

# **R0721 Rotary Encoder Magnetic Ring**

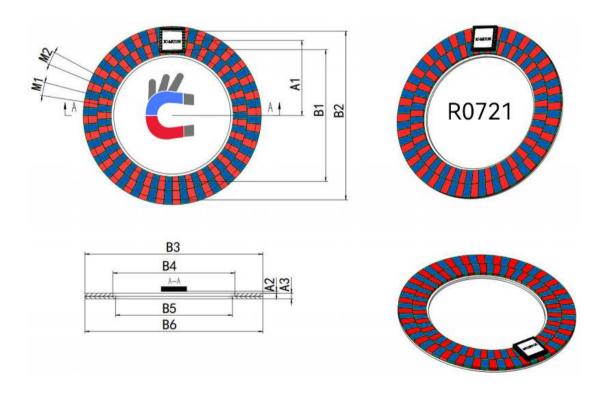
## **Description:**

This 2-track <u>axial magnetic target</u> is designed for use with the MU150 Nonius encoder iC. It features bipolar magnetization and consists of two distinct pole pairs: a Mastertrack with 32 pole pairs and a Nonius-track with 31 pole pairs.

The magnetic target has an outer diameter of 35 mm and is compatible with 23 mm shafts. It is constructed with a durable metal carrier and utilizes vulcanized rubber magnet material, ensuring robust performance and longevity in demanding applications.

This product is ideal for precision encoding tasks, offering reliable and accurate magnetic tracking for industrial and technical use.

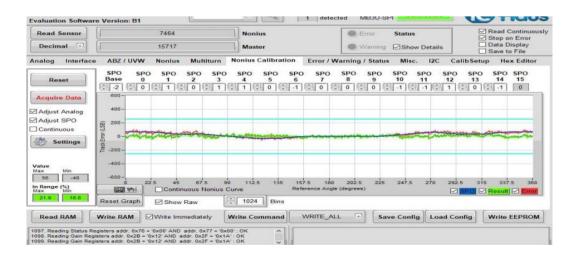
## **Product Overview:**





Item	Parameter	Comments	Тур.	Tolerance	Unit
NO.					
A1	Radial Position of Chip	referred to axial center	14.75		mm
	Center				
A2	Distance Package Surface	referred to magnetic coating	0.4		mm
	DFN16-5x5	surface			
А3	Total height	height of magnetic material	2	±0.1	mm
		and carrier			
B1	Nonius-track diameter	inner magnetic track	25.9		mm
		diameter			
B2	Master-track diameter	outer magnetic track	33.1		mm
		diameter			
В3	Outer Diameter of magnetic	magnetic material	35	±0.2	mm
	material				
B4	Inner Diameter of magnetic	magnetic material	24	±0.2	mm
	material				
B5	Inner Diameter of metal	metal carrier	23	0.05	mm
	carrier				
В6	Out diameter of metal	metal carrier	35		mm
	carrier				
M1	Width of single nonius-track		1.31		mm
	pole				
M2	Width of single master-track		1.62		mm
	pole				
Нс	Coercive force	at 20°C	170	kA/m	
Br	Remanence	at 20°C	20	mT	
Т	Operating temperature		-35-	°C	
			120		
AMP	Magnetic field amplitude	when the air gap 0.4mm	3	mT	

## **Product test screenshots:**





## **About Us:**



Established in 2010 and headquartered in Beijing, China, CCmagnetics is a duly registered commercial entity operating under the auspices of the Chinese industrial and commercial authorities.

CCmagnetics's mission is to enable customers to purchase magnetic rings without incurring, or minimizing, mold costs. To date, CCmagnetics has made over 1000+ magnetic ring specifications publicly available. These magnetic rings are compatible with a wide range of IC sensors and can be adapted to most motors and magnetic encoders, offering exceptional value for money.



### **Image Captions:**

- 1. Surface-mounted external magnetization coil for magnetizing motor encoder magnetic rings.
- 2. Planar multipole magnetization coil for magnetizing axial encoder magnetic rings.
- 3. Torsional multipole magnetization coil for magnetizing radial encoder magnetic rings.



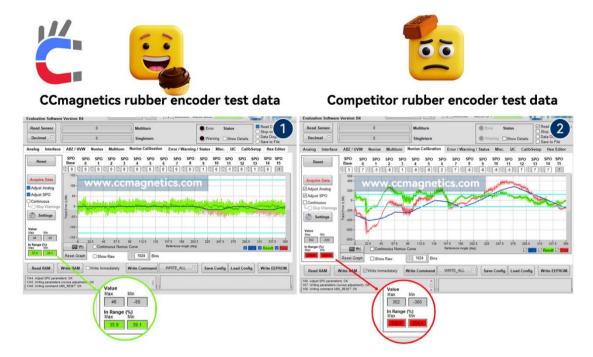
- 4. Embedded internal magnetization coil for magnetizing motor magnetic rings.
- 5. A delegation from a South Korean customer visits CCmagnetics.
- 6. CCmagnetics team conducts random inspections on encoder rings before shipment, regardless of size or quantity.



### **Image Captions:**

- 1. CCmagnetics' encoder magnetic rings utilize automated dispensing equipment to ensure a stable bond between the magnetic ring and the metal carrier.
- 2. CCmagnetics' encoder magnetic rings can be adhered to customer-designed metal carriers, maximizing the use of internal robot space.
- 3. The encoder magnetic ring that supports any metal carrier has been widely recognized and praised by customers.
- 4. Vulcanized rubber encoder magnetic rings awaiting packaging and shipment to Germany for use in handling robots.





#### **Image Captions:**

- 1. CCmagnetics' encoder magnetic ring test performance is excellent. The magnetic ring for this encoder model requires an In-range percentage of less than 60% to pass. CCmagnetics has achieved a remarkable In-range percentage of 40% or below.
- 2. Screenshot of a competitor's encoder magnetic ring test: While the magnetic pole observation appears normal and the price is lower, these products are unusable. Representative Patents

#### **Representative Patents**

Since its inception, our company has been dedicated to the field of magnetic transmission and magnetic rings. Our representative patents include:





Patent Name 1: Comprehensive management system for magnetic ring production line

Patent Name 2: Fixture tooling for rubber mold

Patent Name 3: Axial magnetization equipment

Patent Name 4: Magnetic detection equipment for sealing ring

Patent Name 5: Torque adjustable magnetic coupling

Patent Name 6: Magnetic suction coupling with clutch function

## **Ordering Information:**

#### Payment:

We accept payment via proforma invoice and 100% T/T. Credit card payments are accepted, but a 2.9% surcharge will apply.

#### Packaging and Logistics:

We accept delivery through the customer's preferred shipping company. Our packaging materials, including tinplate, kraft paper, and foam, fully comply with EU environmental regulations.

#### **Delivery Time:**

Shipment will be arranged within 30 days after receipt of payment. Delivery time may be shorter if our factory schedule permits.



Transportation time is estimated to be 7-10 days.

#### **After-sales Service:**

Our products undergo rigorous quality inspection and testing before leaving the factory. Based on the demagnetization curve of neodymium iron boron, our products have a lifespan of 60-100 years under normal conditions.

Our products are made of metal and magnets that meet international standards, and the adhesives are made of the well-known brand 3M, and additional material safety reports can be provided.

If any quality issues are found within one year, please provide photos as proof. We will compensate with a new product in your next order. The defective product does not need to be returned.

## Contact us:

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