PRODUCT INFORMATION

EBS Head

High-Resolution Optical Sin/Cos Encoder Kit System

Product overview

The **EBS Head** is a high-resolution optical scanning head that forms a complete encoder kit system with a matching code disc. Using **reflective optical scanning**, it delivers up to **33,000 Sin/Cos cycles per revolution**.
Its differential outputs ensure reliable signal transmission over long cable distances. Precise positioning and a clean operating environment are essential for optimal performance.

Key Advantages

- **High resolution:** Up to 33,000 Sin/Cos cycles per revolution
- **Easy installation:** Locating pins and self-adhesive code discs
- **High precision:** Excellent accuracy and repeatability
- **Reliable signals:** Differential outputs for long cable lengths
- **Flexible integration:** Suitable for different code disc diameters

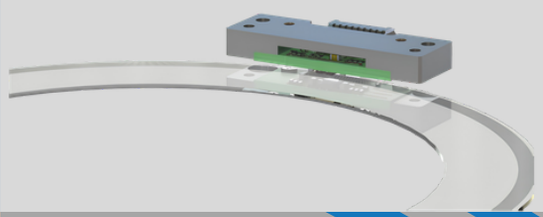
Technical Specifications

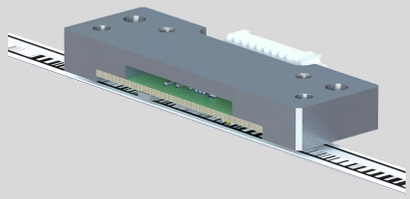
Parameter	Specification
Measuring principle	Optical, reflective
Resolution	Up to 33,000 ppr
Output signals	Differential Sin/Cos + Index
Supply voltage	5 VDC ± 5%
Output frequency	Up to 200 kHz
Air gap	0.3 mm ± 0.1 mm
Operating temperature	–20 °C to +85 °C
Absolute accuracy	± 9 arcsec (code disc)
Repeatability	± 1 arcsec
Connector	Molex 53261-0871 (8-pin)

Overall accuracy depends on mechanical design and installation.

Applications

- High-precision position measurement
- Precision motion control systems
- High-resolution encoder applications
- Custom encoder kit integrations
- Measurement systems in clean environments





SIN/COS OUTPUT SIGNAL

