Electromechanical Rotary Actuator ERMB





High Capacity, Easy Integration, Smooth Operation

Dynamic and Flexible

Weights of up to 15 kg can be rotated dynamically and flexibly with the freely positionable, electromechanical rotary actuator ERMB. The ERMB can naturally be systematically incorporated in a mechatronic multi-axis modular system: as a phi axis with any rotation angle >360° or "standalone" as a small NC controlled rotary table.

Quicker to Install

Standardized adapter plates serve as a mechanical connection between linear actuators and grippers. The ERMB allows for 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 full 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 actuator effectively minimizes vibrations in multi-axis systems, thanks to uniform movements and userdefined acceleration ramps, and thus increases the performance of the entire system. Unlike rotary actuators using shock absorbers, movements to the end position are smooth and wearfree.



For more information: www.festo.com/us/ermb

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Actuator interface, flanged shaft similar to DRQD with large clearance hole The EAPS sensing module, available as an accessory, makes it is possible to define impermissible areas using 2 inductive sensors and trip cams.





EAPS with casing

EAPS without casing

switch:

pin.

Position sensing/reference

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

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 | | |

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

| Mass Moments of Inertia and Positioning Times | | | | | | |
|--|------|------|------|--|--|--|
| Max. mass moment of inertia [kgcm ²] | | | | | | |
| 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], dependent on load and motor | <0.3 | <0.3 | <0.3 | | | |



High capacity

Easy integration

Smooth operation

Festo Corporation

For ordering assistance, or to find your nearest Festo Distributor, Call: 1.800.99.FESTO Fax: 1.800.96.FESTO Email: customer.service@us.festo.com Visit: www.festo.com/us

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