

microNexus™ Filter

A complete motor protection solution for any micro drive application.

microNexus™



- **Compact, space-saving form eliminates additional cable trays, wiring, and panel space within VFD cabinets**
- **Provisions for mounting VFD to front of filter***
- **Increases motor life by eliminating failures caused by bearing currents**
- **Reduces motor noise and heating**
- **Reduces cable heating**
- **Allows for multiple cables in the same conduit**
- **Five-year product warranty**
- **Five-year motor bearing warranty**

Complete motor protection in a micro-sized package.

MTE's microNexus filter takes the proven performance of our award-winning SineWave Nexus and shrinks it down into a **space-saving solution** that integrates into any micro drive application. The microNexus not only eliminates voltage spikes generated by Variable Frequency Drives (VFDs), and reflective waves that cause motor windings and cables to fail, but it also virtually **eliminates common mode voltage** which causes motor bearing failures, cable degradation, and VFD faults. By filtering out damaging common mode voltage, motor bearings are never subject to harmful voltages that cause damaging pitting, frosting, or fluting of bearings, all which lead to motor failure.

microNexus eliminates the need for common mode chokes and inductive absorbers that only temporarily extend motor life. Additionally, there's **no need for shaft grounding rings** which require ongoing maintenance and replacement. With our microNexus, you have a compact electrical solution for big electrical problems.

Applications



Distribution Centers

To efficiently and accurately handle packages, distribution centers use micro drives on a variety of equipment and systems.

Equipment Examples – Belt/steel hinged conveyors, incline/decline conveyors, belt over roller conveyors, condensers, pumps.



Airports

Transporting baggage and people rapidly and safely throughout an airport requires the use of micro drives on many different systems.

Equipment Examples – Baggage conveyors, baggage carousels, people movers, water/wastewater pumps, lighting systems.



Food & Beverage

Food and beverage facilities rely on micro drives within their manufacturing systems to process, handle, transfer and package products for rapid delivery to the marketplace.

Equipment Examples – Conveyors, form/fill/seal systems, tray depositors, filling/capping carousels, packaging, labeling.

Industry Benefits

- **Faster delivery**
- **Less maintenance and downtime**
- **More time for planned maintenance**
- **Fewer damaged shipments**
- **E-commerce growth**
- **Lower maintenance costs**
- **Less food and beverage spoilage**
- **Improved scanning accuracy**
- **Better personnel safety**
- **Better robot safety**

** Functionally compatible with most major drives.
Physically compatible for mounting Rockwell PowerFlex 520-Series AC Drives directly to the filter. Contact MTE for other drive mounting options.*

Performance Specifications

Input Voltage	380V - 480V +/- 10%
Current Range	2A - 22A (≤1 HP - 15 HP)
Harmonic Voltage Distortion	5% maximum
Inverter Switching Frequency	4kHz
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)
Maximum Sound Level	75dB @ 1 meter
Maximum Ambient Temperature	-40C to +40C / -40C to +90C storage
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

Final product specifications subject to change at anytime.



MTE Corporation
(800) 455-4MTE • (262) 253-8200

