

WhisperWheel™

The Challenge

Materion Barr Precision Optics & Thin Film Coatings' patented WhisperWheel™ combines the proven technology of our ColorWheel™ with the latest in motor innovation - providing a solution for applications that require minimal sound levels and maximum lifetime.



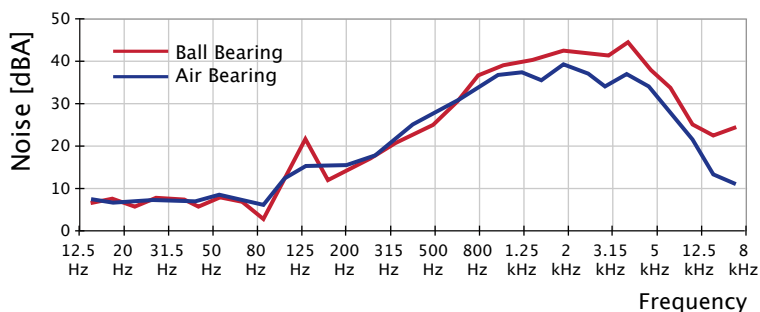
Benefits

- Take advantage of the latest in air bearing motor technology
- Non contact bearing structures provide life expectancies far beyond existing technologies
- High flexibility to customize diameter, segment angle, number of segments, etc.
- Patented (US pat. 5,292,417) sputtering technology for the highest filter performance
- Patented construction (US pat. 5,868,482)
- Less vibration by dual plane balancing

Applications

WhisperWheel™ will meet the stringent requirements for lifetime and sound of projection systems. We also offers various configurations of the WhisperWheel™ for various applications.

1/3 octave comparison between ball bearing and air bearing ColorWheel™



Technical Data

Diameter

- From 40 to 66 mm

Operating speed

- 2×(7200 rpm), 2.5×(9000 rpm), 3×(10,800 rpm)

Filter segments

- According to customer specifications

Spectral performance

- According to customer specifications

Spectral temperature stability

- <0,3%, typical from 20 to 100°C

Balancing

- Dual plane balancing standard

Lifetime

- Start/stop: 300 000 cycle minimum
- Continuous running: 50,000 hours minimum

Operating temperature 5°C to 85°C

Storage temperature -20°C to 85°C

Standard cable 155 mm FPC

Materion is a global advanced materials company, dedicated to providing solutions that enable our customers' technologies and drive their growth. Our products include precious and non-precious specialty metals, precision optical filters, inorganic chemicals and powders, specialty coatings, specialty-engineered beryllium alloys, beryllium and beryllium composites, and engineered clad and plated metal systems. The Materion business is structured to enhance our ability to provide customers with innovative, best total-cost solutions.

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