

180B ISO Blocked Transmission Wire

ISO-6722-1, Class D 150°C, Thin Wall, 60V, Tin Copper

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



		Nom.	Nom.		
Product	Standard	Conductor	Insulation	Nom.	Finished
Number	Conductors	Diameter	Thickness	OD	Weight
	Tin Copper	mm	mm	mm	(kg/100m)
EXRAD-180BW-0.50	0.50mm ² 19/.18mm	0.89	0.28	1.5 +/1	0.8
EXRAD-180BW -0.75	0.75mm ² 19/.22mm	1.08	0.30	1.8+/1	1.1
EXRAD-180BW -1.00	1.00mm ² 19/.25mm	1.22	0.30	2.0 +/1	1.3
EXRAD-180BW -1.50	1.50mm ² 19/.32mm	1.57	0.30	2.3+/1	1.8







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		ISO 6722-1 Class E Thin Wall	Exrad® 180B	
		Requirement	Typical Results (2.5mm ² Sample)	Results
5.7	Insulation Volume Resistivity	$10^9 \Omega/\text{mm}$ min.	$4.1 \times 10^{13} \Omega/mm$	Pass
5.8	Pressure at High Temperature	'1.1N@ 175°C no dielectric breakdown	No breakdown	Pass
5.9	Strip Force / Adhesion	Per customer agreement	49N	NA
5.10	Low Temperature Winding	3 tns 2.5kg - 40°C no dielectric breakdown	No dielectric breakdown, No cracking	Pass
5.11	Impact	100gm @-40°C no breakdown	No breakdown,	Pass
5.12.4.1	Sandpaper Abrasion	.5kg 250mm min.	790mm	Pass
5.12.4.2	Scrape Abrasion	Per Customer Agreement	2072	Pass
5.13	Long-Term Heat Aging	175°C 3000 hours	No breakdown, no cracks	Pass
5.15	Thermal Overload	225°C 6 hours	No breakdown, no cracks	Pass
5.16	Shrinkage by heat	2mm max. 150°C	No shrinkage,	Pass
5.17	Fluid Compatibility	Gasoline 15% max.	0%	Pass
		Diesel Fuel 15% max.	0%	Pass
		Engine Oil 15% max.	0%	Pass
		Ethanol 15% max.	0%	Pass
		Power Steering 30% max	0%	Pass
		Automatic Transmission 25% max	0%	Pass
		Engine Coolant 15% max	0%	Pass
		Battery Acid no breakdown	No breakdown,	Pass
5.19	Ozone Resistance	45°C 85% Relative Humidity, 70 hours, Ozone 50 +/- 5 pphm 1kV 1 min. (no breakdown)	No breakdown,	Pass
5.20	Resistance to hot water	Not less than $10^5 \Omega$ -mm	1X 10 ¹¹ Ω-mm	Pass
5.21	Temperature and Humidity Cycling	40 x 8 hour cycles -40°C and 125°C 80 -100% relative humidity	No dielectric breakdown, No cracking	Pass
5.22	Resistance to Flame	70 sec. max. 50mm unburned	8 sec. after burn	Pass

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