

180B AWG Blocked Transmission Wire

SAE TXL Dimensions, 180°C, 60V, Tin Copper

- Highly Engineered EXRAD[®] 180B
 Irradiation Crosslinked Fluoroelastomer
 - Performs in Engines and Transmissions
 When Other Products Crack and Leak
- Custom-Engineered Silicone Fluid Blocking Material
 - More Robust Performance for Todays Longer Warranties
- Survives Temperature Spikes of 270°C .
 and Higher
- Blocks Fluid Migration Through Conductor Strands



















Product Number	Standard Conductors Tin Copper	Nom. Conductor Diameter in. mm.	Nom. Insulation Thickness in. mm.	Nom. Finished OD in. mm.	Nom. Finished Weight (lbs/mft)	Ampacity At 40°C in Free Air
EXRAD-XBTC-24XX	24 (7/32)	.024 .61	.016 .41	.054 1.37	2.91	6
EXRAD-XBTC-22XX	22 (7/30)	.031 .79	.016 .41	.063 1.60	3.96	11
EXRAD-XBTC-20XX	20 (7/28)	.038 .97	.016 .41	.070 1.78	5.58	15
EXRAD-XBTC-18XX	18 (19/30)	.049 1.19	.016 .41	.081 1.98	7.34	21
EXRAD-XBTC-16XX	16 (19/29)	.057 1.45	.016 .41	.089 2.26	10.25	28







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F	Property / Attribute	SAE J-1128 TXL Requirement	EXRAD 180B 18 AWG Typical Performance	
Flex Life				
Flex Test	Per Modified ISO 14572		NA	NA
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	1 sec	
Thermal Performance				
Cold Bend	4 hours at temperature no cracks / breakdown	-40 ⁰ C	-55°C	
Temperature Rating	240 Hours @213°C heat aging	155°C	213°C	
Temperature Rating	3000 Hours @180°C	125°C	180°C	
Mechanical Properties				
Tensile	Minimum psi	1500	3800	
Elongation	Minimum %	150	320	
Abrasion	Sand Paper Resistance Length in.	10	31	
Abrasion	Scrape Cycles	None	1400	
Pinch	Pounds		None	26
Hydrolysis Resistance				
Hydrolysis Resistance	168 Hours @ 75°C salt water immersion and 48 volts DC, no cracks, no dielectric failure		Pass	Pass
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.	0%
Gasoline	ASTM D471 Ref. Fuel C	23 +/-5 °C	15% Max.	0%
Brake Fluid	SAE-J-1703	50 +/-5 °C	None	0%
Ethanol	85% Ethanol + 15% ASTM D471, Ref. Fuel C	23 +/-5 °C	15% Max.	0%
Diesel Fuel	ASTM D471, 90% IRM-903 + 10% p-xylene	23 +/-5 °C	None	0%
Power Steering	ASTM D471, IRM-903	50 +/-3 °C	30% Max.	0%
Auto Transmission	Citgo #33123 SAE-J311	50 +/-3 °C	25% Max.	<2%
Methanol		23+/-5°C	15% Max.	0%
Engine Coolant	50% Ethylene Glycol + 50% distilled Water	50 +/-3 °C	15% Max.	0%
Battery Acid	H_2SO_4 Specific Gravity = 1.260 +/005	23+/-5°C	5% Max.	0%

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