Electric Rotary Module ERM

Easily adaptable due to the 90° swivelable drive
Rotary Module ERM
Extremely adaptable. Perfectly integrateable.

Change over to ERM now.
The ERM from SCHUNK is the first rotary module with a swivable and adaptable drive. Due to its universal drive concept, it can do all in one from rotating and swiveling to reorientation of workpieces.

More flexible than ever.
Due to the adaptable drive, the rotary module ERM can be perfectly integrated into existing assembly and handling plants. It is extremely flexible since it can be actuated with all conventional industrial servo motors. Equipped with the matching motor, all the features of system control units in terms of programming, safety, or field bus systems can be directly transferred to the module. You are more flexible than ever when selecting the matching control strategy.

You integrate. We guarantee.
The drive including the bevel gear can be attached and adjusted in 4 x 90° stages, and therefore the interfering contour of the motor can be excellently adapted to the conditions of your application. Combined with any adjustable timed sequence of the bevel gear, the perfect integration of the rotary module ERM into your handling process is ensured.
Superior Clamping and Gripping –
It is time to make use of your machine’s full potential!

With superior components, we awake reserves where you would never expect them. In your machine. SCHUNK Synergy – the perfectly harmonized interplay of clamping technology and gripping systems make our customers a champion in productivity.
ERM
Rotary Module

Our Promise of Performance. Your benefit.

Depending on the used motor, the rotary module ERM disposes of a torque of maximum 75 Nm, and any intermediate position can be approached. Designed for axial forces up to 4,000 N, and speeds up to 62.5 rpm, the module is suitable as a freely programmable rotary indexing table, as a positioning device, or for reorientation of workpieces. The standard center bore allows constructions of particularly compact plant designs.

We guarantee. You benefit.

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<tr>
<th>Easier</th>
<th>Easy plant integration</th>
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<td></td>
<td>the customer selects the desired motor after having checked the data of his plant in terms of field bus and safety technology</td>
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<td>More agile</td>
<td>360° infinitely rotating</td>
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<td>for a wide range of possible applications</td>
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<td>More flexible</td>
<td>Up to 360° adjustable 4 x 90° stages</td>
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<td>Use at gantries or robots is possible, since the drives can be flexibly adjusted.</td>
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<td>More precise</td>
<td>75 Nm high torque and a 0.06° repeat accuracy</td>
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<td>for positioning high payloads precisely</td>
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<tr>
<td>More agile</td>
<td>Any intermediate position</td>
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<td>can be chosen for ensuring highly flexible processes, and optimal adaptation to the individual applications</td>
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<tr>
<td>More compact</td>
<td>Center bore Ø 22 mm, and a 8-fold media feed-through up to 8 bar</td>
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<td>for compact plant designs, and for the use of pneumatic gripping modules</td>
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<td>More quiet</td>
<td>0.05 mm axial run-out for rotary indexing tables</td>
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<td>More robust</td>
<td>Protection class IP65 for the use in harsh environmental conditions</td>
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Technical Data

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<th>Size 160</th>
<th>Dead weight 15 kg</th>
<th>Torque 75 Nm</th>
<th>Air feed troughs 8</th>
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<td>Speed 62.5 rpm</td>
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The Rotary Module ERM in practice

Task
Loading and unloading a machine tool with raw and finished parts.

Solution
A handling system consisting of a gantry, two SCHUNK 3-finger centric grippers PZN-plus, and a rotary module ERM are taking over the handling of raw and finished parts. In the first step the raw part is removed from a rack with a gripper, and transported to the machine tool. During the swivelling process, the rotary module ERM and both grippers are alternatingly loading and unloading the raw and finished parts from the machine. The fingers of the finished parts gripper are particularly designed for a gentle and damage-free handling of the workpieces.

Customer benefits
- Very efficient loading and unloading of the machine tool is possible.
- The travel times of the handling axes and the downtime of the machine tool are minimized.

Sectional diagram

1. Motor shaft
   for motor connection

2. Bevel gear
   variably attachable. Therefore the motor can be swivelled 4 x by 90° stages

3. 2-fold hypoid gear stages
   for gear reduction of the rotation

4. Drive flange
   to adapt the application for rotation

5. Integrated air feed through with connection borehole
   for hose-free feed-through of the compressed air

The rotary module ERM can be flexibly used for various application tasks.
The SCHUNK mechatronic Modular System offers 100% Compatibility

SCHUNK is the first manufacturer who bundles a variety of mechatronic modules in one single program. The spectrum ranges from simple gripping modules as a pneumatic alternative to gripping and rotary modules with integrated intelligence up to adaptable, mechatronic gripping and rotary modules. The latter ones can be equipped with different motors and functionalities.

**SCHUNK Grippers**

**Electric 2–Finger Small Parts Gripper EGP**
The EGP scores with a 180% better gripping force–mass–ratio towards comparable small parts grippers. By using the EGP, the change from pneumatic to mechatronic gripping modules is child’s play. Gripper size 40 disposes of a gripping force which can be manually adjusted in 4 stages. The new gripper size 25 is the smallest electric gripper worldwide. The EGP is the ideal electric alternative to the pneumatic SCHUNK 2–Finger Parallel Gripper MPG-plus. A change is quickly and easily possible.

**SCHUNK Rotary Modules**

**Electric Rotary Module ERS with rotary feed–through**
The ERS is a new option, and is equipped with a pneumatic or electric rotary feed–through DDF. The standard DDF module disposes of eight signal feed–throughs, and a pneumatic air channel. In order to ensure highest flexibility of the control strategy, the rotary module ERS can be actuated with the external SCHUNK controller for 48 V, or with an external standard controller (e.g. Bosch or Siemens) for the 560 V version. Depending on the requirement and case of application, the ERS is available with a pneumatic holding brake, or as an IP 54 protection class version.

**SCHUNK Linear Modules**

**ELM with direct drive**
Particularly used for flexible and highly dynamic positioning tasks, which cannot be solved with pneumatic drives any more. A measuring system for position recognition and control of temperature, and a precision ball–bearing are directly integrated.

“360° – fully flexible. Efficient in all directions.”

Jens Lehmann
German goalkeeper legend, brand ambassador of SCHUNK, the family-owned company since 2012

For further information visit our website: [www.gb.schunk.com/qr/erm](http://www.gb.schunk.com/qr/erm)