

## 150UT Powertrain

## ISO 6722-1 Class D-150°C-Thin Wall-60V

**EXRAD 150 UT** is a high performance wire which meets the requirements of ISO 6722-1 150°C thin wall wire. It is an irradiation cross-linked polyolefin with impressive properties. EXRAD 150UT is rated at 150°C, but it survives temperatures to 240°C and higher for short periods of time. It is safer in overload conditions because it will not melt.

EXRAD 150 UT creates opportunities to eliminate unnecessary and expensive convolute tubing, tapes and heat shields that protect inferior wire systems. 150 UT meets or exceeds the ISO 6722-1 standards that are commonly used in Europe and now in use, in North American vehicles.

EXRAD150 UT processes very well on automated high speed cut and strip equipment. The end result is an automotive wire ideally suited to applications where heat protection, long life and less expensive wiring harnesses are required.















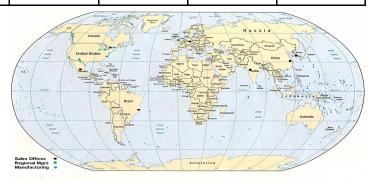






	Standard	Nom. Dia. Of	Insulation	Nominal	Finished
Product	Conductors	Conductor	Thickness	OD	Weight
Number	Bare Copper	mm	mm	mm	(kg/100m)
EXRAD-UT-0.35	0.35mm <sup>2</sup> 7/.25mm	0.78	0.28	1.3 +/1	0.7
EXRAD-UT-0.50	0.50mm <sup>2</sup> 19/.18mm	0.89	0.28	1.5 +/1	0.7
EXRAD-UT-0.75	0.75mm <sup>2</sup> 19/.22mm	1.08	0.3	1.8 +/1	0.9
EXRAD-UT-1.00	1.00mm <sup>2</sup> 19/.25mm	1.22	0.3	2.0 +/1	1.1
EXRAD-UT-1.50	1.50mm <sup>2</sup> 19/.32mm	1.57	0.3	2.3 +/1	1.6
EXRAD-UT-2.00	2.00mm <sup>2</sup> 19/.36mm	1.73	0.45	2.65 +/1	2.2
EXRAD-UT-2.50	2.50mm <sup>2</sup> 37/.29mm	1.98	0.35	2.85 +/15	2.6
EXRAD-UT-3.00	3.00mm <sup>2</sup> 37/.32mm	2.12	0.4	3.25 +/15	3.36
EXRAD-UT-4.00	4.00mm <sup>2</sup> 37/.37mm	2.50	0.4	3.55 +/15	4.1







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		ISO 6722-1 Class D Thin Wall	Exrad 150UT	
		Requirement	Typical Results (.75mm <sup>2</sup> Sample)	Results
5.7	Insulation Volume Resistivity	$10^9\Omega$ /mm min.	$6.43 \times 10^{18} \Omega / \text{mm}$	Pass
5.8	Pressure at High Temperature	'0.8N 150°C no dielectric breakdown	no breakdown	Pass
5.9	Strip Force / Adhesion	Per customer agreement	35N	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	.2kg 35mm min.	730mm	Pass
5.12.4.2	Scrape Abrasion	Per Customer Agreement	2430	Pass
5.13	Long-Term Heat Aging	150°C 3000 hours	no breakdown, no cracks	Pass
5.15	Thermal Overload	200°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.	1%	Pass
		Diesel Fuel 15% max.	3%	Pass
		Engine Oil 15% max.	2%	Pass
		Ethanol 15% max.	3%	Pass
		Power Steering 30% max	1%	Pass
		Automatic Transmission 25% max	2%	Pass
		Engine Coolant 15% max	1%	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	$5.35 \times 10^{14} \Omega$ -mm	Pass
5.21	Temperature and Humidity Cycling	40 - 8 hours cycles -40°C and 125°C 80 -100% relative humidity	no dielectric breakdown, no crack- ing	Pass
5.22	Resistance to Flame	70 sec. max. 50mm unburned	8 sec. after burn	Pass

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



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