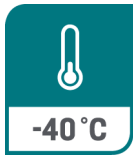
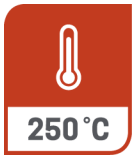




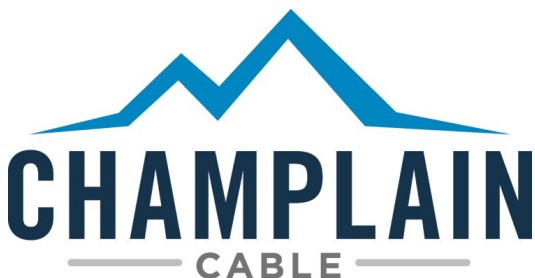
# 250HT Powertrain Wire

SAE TXL Dimensions, 250°C, 1000V, Bare Copper

- High-Performing Fluoropolymer EXRAD<sup>®</sup> 250HT
- Performs in Extreme Environments Around Engines and Exhaust
- Excellent Resistance to Oil, Gasoline, and Many Automotive Fluids
- More Robust Performance for Today's Longer Warranties
- Survives Temperature Spikes of 290°C and Higher for 360 hours
- Very Tough and Abrasion Resistant



Product Number	Standard Conductors Bare Copper	Nom. Conductor Diameter		Nom. Insulation Thickness		Nom. Finished Diameter		Nom. Finished Weight (lbs/mft)	Ampacity At 40°C in Free Air
		in.	mm.	in.	mm.	in.	mm.		
EXRAD-HT22-XX	22 (7/30)	.031	.79	.016	.41	.063	1.60	4.35	11
EXRAD-HT20-XX	20 (7/28)	.035	.89	.016	.41	.070	1.78	5.99	15
EXRAD-HT18-XX	18 (19/.0092)	.047	1.19	.016	.41	.078	1.98	7.85	21
EXRAD-HT16-XX	16 (19/29)	.057	1.83	.016	.41	.089	2.26	10.82	28
EXRAD-HT14-XX	14 (19/27)	.071	1.85	.016	.41	.103	2.62	15.76	46
EXRAD-HT12-XX	12 (105/32)	.095	2.41	.018	.46	.128	3.25	23.57	60



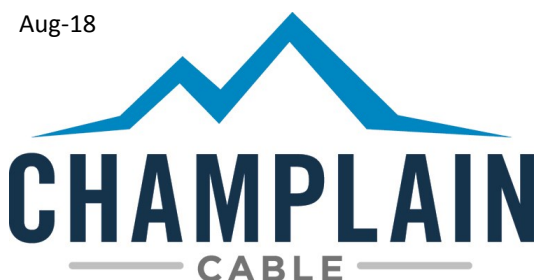


# 250HT Powertrain Wire

Property / Attribute			SAE J-1128 TXL Req.	EXRAD 250 HT 18 AWG Typical Performance
<b>Dielectric Strength</b>				
Dielectric Test	Wet Dielectric after 5 hour soak		1 kV 1 min.	5 kV 30 min.
<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		-40 <sup>o</sup> C	-40 <sup>o</sup> C
Temperature Rating	360 Hours @290 <sup>o</sup> C heat aging		155 <sup>o</sup> C	290 <sup>o</sup> C
Temperature Rating	3,000 Hours @250 <sup>o</sup> C		125 <sup>o</sup> C	250 <sup>o</sup> C
Temperature Rating	10,000 Hours @225 <sup>o</sup> C		N/A	225 <sup>o</sup> C
<b>Mechanical Properties</b>				
Tensile	Minimum psi		1500	3600
Elongation	Minimum %		150	350
Abrasion	Sand Paper Resistance Length in.		10	96
Abrasion	Scrape Cycles		None	2440
Pinch	Pounds		>7	8.5
<b>Ozone Resistance</b>				
Ozone Test	192 Hours @ 650C 100 pphm no cracks		Pass	Pass
<b>Fluids</b>				
Engine Oil	ASTM D471, IRM-902	50 +/-3 <sup>o</sup> C	15% Max.	<1% @90 <sup>o</sup> C
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5 <sup>o</sup> C	15% Max.	<1%
Brake Fluid	SAE-J-1703	50 +/-5 <sup>o</sup> C	None	<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	23 +/-5 <sup>o</sup> C	None	<1%
Power Steering	ASTM D471, IRM-903	50 +/-3 <sup>o</sup> C	30% Max.	<1% @90 <sup>o</sup> C
Auto Transmission	Citgo #33123 SAE-J311	50 +/-3 <sup>o</sup> C	25% Max.	<1% @90 <sup>o</sup> C
Methanol			15% Max.	1%
Engine Coolant	50% Ethylene Glyco + 50% distilled Water	50 +/-3 <sup>o</sup> C	15% Max.	<1%
Battery Acid	H2SO4 Specific Gravity = 1.260 +/- .005	23 +/-5 <sup>o</sup> C	5% Max.	<1%

We cannot anticipate all conditions under which this information and our products or the 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

Aug-18



**Manufacturing Locations:**  
**Colchester, Vermont**  
**El Paso, Texas**  
[www.champcable.com](http://www.champcable.com)