



*EcoSpin* – Magnetic sensors

Rotational speed and angular measurement  
has never been easier

# *EcoSpin* – Magnetic sensors. Easy, versatile and economical.

## *EcoSpin* Product Highlights

- **Easy** – Quick and easy installation in less than 60 seconds
- **Versatile** – Modular, flexible system, individually adaptable to the specific application
- **Economical** – Greatest economy thanks to a finely adapted product concept with an optimal price/performance ratio

## Benefits of magneto-resistive sensors

- **Long service life** – Measurements are contactless and wear-free without any moving parts
- **Robust** – High protection class together with resistance to shock and vibration are particular characteristics of these magnetic sensors
- **Process security** – Durability and its immunity to dirt enables peak machine productivity



## Installation friendly

In developing the *EcoSpin* concept, particular attention was paid to installation friendliness. The spacer strip mounted on the sensors eliminates the need for a feeler gauge making sensor installation and adjustment child's play.

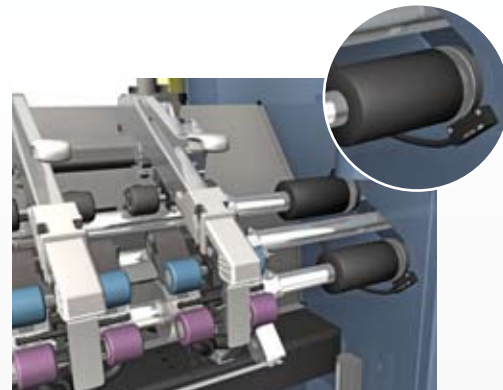
## Compact

*EcoSpin* inspires thanks to smallest sensor dimensions. With an installation depth of a mere 10 mm, the sensor is ideally suited for applications with limited installation space.

# EcoSpin – universally employable for many tasks.

## Rotational speed monitoring

Rotational speed must be measured and monitored on spindles winding up, diverting or stretching thread. *EcoSpin* is particularly well suited to these tasks thanks to its immunity to vibrations and dirt.



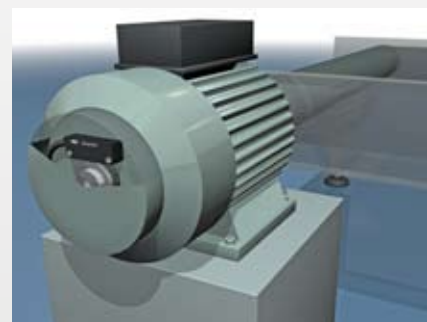
## Angular measurement

The angle of cuts must be measured on manual and semiautomatic timber processing machinery. Magneto-resistive sensors in particular are eminently suitable for these applications because of their ability to measure angles combined with their imperviousness to dirt.



## Rotational speed measurement

Measuring systems to determine rotational speed are frequently integrated into electric motors. Thanks to its extremely compact installation size and easy installation, *EcoSpin* offers an ideal solution for this integration.

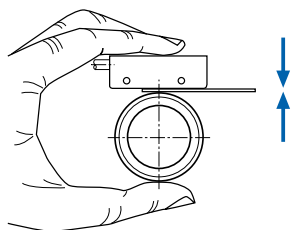


## Typical application fields

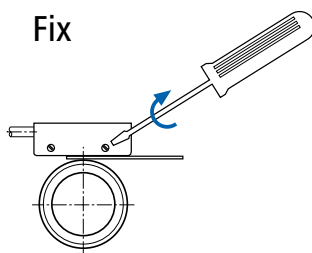
- Textile machinery
- Motion control
- Graphics machinery
- Wood/timber processing machinery
- Machine tools
- Packaging machinery
- Medical technology

## Easiest installation and adjustment with *EcoSpin* – in less than 60 seconds

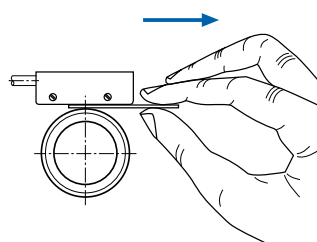
Press



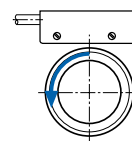
Fix



Pull



Go



0s

20s

40s

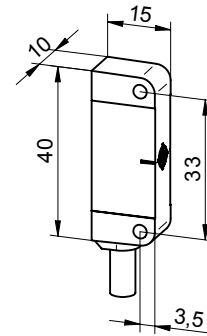
60s

## The most important technical properties

<i>EcoSpin</i> magnetic sensor	MEFK 10G2124
voltage supply	8 ... 28 VDC
max. measuring steps*	2880 steps at 4-fold evaluation
max. switching frequency*	2,0 MHz
system accuracy	± 0,8°
jitter	± 20%
output circuit	A/B channel with push-pull output
protection class	IP 67
temperature range	-25 ... +85 °C
connection	cable PUR 4 x 0,25

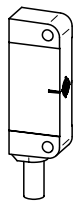
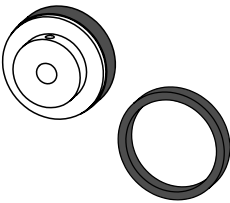
\*Please refer to the spec sheet for details

## Small and robust



## Easy and flexible – Your *EcoSpin* solution in 3 steps

- ① Determine the pulse count
- ② Assign interpolation factor and number of poles
- ③ Magnetic sensor, magnet rotor and magnet ring order key

<i>EcoSpin</i>		
Magnetic sensor	Magnet carrier	
		
Number of pulses per rotation	Interpolation factor	Number of poles
32	1-fold	32 poles
64	2-fold	32 poles
100	2-fold	50 poles
128	4-fold	32 poles
200	4-fold	50 poles
256	8-fold	32 poles
360	10-fold	36 poles
500	10-fold	50 poles
512	8-fold	64 poles
720	10-fold	72 poles

**Magnetic sensor** MEFK 10G2124/N

Interpolation factor \_\_\_\_\_

01 = 1-fold  
02 = 2-fold  
04 = 4-fold  
08 = 8-fold  
10 = 10-fold

**Magnet rotor** MSAP X    /    X   

Number of poles \_\_\_\_\_

32, 36, 50, 64, 72 poles

External diameter \_\_\_\_\_

031 = 31 mm  
056 = 56 mm

Internal diameter \_\_\_\_\_

006 = 6 mm  
008 = 8 mm  
012 = 12 mm  
020 = 20 mm  
528 = 5/8 inch (15,875 mm)  
120 = 1 inch (25,4 mm)

**Magnet ring** MRAP X    /    X   

Number of poles \_\_\_\_\_

32, 36, 50, 64, 72 Pole

External- x internal diameter \_\_\_\_\_

031 X 022 = 31 x 22 mm  
056 X 048 = 56 x 48 mm

For more information about *EcoSpin*, please look on the internet under [www.baumerelectric.com/en/211.html](http://www.baumerelectric.com/en/211.html)

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