

**Product Presentation**  
***MSAC501 & MRAC501***  
***MSAC501 & MBAC501***  
***MagLine Roto Absolute***



Magnetic measurement system for absolute angle measurement

## In general:

The proven **absolute sensor MSA501** is now able to measure rotary (**version MSAC501**) and is therefore ideally suited for the absolute angle detection.

As a „partner“ for the sensor MSAC501 is the ring **MRAC501 (absolute ring solution)** and tape **MBAC501 (absolute tape)** available.

## Sensor MSAC501:

### Function of the sensor:

The MSA501 is in different code sizes selectable (7, 8, 9, 10 or 11 bit). These code sizes determine the length of the active absolute sensor line and hence the minimum and maximum possible diameter of the ring or customer flange.

The rotary sensor MSAC501, just as the magnetic sensor MSA501, feature an SSI/ or RS485 output. Furthermore an LD output for digital incremental data output can be chosen as an option. The CANopen interface is planned.

### User benefits:

Rotary absolute measurements are possible even at high speeds (up to 25 m/sec digital; 5 m/sec absolute). The exact sensor position is immediately available even after a power interruption. An additional reference movement or motion is not necessary.

Furthermore, the proven diagnostic LED of MSA501 is implemented, which indicates the particular error states by color or blink rate.

## In combination with ring MRAC501:

The **MRAC501** is obtainable as a stable ring with fixed aluminum flange and is therefore suitable for detection of rotations **up to 360° (single turn)**.

The absolute ring MRAC501 is currently available in one size with an outer diameter of 406,4 mm. It has 256 poles (8 bit code) and a hollow shaft of 320 mm. The maximum ring/ sensor distance in the center is 0,2 mm.

The high protection class IP67 and the high operating temperature range of -40° ...+80°C round off its profile.

## In combination with the magnetic tape MBAC501:

The **tape MBAC501** consists of magnetic tape incl. steel girders. It is intended for self-assembly by the customer on a customer flange or a curved surface. With this solution **a measuring range < 360° can be covered**.

The MBAC501 is available in **different code sizes** (7, 8, 9 ,10 or 11 Bit). These code sizes define the max. **length of the absolute code**. Depending on the diameter of the customer's flange the suitable code size of the MBAC501 tape has to be chosen.

Code:	Measurement length (max.):	Minimum Diameter:	Max. Measurement angle:
7-bit	640 mm	383,61 mm	< 190°
8-bit	1.280 mm	500,80 mm	< 290°
9-bit	2.560 mm	633,61 mm	< 360°
10-bit	5.120 mm	782,05 mm	< 360°
11-bit	10.240 mm	946,11 mm	< 360°

**A 360° measurement is not possible due to the gap at the ends of the magnetic tape!!!**



## Prices:

### MSAC501:

	<b>List price:</b>
<b>Basic Price</b>	€ 527,30
RS485 interface	€ 0,00
SSI interface	+ € 29,30
LD-output	+ € 122,70

**discounts:**  
similar to MSA501

### MRAC501:

Size: 8 Bit	€ 998,50
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### MBAC501:

Price / mtr.	€ 127,30
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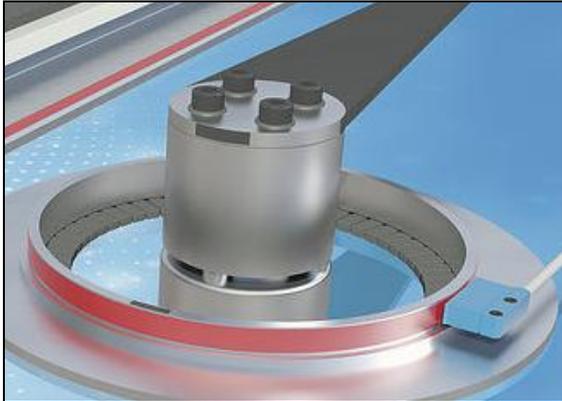
**discounts:**  
similar to MBA501

## Dates / delivery time:

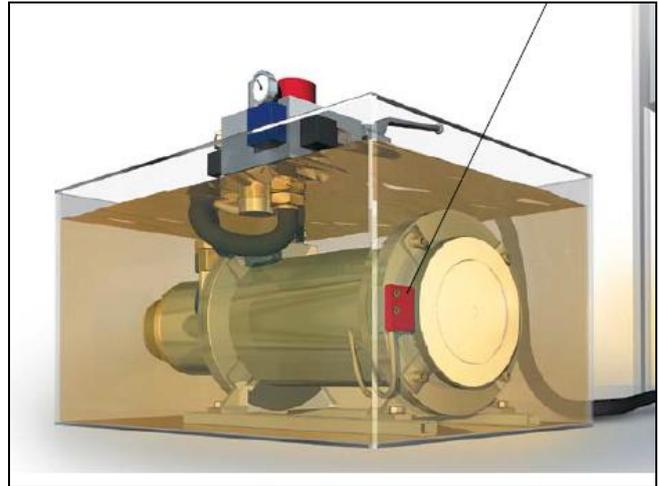
Delivery time: app. 3 weeks  
Country of Origin: Germany

## Applications / target markets:

**Torque motors:**



**Motor feedback for AC motors:**  
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**Positioning of antennas:**

