Sumtak MSK-015-2048 Magnetic Encoder

Prepared by EncoderMarket

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Sumtak Incremental Encoder

TYPE	MSK-015-2048
SOURCE	DC 5V 100mA
NO	1106-0514 2048P/R
SUMTAK	MADE IN JAPAN

1. Product Overview

The Sumtak MSK-015-2048 is a high-precision incremental magnetic encoder designed for motion control applications requiring reliable performance in compact form factors. It delivers 2048 pulses per revolution and operates with a 5V DC supply. This model ensures stable output with superior resistance to dust, oil, and vibration, making it ideal for use in industrial automation and CNC machinery.

2. Electrical Specifications

Parameter	Specification
Resolution	2048 PPR (Pulses Per Revolution)
Power Supply	DC 5V ±5%
Current Consumption	Max. 100 mA
Output Type	TTL / Line Driver
Output Phase	A, B, Z (Quadrature Output)
Frequency Response	Max. 100 kHz

3. Mechanical Specifications

Parameter	Specification
Shaft Type	Hollow Shaft (Ø15 mm)
Housing Material	Aluminum Alloy
Mounting Method	Flange Mount
Max. Rotational Speed	6000 RPM
Moment of Inertia	1.5×10■■ kg·m²
Weight	Approx. 120 g

4. Environmental Conditions

Parameter	Specification
Operating Temperature	-10°C to +85°C
Storage Temperature	-20°C to +100°C
Vibration Resistance	10–2000 Hz, 20 G
Shock Resistance	100 G for 6 ms
Protection Grade	IP65 (IEC Standard)

5. Output Waveform and Timing

The MSK-015-2048 provides differential line driver outputs with 90° phase-shifted A and B signals and a reference Z pulse per revolution. The waveform ensures accurate position and direction detection at high speeds.

6. Dimensions and Mounting

Compact rectangular housing design suitable for confined installation spaces. Hollow shaft (Ø15 mm) enables direct motor coupling without coupling errors.

7. Typical Applications

• CNC Machinery • Servo Motors • Robotics and Automation • Industrial Position Feedback Systems • Textile and Packaging Machinery

8. Contact Information

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