

## Protect Your Motor Bearings from Harmful Electrical Fluting Damage - GUARANTEED

### Product Overview

The SineWave Nexus and microNexus filters are the optimal solution for reducing common mode and differential mode voltages and currents. These filters provide complete motor protection - for any application - at any cable length.



### Nexus Product Benefits

- Only comprehensive motor protection solution on the market
- Eliminates common mode and differential mode noise
- Pricy “VFD” cable and insulated bearings not required
- Extends the life of non-inverter and inverter duty motors
- Combines the protection of an isolation transformer and sinewave filter in one compact solution
- Ideal solution for critical applications and hazardous (Class 1&2) locations



For full warranty details and a registration form, scan the QR code or visit: [www.mtecorp.com](http://www.mtecorp.com)

### Warranty Overview

MTE Corporation warranties AC induction motor bearings against failure from electrical fluting damage when MTE’s SineWave Nexus or microNexus filters have been installed with a new motor. If damage does occur, MTE will pay the current Vaughen’s National Average Price for “Furnish/Install 2 Standard Ball Bearings” and will also replace the SineWave Nexus or microNexus filter.



### Warranty Requirements

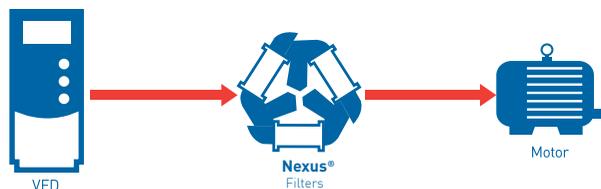
- The SineWave Nexus or microNexus filters must be connected in common mode assembly DC bus configuration to assure low impedance filter connection back to the drive.
- New bearings or a new unused motor must be installed at the time of initial application of the SineWave Nexus or microNexus filter for the warranty to be valid.
- There must be an approved registration within one (1) month of system commissioning. The warranty begins after registration approval and lasts for 5 years.

The optimal solution for reducing common mode and differential mode voltages and currents.

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SineWave  
Nexus® and  
microNexus™

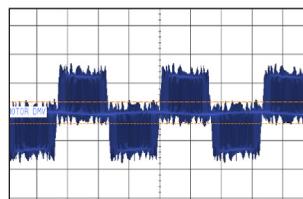


### Performance Specifications

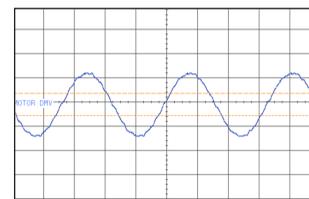
Input Voltage	<ul style="list-style-type: none"> <li>• SineWave Nexus: 380V - 600V +/- 10%; 60Hz</li> <li>• microNexus: 380V - 480V +/- 10%; 60Hz</li> </ul>
Current Range	<ul style="list-style-type: none"> <li>• SineWave Nexus: 2A - 160A (≤1 HP - 125 HP)</li> <li>• microNexus: 2A - 22A (≤1 HP - 15 HP)</li> </ul>
Harmonic Voltage Distortion	<ul style="list-style-type: none"> <li>• SineWave Nexus: 5% maximum @ 4-8kHz</li> <li>• microNexus: 5% maximum @ 4kHz</li> </ul>
Inverter Switching Frequency	<ul style="list-style-type: none"> <li>• SineWave Nexus: 2kHz to 8kHz</li> <li>• microNexus: 4kHz</li> </ul>
Inverter Operating Frequency	6Hz to 75Hz; >75Hz to 120Hz with derating
Insertion Loss (Voltage)	10% maximum @ 60Hz
Efficiency	>98%
Common Mode Attenuation	-20dB (>90% PWM common mode RMS voltage reduction) @ 4-8kHz
Maximum Sound Level	75dB @ 1 meter
Maximum Ambient Temperature	<ul style="list-style-type: none"> <li>• SineWave Nexus Modular Filter: -40C to +60C Enclosed Filter: -40C to +55C</li> <li>• microNexus: -40C to +40C</li> <li>• Storage for Both: -40C to +90C</li> </ul>
Altitude Without Derating	3,300 feet above sea level
Maximum Motor Lead Length	15,000 feet
Relative Humidity	0% to 95% non-condensing
Current Rating	100% RMS continuous; 150% for 1 minute intermittent

### Nexus Performance:

#### Total Harmonic Voltage Distortion

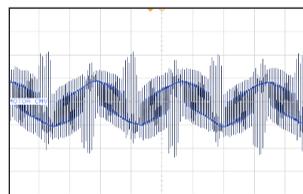


Without Nexus

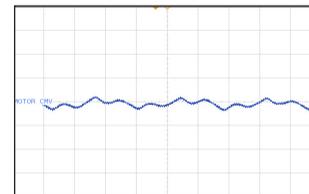


With Nexus

#### Common Mode Voltage



Without Nexus



With Nexus

#### Common Mode Current



Without Nexus



With Nexus

Final product specifications subject to change at anytime.



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FORM: SWN-WAR-E 063023