

## 150 HVUT ISO Thin Wall

## ISO 19642-5, Class D, 150°C, Thin Wall, 600VAC / 900VDC

- Highly Engineered EXRAD<sup>®</sup> 150HVUT Irradiation Crosslinked Polyolefin
- Processes Very Well on Automated High Speed Cut and Strip Equipment
- Survives Temperature Spikes of 240°C and Higher
- Opportunity to Eliminate Convolute Tubing, Tapes and Heat Shields
- More Robust Performance for Todays Longer Vehicle Warranties
- Safer in Overload Conditions Because it Will Not Melt



















Product Number	Standard Conductors Bare Copper	Voltage Rating	Conductor Diameter (mm, nom)	Insulation Thickness (mm, nom)	Finished Diameter (mm, nom)	Finished Weight (kg/100m)
EXRAD-HVUT-0.35	0.35mm <sup>2</sup> 7/.25mm	600VAC / 900VDC	0.76	0.28	1.3 +/1	0.4
EXRAD-HVUT-0.50	0.50mm <sup>2</sup> 19/.18mm	600VAC / 900VDC	0.89	0.32	1.5 +/1	0.6
EXRAD-HVUT-0.75	0.75mm <sup>2</sup> 19/.22mm	600VAC / 900VDC	1.08	0.36	1.8 +/1	0.9
EXRAD-HVUT-1.00	1.00mm <sup>2</sup> 19/.25mm	600VAC / 900VDC	1.22	0.37	2.0 +/1	1.1
EXRAD-HVUT-1.50	1.50mm <sup>2</sup> 19/.32mm	600VAC / 900VDC	1.57	0.37	2.3 +/1	1.6
EXRAD-HVUT-2.00	2.00mm <sup>2</sup> 19/.36mm	1000VAC / 1500VDC	1.73	0.46	2.65 +/1	2.2
EXRAD-HVUT-2.50	2.50mm <sup>2</sup> 37/.28mm	1000VAC / 1500VDC	1.98	0.53	2.85 +/15	2.6
EXRAD-HVUT-3.00	3.00mm <sup>2</sup> 37/.32mm	1000VAC / 1500VDC	2.13	0.56	3.25 +/13	3.36
EXRAD-HVUT-4.00	4.00mm <sup>2</sup> 37/.38mm	1000VAC / 1500VDC	2.50	0.60	3.55 +/15	4.1







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		ISO 6722-1 Class D Thin Wall Req.	Exrad 150HVUT Typical Results (.75mm² Sample)	Results
5.7	Insulation Volume Resistivity	$10^{10}\Omega$ /mm min.	$6.43 \times 10^{15} \Omega/\text{mm}$	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	N/A
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	2430mm	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.	1.0%	Pass
		Diesel Fuel 15% max.	3.0%	Pass
		Engine Oil 15% max.	2.0%	Pass
		Ethanol 15% max.	3.0%	Pass
		Power Steering 30% max	1.0%	Pass
		Automatic Transmission 25% max	2.0%	Pass
		Engine Coolant 15% max	1.0%	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 $10^{10}\Omega$ -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 cracking	Pass
5.22	Resistance to Flame	70 sec. max. 50mm unburned	8 sec. after burn	Pass

U e cannot anticipate all conditions under which this information and our products of the products of other manufacturers in combination with our products may be used&U e 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&Ssers are advised to make their own tests to determine the safety and suitability of each such product combination for their own purpose&Snless 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



Manufacturing Locations:
Colchester, Vermont
El Paso, Texas
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