527 mΩ/m max.	0.450 mΩ/m	Pass	
5.3.3	Withstand Voltage	1kV for 30min	No dielectric breakdown	Pass	
5.3.5	Insulation Faults	Sparktest @ 3.0kV	No breakdown	Pass	
5.3.6	Insulation Volume Resistivity	$10^9 \Omega$ —mm min.	$1.25 \times 10^{15} \Omega$ -mm	Pass	
5.4.5	Flexibility Test	Customer-Defined	N/A	NA	
5.5.2	Long-Term Heat Aging	200°C, 3000 hrs, 1kV, no breakdown	No cracks, No breakdown	Pass	
5.5.3	Short-Term Heat Aging	225°C, 240hrs, 1kV, no breakdown	No cracks, No breakdown	Pass	
5.5.4	Thermal Overload	250°C, 6 hrs, 1Kv, no breakdown	No cracks, No breakdown	Pass	
5.5.5	Pressure at High Temperature	Under load @200°C, 1kV 1min, no breakdown	No cracks, No breakdown	Pass	
5.5.6	Shrinkage by heat	2mm max. @ 150°C	0.0 mm	Pass	
5.5.7	Low Temperature Winding	4 hrs @ -40°C, 1kV, no breakdown	No cracks, No breakdown	Pass	
5.5.8	Cold Impact	16 hrs @ -15°C, 1kV, no breakdown	No cracks, No breakdown	Pass	
5.5.9	Temperature and Humidity Cycling	40 x 8 hour cycles -40°C to 150°C, relative humidity 80 -100%, 1kV	No cracks, No breakdown	Pass	
5.5.10	Resistance to hot water	35 days in 85C water, IR not less than 10^{12} Ω/mm	$4.46 \times 10^{14} \Omega$ /mm, no breakdown	Pass	
5.5.11	Resistance to liquid chemicals	Groups 1 and 2, no breakdown.	All fluids: no crack/damage/breakdown	Pass	
5.5.14	Ozone Resistance	65°C, 192 hours, Ozone (1+/- 0.05) x 10-6	No cracks	Pass	
5.5.15	Resistance to Flame Propagation	Must extinguish within 30 sec. max. and a min of 50mm unburned	5.2 sec.	Pass	

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