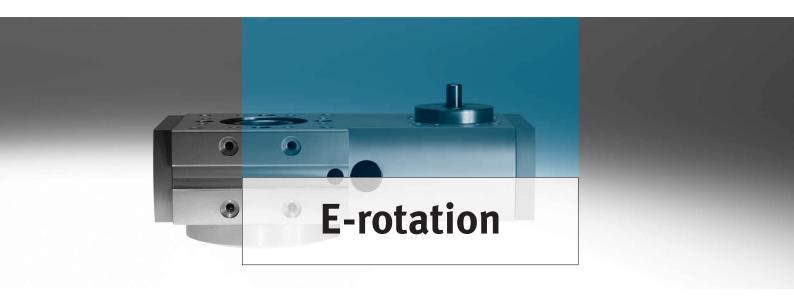
## **Electric rotary drive module ERMB**





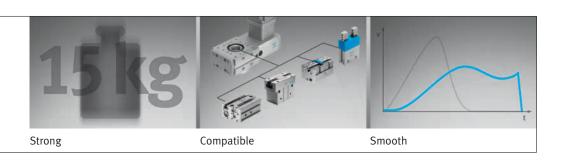
Weights of up to 15 kg can be rotated dynamically and flexibly with the freely positionable, electric rotary drive module ERMB. The ERMB can naturally be systematically incorporated in a mechatronic multi-axis modular system: as a phi axis with any rotation angle 3360° or "stand alone" as a small NC controlled rotary table.

### Quicker to install

Standardized adapter plates serve as a mechanical connection between linear axes and grippers. The ERMB is impressive with mounting interfaces on all sides and a high-strength rotary flange with large hollow shaft diameter. This concept enormously reduces planning and design costs. A harmonised range of motors are available for driving the ERMB. A uniform controller concept simplifies the use of servo and stepper motors and a comprehensive software platform simplifies commissioning and control. The ERMB's performance adapts to requirements dependent on the motor technology used.

### Simply balanced

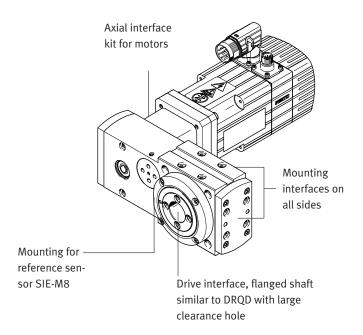
The ERMB rotary module effectively minimises vibrations in multi-axis systems, thanks to uniform movements and user-defined acceleration ramps, and thus increases the performance of the entire system. Unlike rotary modules using shock absorbers, movements to the end position are smooth and wear-free.



151.1.**PSI** 

Product Short Information

# **Electric rotary drive module ERMB**



The EAPS sensing module, available as an accessory, makes it is possible to define impermissible areas using 2 inductive sensors and trip





EAPS with casing

EAPS without casing

#### Technical data

| Size                      | ERMB-20 | ERMB-25 | ERMB-32 |
|---------------------------|---------|---------|---------|
| Max. output torque [Nm]   | 3.15    | 8.8     | 25.5    |
| Gear unit ratio [i]       | 4.5:1   | 4:1     | 3:1     |
| Max.output speed [r.p.m.] | 300     | 300     | 300     |
| Rotation angle [°]        | Endless |         |         |

### Position sensing/reference switch:

Sensing on the rotary module takes place with SIEN-M8 type inductive sensors. This is accomplished by sensing a 90° adjustable indexing

| Repetition accuracy               |             |  |  |
|-----------------------------------|-------------|--|--|
| Repetition accuracy (with servo   | Max. ±0.03° |  |  |
| motors type EMMS-AS)              |             |  |  |
| Repetition accuracy               | Max. ±0.05° |  |  |
| (with MTR-DCI)                    |             |  |  |
| Repetition accuracy (with stepper | Max. ±0.08° |  |  |
| motors EMMS-ST I)                 |             |  |  |

| Mass moments of inertia and positioning times    |      |      |      |  |  |
|--|------|------|------|--|--|
| Max. mass moment of inertia [kgcm <sup>2</sup> ] |      |      |      |  |  |
| with EMMS-AS                                     | 50   | 200  | 1000 |  |  |
| with EMMS-ST                                     | 30   | 100  | 500  |  |  |
| with MTR-DCIG7                                   | 50   | 300  | 1000 |  |  |
| with MTR-DCIG14                                  | 200  | 1200 | 3700 |  |  |
| Min. positioning times [180°/s],                 | <0.3 | <0.3 | <0.3 |  |  |
| dependent on load and motor                      |      |      |      |  |  |

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