

## 150 HVFX-XLE

## High Voltage Shielded Battery Cable

#### 600V - 1000V, 150°C, SAE STX

- Highly Engineered EXRAD<sup>®</sup> Irradiation Crosslinked Insulation and Jacket
- Very Flexible for Tight Spaces and Easy Routing
- Smaller and Tougher than Silicone or EPDM alternatives
- Exceeds J-1127 STX requirements
- Withstands Thermal Excursions to 240°C +
- Highly Oil Resistant with Excellent Low-Temperature Performance





















		Nom.	Nom.				Min.		Ampacity
Product	Standard	Conductor	Primary	Nom. Shield	Nom. Final	Shield	Static	Finished	(40°C
Number	Conductor	Diameter	Diameter	Diameter	Diameter	Coverage	Bend	Weight	Free Air)
	Bare Copper	in. mm.	in. mm.	in. mm.	in. mm.		Radius	(lbs/mft)	
600V									
EXRAD-HVX10X	10 (105/30)	.110 2.79	.152 3.86	.170 4.32	.210 5.33	95%	24mm	77	80
1000V									
EXRAD-HVX8X	8 (133/29)	.166 4.22	.226 5.74	.249 6.32	.309 7.85	95%	36mm	143	106
EXRAD-HVX6X	6 (133/27)	.194 4.93	.264 6.45	.283 7.04	.337 8.56	95%	40mm	191	155
EXRAD-HVX4X	4 (133/25)	.242 6.15	.302 7.67	.325 8.26	.386 9.80	95%	49mm	262	190
EXRAD-HVX2X	2 (665/30)	.318 8.08	.393 9.98	.416 10.57	.476 12.09	95%	61mm	425	255
EXRAD-HVX1X	1 (779/30)	.346 8.79	.446 11.33	.469 11.91	.529 13.44	95%	68mm	500	293
EXRAD-HVX1/0X	1/0 (1007/30)	.390 9.91	.490 12.45	.518 13.16	.598 15.19	95%	76mm	650	339
EXRAD-HVX2/0X	2/0 (1254/30)	.438 11.13	.548 13.92	.576 14.63	.656 16.66	95%	84mm	820	390
EXRAD-HVX3/0X	3/0 (1615/30)	.475 12.07	.585 14.86	.613 15.57	.693 17.60	95%	88mm	968	451
EXRAD-HVX4/0X	4/0 (2107/30)	.602 15.29	.712 18.08	.740 18.80	.828 21.03	95%	105mm	1290	529







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P	Property / Attribute	SAE J-1127 STX Req.	EXRAD HVFX 6 AWG Typical Performance	
Dielectric Strength			_	
Dielectric Test	Wet Dielectric after 5 hour soak		1 kV 1 min.	5 kV 30 min.
Flame Resistance				
Flame Test	Maximum time after burn		70 Sec	2 sec
Thermal Performance				
Cold Bend	4 hours at temperature no cracks / breakdown		-40°C	-70°C
Temperature Rating	240 Hours @180°C heat aging		155°C	180°C
Temperature Rating	3000 Hours @150°C		125°C	150°C
Mechanical Properties				
Tensile	Minimum psi		1500	2979
Elongation	Minimum %		150	380
Abrasion	Sand Paper Resistance Length in.		10	21
Abrasion	Scrape Cycles		None	NA
Pinch	Pounds		None	NA
Ozone Resistance				
Ozone Test	192 Hours @ 65°C 100 pphm no cracks		Pass	Pass
Fluids				
Engine Oil	ASTM D471, IRM-902	50 +/-3 °C	15% Max.	1.2%
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5 °C	15% Max.	<1%
Brake Fluid	SAE-J-1703	50 +/-5 °C	None	<1%
Ethanol	85% Ethanol + 15% ASTM D471, Ref. Fuel C	23 +/-5 °C	15% Max.	<1%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	23 +/-5 °C	15% Max.	1.9%
Power Steering	ASTM D471, IRM-903	50 +/-3 °C	30% Max.	1.1%
Auto Transmission	Citgo #33123 SAE-J311	50 +/-3 °C	25% Max.	4.8%
Methanol	FOW F.1 1 OL . FOW 1: .:11 124 .	E0 : / 0 <sup>0</sup> 0	25% Max.	<1%
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Engine Coolant Battery Acid	50% Ethylene Glyco + 50% distilled Water H <sub>2</sub> SO <sub>4</sub> Specific Gravity = 1.260 +/005	50 +/-3 °C 23 +/-5 °C	25% Max. 15% Max. 5% Max.	<1% 0% <1%

We cannot anticipate all conditions under which this information and our 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
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