

## EC 90 flat with MILE Encoder

In order to take advantage of the EC 90 flat motor's ultra slim design also in high-precision applications and positioning tasks, a microsystem is being applied; the MILE encoder. The incredibly miniature system can be integrated into the motor without adding length to it.

Behind the abbreviation MILE hides Maxon's Inductive Little Encoder, the worldwide smallest inductive rotary encoder. Its operating principle is based on the detection of high-frequency inductivity which generates eddy current in an electrically conducting target.

The advantages of a high-frequency inductive method of measurement compared to traditional encoders:

- High robustness towards dust or oil vapor, thus making additional protective measures, such as a cover, unnecessary.
- High speed.
- Insensitivity against interference pulses (for example from PWM controllers or motor magnets).

Compared to its predecessor, equipped with an optical encoder, the new EC 90 flat MILE possesses a remarkably higher nominal torque of 517 mNm and is, with resolutions of up to 3200 impulses per turn, extremely precise too. This makes it the perfect choice in applications, such as door drives, logistic robots, or solar trackers. The motor is distinguished by optimal integration of the MILE encoder and combines state-of-the-art with the tried and tested features; flange pattern, fixation, and pin assignment are all identical to its forerunner.

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Length of the press release: 1440 characters, 216 words

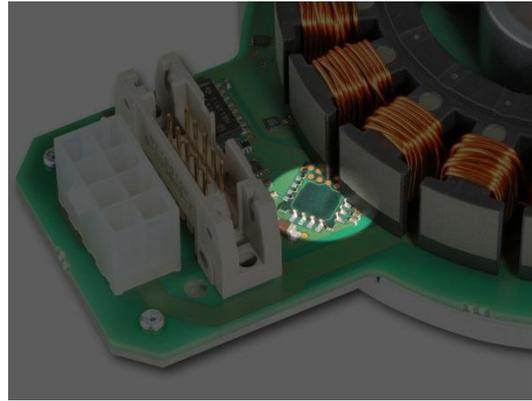
The media release is available as download on the Internet: [www.maxonmotor.com](http://www.maxonmotor.com)

**maxon motor ag**  
Brünigstrasse 220  
P.O. Box 263  
CH-6072 Sachseln

Phone +41 41 666 15 00  
Fax +41 41 666 16 50  
Web [www.maxonmotor.com](http://www.maxonmotor.com)



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*MILE Encoder, integrated in Main PCB*