



# AUTOMOTIVE

Inventing the Future of Wire and Cable

## RADXL XLE HYBRID

Shielded Battery Cable

-70 - 150°C

RADXL XLE Hybrid shielded battery cable designed specifically to handle the higher voltage and current required by today's hybrid and battery power vehicles. XLE is an extremely flexible, yet tough insulation. These cables significantly reduce the effects of EMI and RFI. The jacket insulation isolates any stray currents making this cable very safe. Our thin wall and high temperature insulations allow for lower weight and less space.

RADXL XLE Hybrid battery cable has an irradiated cross-linked elastomer insulation able to withstand temperatures of 240°C and higher. Thinner and lighter than other shielded battery cables, it is flexible enough for easy routing yet tough enough to withstand the roughest environments. XLE has excellent resistance to oil at temperatures exceeding 105°C.

The end result is an automotive wire ideally suited to applications where a combination of flexibility, long life and performance is required. RADXL XLE Hybrid can be routed through twists and turns where other battery cables fail

### Benefits and Features

RFI and EMI Protection  
SAE J1654 600 Volt Rating  
Rubber Like Flexibility  
Fluid Resistant  
-70°C to 150°C (ISO 6722)

### Applications

Including but not limited to:  
Battery Packs  
Motors  
Inverters  
Generators



Part Number	Standard Conductors Bare Copper	Nom. Dia Conductor		Nom. Dia. Primary insulation		Nom. Dia Shield		Nom. Dia. Outside		Shield Coverage	Finished Weight (lbs/mft)	Ampacity
		in.	mm.	in.	mm.	in.	mm.	in.	mm.			
RADXL-FSX10X	10 (105/30)	.112	2.84	.162	4.11	.184	4.67	.234	5.94	85%	59.0	80
RADXL-FSX8X	8 (133/29)	.166	4.22	.236	5.99	.252	6.40	.303	7.70	85%	92.0	106
RADXL-FSX6X	6 (133/27)	.195	4.95	.265	6.73	.280	7.11	.330	8.37	85%	126.0	155
RADXL-FSX4X	4 (133/25)	.242	6.15	.312	7.92	.330	8.37	.390	9.91	85%	187.0	190
RADXL-FSX2X	2 (665/30)	.318	8.08	.398	9.98	.421	10.69	.481	12.21	85%	295.0	255
RADXL-FSX1X	1 (779/30)	.346	8.79	.456	11.58	.468	11.89	.528	13.41	85%	334.0	293
RADXL-FSX1/0X	1/0 (1007/30)	.390	9.91	.500	12.70	.518	13.57	.578	14.68	85%	412.0	339
RADXL-FSX2/0X	2/0 (1254/30)	.438	11.13	.558	14.17	.584	14.83	.664	16.86	85%	534.0	390
RADXL-FSX3/0X	3/0 (1568/30)	.520	13.21	.640	16.26	.676	17.17	.756	19.20	85%	620.0	451
RADXL-FSX4/0X	4/0 (2107/30)	.602	15.29	.722	18.33	.748	19.00	.828	21.03	85%	876.0	529

\* Ampacity 150°C rated single-insulated conductor in free air at 40°C ambient air temperature.



Champlain Cable Corporation  
175 Hercules Drive  
Colchester, Vermont 05446

P 800.451.5162  
F 802.654.4224  
sales@champcable.com



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## RADXL XLE

Property / Attribute		SAE J-1127 Req.	RADXL XLE 2 AWG Typical Performance	
<b>Dielectric Strength</b>				
Dielectric Test	AC Dielectric Test SAE J1654 4.1	2500 Vac, 1 min	Pass	
<b>Flame Resistance</b>				
Flame Test	Maximum time after burn	70 Sec	0 sec	
<b>Thermal Performance</b>				
Cold Bend	4 hours at temperature no cracks / breakdown	ISO 6722	-40 <sup>o</sup> C	Pass
Temperature Rating	240 Hours heat aging ISO 6722 10.2		175 <sup>o</sup> C	Pass
Temperature Rating	3000 Hours		150 <sup>o</sup> C	Pass
<b>Mechanical Properties</b>				
Tensile	Minimum psi		1600	2530
Elongation	Minimum %		200	510
<b>Fluids</b>				
Engine Oil	ASTM D471, IRM-902	50 +/-3 <sup>o</sup> C	15% Max.	.15%
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5 <sup>o</sup> C	15% Max.	11.1%
Ethanol	85% Ethanol + 15% ASTM D471, Ref. Fuel C	23 +/-5 <sup>o</sup> C	15% Max.	<1%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	50 +/-3 <sup>o</sup> C	15% Max.	0%
Power Steering	ASTM D471, IRM-903	50 +/-3 <sup>o</sup> C	30% Max.	1.70%
Auto Transmission	Dexron III	50 +/-3 <sup>o</sup> C	25% Max.	1%
Auto Transmission	Dexron VI	50 +/-3 <sup>o</sup> C	25% Max.	2.2%
Engine Coolant	50% Ethylene Glyco + 50% distilled Water	50 +/-3 <sup>o</sup> C	15% Max.	0%
Battery Acid	H2SO4 Specific Gravity = 1.260 +/- .005	23 +/-5 <sup>o</sup> C	5% Max.	1.5%
Hot Water	2.5 m in 85 <sup>o</sup> C Salt Sol. for 5 seven day cycles. IR > 10 <sup>9</sup> Ω*mm, pass 1.Kv dielectric			Jacket >10 <sup>9</sup> Ω*mm, Passed Dielectric

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