

Non-Contact 360° Hall Rotary Angle Sensor (MA10013 / MA30005)

Model: MA10013 / MA30005 Series

Product Overview

High-precision 360° continuous rotation contactless Hall-effect angle sensor for steering angle, valve positionings, and robotic joints.

Key Features

- True contactless magnetic sensing across full 0° to 360° rotation
- Infinite mechanical rotational life with dual precision ball bearings
- Analog 0.5-4.5V, PWM, SPI, or CAN bus output formats
- Resolution up to 12-bit (0.088°) with independent linearity < ±0.5%
- Anodized aluminum or reinforced thermoplastic housing

Typical Applications

- Automotive & Commercial Vehicles
- Industrial Machinery & Automation
- Electric Vehicles (EV & FCEV)
- Safety Interlocks & Control Systems

Technical Specifications

Parameter	Specification / Technical Value
Measurement Range	0° to 360° continuous (Custom programmable)
Supply Voltage	5.0V DC or 9-32V DC
Output Signal	0.5-4.5V ratiometric / PWM (1 kHz) / SPI
Resolution	12-bit (4096 counts per revolution)
Operating Temp	-40°C to +125°C
Protection Class	IP67 sealed shaft and connector