

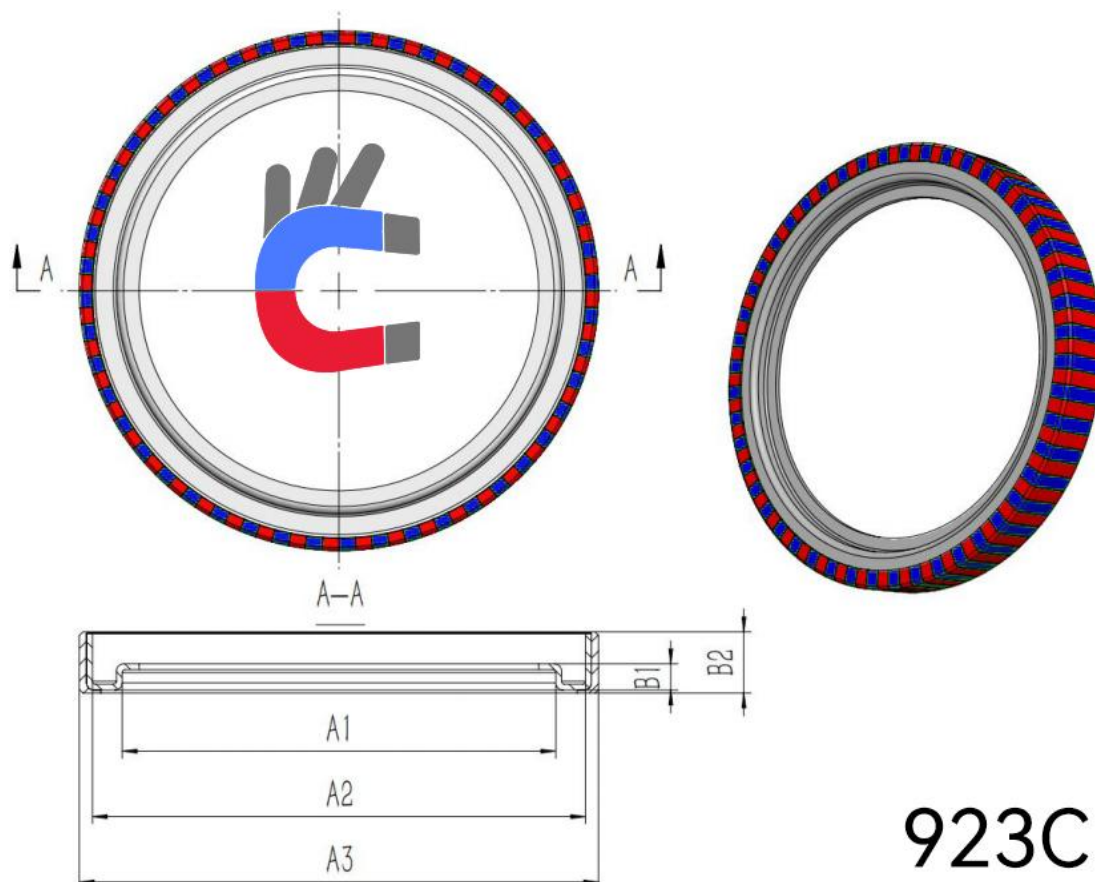
## Automotive ABS Sensor Rings-923C

### Description:

Automotive ABS Sensor Rings typically utilize multipole magnetization technology to generate high-precision sinusoidal or quasi-sinusoidal magnetic fields. This provides stable and accurate speed signals for the ABS system, which effectively prevents wheel lock-up.

These magnetic rings are capable of operating stably over a wide temperature range with low thermal decay, ensuring long-term signal reliability. They are also easy to install and can withstand very high rotational speeds (e.g., up to 30,000<sup>3</sup> RPM), meeting the demands of various harsh application environments.

### Product Overview:

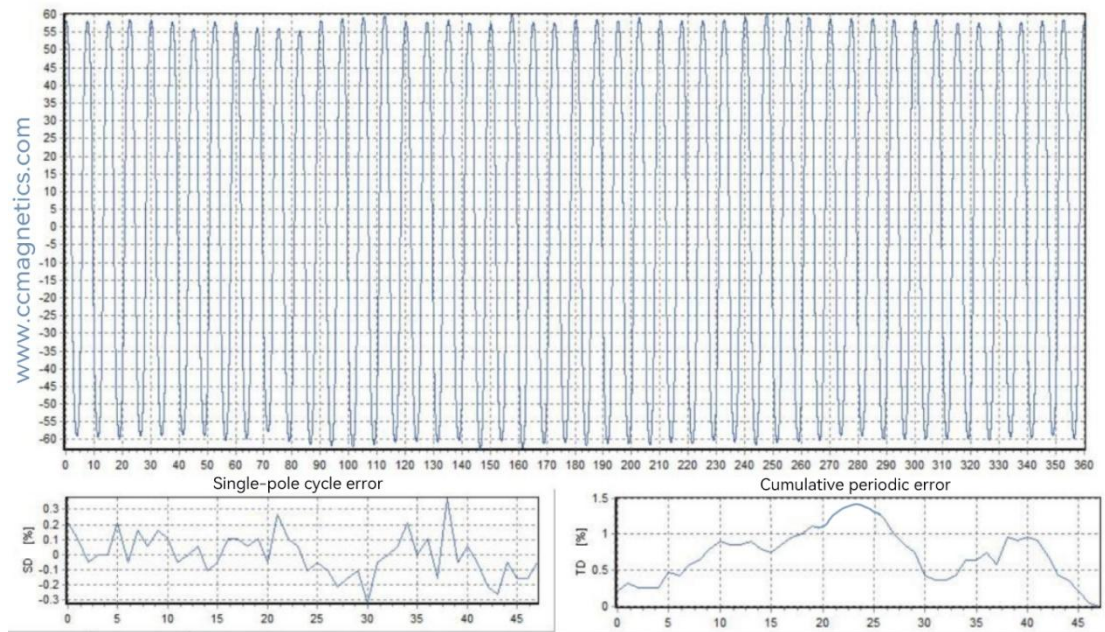


**Note: External Magnetic Field Interference**

External magnetic fields can alter the component's functional properties. A magnetic field of  $\geq 1$  mT will reduce the system's accuracy, while a field of  $\geq 20$  mT can damage the disk's magnetization. The functionality of the system may no longer be guaranteed. Direct contact with magnetic clamps or other permanent magnets must be avoided.

| SKU   | A1 (mm)            | A2 (mm)        | A3 (mm)              | B1 (mm) | B2 (mm)            | Pole count |
|-------|--------------------|----------------|----------------------|---------|--------------------|------------|
| R1043 | 59.7 ( $\pm 0.1$ ) | 67.9 (0/-0.12) | 71.5 ( $\pm 0.20$ )  | 3.6     | 8.4 ( $\pm 0.20$ ) | 96         |
| R1044 | 67.6(-0.05/-0.18)  | 83             | 88.5 ( $\pm 0.20$ )  | 9       | 9 ( $\pm 0.20$ )   | 96         |
| R1045 | 67.9(0/-0.12)      | 76.8 (+0.12/0) | 80.8 ( $\pm 0.20$ )  | 6.5     | 9.7 ( $\pm 0.20$ ) | 88         |
| R1046 | 70(-0.05/-0.18)    | 78             | 82 ( $\pm 0.20$ )    | 11.8    | 8.2 ( $\pm 0.20$ ) | 96         |
| R1047 | 70.9(-0.08/-0.20)  | 78.2           | 82 ( $\pm 0.20$ )    | 10.6    | 8 ( $\pm 0.20$ )   | 96         |
| R1048 | 73.9(0/-0.12)      | 84.7           | 88.7 ( $\pm 0.20$ )  | 10      | 8 ( $\pm 0.20$ )   | 96         |
| R1049 | 74(-0.03/-0.15)    | 84.5           | 88.8 ( $\pm 0.20$ )  | 10.2    | 7.8 ( $\pm 0.20$ ) | 96         |
| R1050 | 80.9(0/-0.12)      | 88.8           | 93 ( $\pm 0.20$ )    | 6.9     | 8.4 ( $\pm 0.20$ ) | 96         |
| R1051 | 80.9(0/-0.12)      | 88.8           | 93 ( $\pm 0.20$ )    | 6.9     | 8.4 ( $\pm 0.20$ ) | 88         |
| R1052 | 80.9(-0.05/-0.18)  | 88.4           | 93 ( $\pm 0.20$ )    | 8.3     | 8.4 ( $\pm 0.20$ ) | 96         |
| R1053 | 81(-0.01/-0.12)    | 88.8           | 93 ( $\pm 0.20$ )    | 6.9     | 8.4 ( $\pm 0.20$ ) | 96         |
| R1054 | 88.2(-0.03/-0.15)  | 96.8           | 100.8 ( $\pm 0.20$ ) | 9.4     | 9.2 ( $\pm 0.20$ ) | 96         |
| R1055 | 89(-0.05/-0.18)    | 96.7           | 100.7 ( $\pm 0.20$ ) | 9       | 9 ( $\pm 0.20$ )   | 96         |
| R1056 | 99.8(-0.05/-0.18)  | 110.2          | 115 ( $\pm 0.20$ )   | 8       | 10 ( $\pm 0.20$ )  | 96         |

## Test Data:



| Parameter                  | Data  | Reference |
|----------------------------|-------|-----------|
| Number of Pole Pairs       | 48    | 48        |
| N Max Value (mT):          | 57.34 | 100       |
| N Min Value:               | 53.34 | 45        |
| N Average Value:           | 55.27 | 45        |
| S Max Value (mT):          | 59.01 | 100       |
| S Min Value:               | 56    | 45        |
| S Average Value:           | 57.46 | 45        |
| Positive Unipolar Error +: | 0.37  | 2         |
| Positive Unipolar Error -: | -0.37 | 2         |
| Reverse Unipolar Error +:  | 0.43  | 2         |
| Reverse Unipolar Error -:  | -0.37 | 2         |
| Positive Cumulative Error: | 1.33  | 5         |
| Reverse Cumulative Error:  | 1.28  | 5         |
| Max Curve Height:          | 0.99  | 3         |
| Min Curve Height:          | 0.92  | 3         |
| Max Pole Gap:              | 0.48  | 100       |
| Min Pole Gap:              | -0.64 | 100       |
| Max Pole Ratio:            | 50.43 | 55        |
| Min Pole Ratio:            | 49.57 | 45        |

## 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.

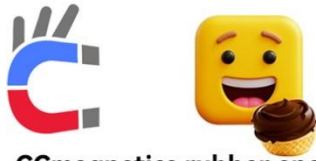


#### Image Captions:

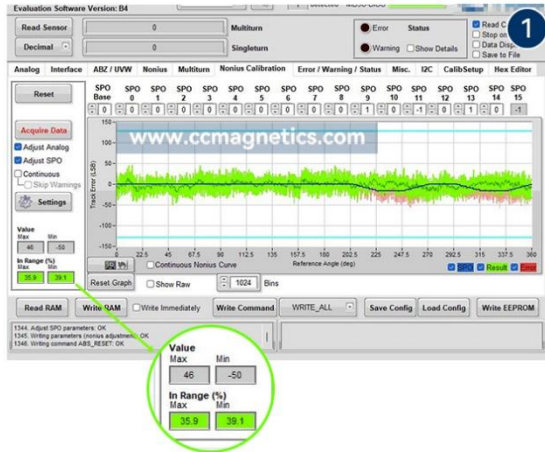
1. Surface-mounted external magnetization coil for magnetizing motor encoder magnetic rings.
2. Planar multipole magnetization coil for magnetizing axial encoder magnetic rings.
3. Torsional multipole magnetization coil for magnetizing radial encoder magnetic rings.
4. Embedded internal magnetization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

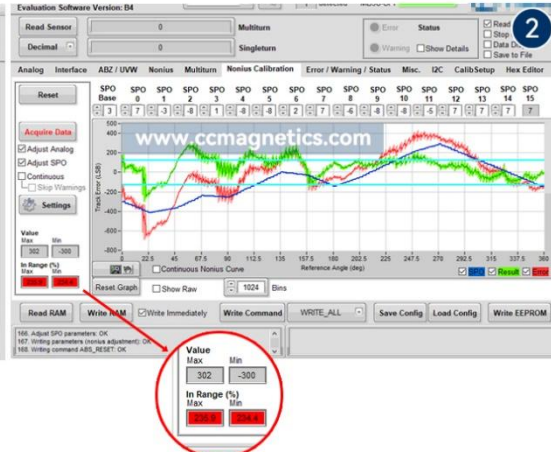
1. CCmagnetics' encoder magnetic rings utilize automated dispensing equipment to ensure a stable bond between the magnetic ring and the metal carrier.
2. CCmagnetics' encoder magnetic rings can be adhered to customer-designed metal carriers, maximizing the use of internal robot space.
3. The encoder 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.



CCmagnetics rubber encoder test data



Competitor rubber encoder test data



## 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:**