Magnet for TMR Angle Sensor Use

The optimal magnet for TMR angle sensors

Magnetic field distributions that reduce angular errors can be made by combining it with our TMR angle sensors due to the adoption of an isotropic bonded NdFeB magnet

Features

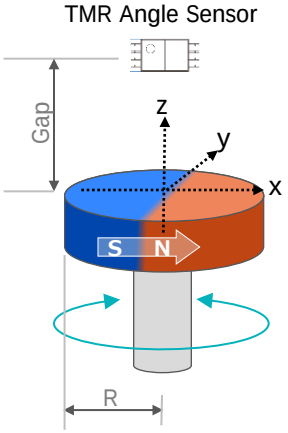
- Magnetization to minimize the error of angle
- High robustness against the setting area between magnet and TMR angle sensor
- High reliability

Applications

- For EPS angle sensor
- For control system of wiper motor
- For other automotive angle sensor

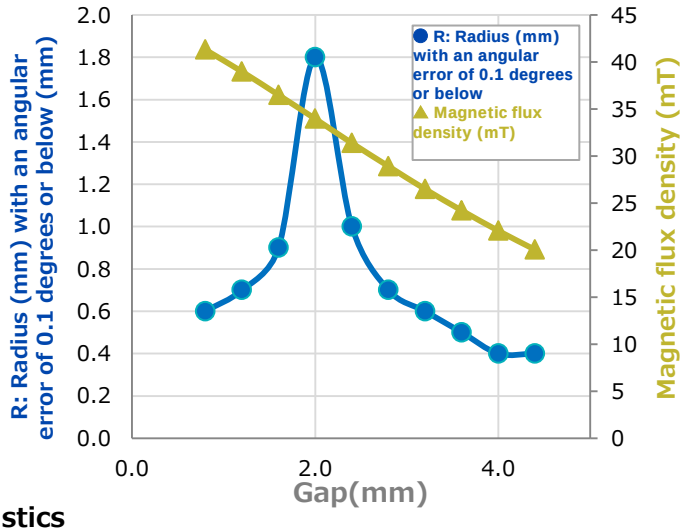
Characteristics

- **Positional relationship between magnets and sensors**



- **The distance between magnets and TMR angle sensors, and the relationship between the magnetic flux density and radius that can attain an angular error of 0.1 degrees or below**

CM9BI Measured value using a dual-form magnet with a Φ13x thickness



- **Magnetic characteristics**

		CM9BI	CM6PI
Magnetic powder		Isotropy NdFeB	Isotropy NdFeB
Resin		PA12	PPS
Residual magnetic flux density Br	mT	615	525
Retention force Hcb	kA/m	410	358
Retention force Hcj	kA/m	748	891
Maximum energy product BH max	kJ/m³	63	47

The CM9BI is recommended for general applications.
The CM6PI is recommended when the ambient temperature is expected to be 150℃ or above.