

SilentWheel™

The Challenge

Materion Barr Precision Optics & Thin Film Coatings offers new, improved SilentWheel™ with lower sound levels and longer projection life. It is the combination of our proven ColorWheel™ technology and the development of our innovative sleeve bearing motor technology.

Benefits

SilentWheel™ offers many additional benefits compared to standard product

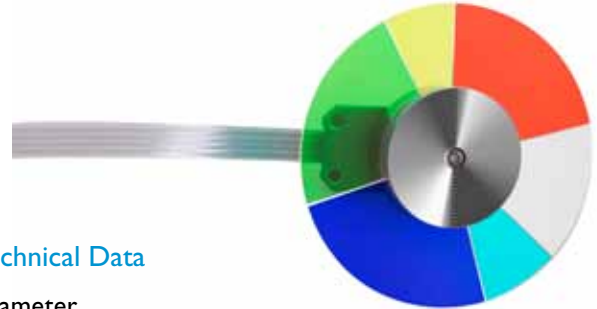
- Significantly improved lifetime
- Less initial sound level
- Less sound level increment in time
- Less high tone noise

The new and improved SilentWheel™ is produced with high precision engineering using state of the art machinery and has all the features the standard product offers including:

- 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 (U.S. pat. 5,868,482)

Applications

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



Technical Data

Diameter

- From 33 to 100 mm

Operating speed

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

Filer segments

- According to customer specification

Spectral performance

- According to customer specification

Spectral temperature stability

- <0.3%, typical from 20 to 100°C

Balancing

- To better than G6.3 quality grade per ISO 1940-1986

Lifetime

- LI 20,000 Hours (LI = 1% failure point)

Sound pressure level

- 2 to 4 dBA less than ball bearing motor
- Depending on rotation speed and ColorRing design

Operating temperature 0 to 85°C

Storage temperature -20 to 85°C

Standard cable

- 180mm FFC
- 180mm FPC (other length may require tooling cost)

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.

MATERION BARR PRECISION OPTICS & THIN FILM COATINGS

2 Lyberty Way
Westford, MA 01886
Phone: +1.978.692.7513
www.materion.com/barroptics

33# Building,
No. 76 Fu Te Dong San Road,
WGQ Free Trade Zone, Pudong
Shanghai 200131, P. R. C.
T +86 21 5057 4646
F +86 21 5057 4647

MATERION CORPORATION
www.materion.com