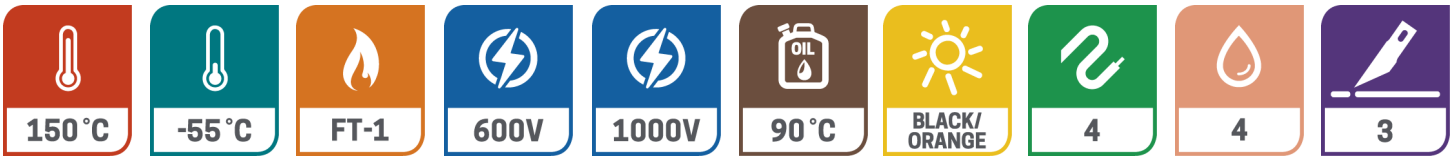
150 HVFX-XLE

High Voltage Shielded Battery Cable

600V - 1000V, 150°C, SAE STX

- Highly Engineered EXRAD® 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



Product Number	Standard Conductor Bare Copper	Nom. Conductor Diameter in.	Nom. Conductor Diameter mm.	Nom. Primary Diameter in.	Nom. Primary Diameter mm.	Nom. Shield Diameter in.	Nom. Shield Diameter mm.	Nom. Final Diameter in.	Nom. Final Diameter mm.	Shield Coverage	Min. Static Bend Radius	Finished Weight (lbs/mft)	Ampacity (40°C Free Air)
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

CHAMPLAIN CABLE

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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^{0}C	-70^{0}C
Temperature Rating	240 Hours @180^{0}C heat aging		155^{0}C	180^{0}C
Temperature Rating	3000 Hours @150^{0}C		125^{0}C	150^{0}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^{0}C 100 pphm no cracks		Pass	Pass
Fluids				
Engine Oil	ASTM D471, IRM-902	50 +/-3 ^{0}C	15% Max.	1.2%
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5 ^{0}C	15% Max.	<1%
Brake Fluid	SAE-J-1703	50 +/-5 ^{0}C	None	<1%
Ethanol	85% Ethanol + 15% ASTM D471, Ref. Fuel C	23 +/-5 ^{0}C	15% Max.	<1%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	23 +/-5 ^{0}C	15% Max.	1.9%
Power Steering	ASTM D471, IRM-903	50 +/-3 ^{0}C	30% Max.	1.1%
Auto Transmission	Citgo #33123 SAE-J311	50 +/-3 ^{0}C	25% Max.	4.8%
Methanol			25% Max.	<1%
Engine Coolant	50% Ethylene Glyco + 50% distilled Water	50 +/-3 ^{0}C	15% Max.	0%
Battery Acid	H_2SO_4 Specific Gravity = 1.260 +/- .005	23 +/-5 ^{0}C	5% Max.	<1%

Jun-18

CHAMPLAIN CABLE

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