EasyHandling – Scalable Mechatronic Solutions
Rexroth delivers exceptional factory automation by drawing upon core competencies, global partnerships, and deep industry knowledge in all Drive & Control technologies.

Assembly and Handling
Material-handling, positioning and assembly of everything from small parts to heavy payloads requiring long motion lengths.

Solar, Semicon, Medical
Precision and compact modules satisfy applications, from simple positioning to gantry-style robots, with high performance in sensitive environments.

Food, Packaging, and Printing
Compound packaging, stacking, sorting, palletizing, cartoning and gentle food handling.

Automotive and Machine Tool
Guiding for machine tools and transfer of heavy automotive components.

Rexroth has decades of experience in development of best-in-class components for force and motion control. This provides our unique foundation for high performance multi-technology solutions.

Visit www.boschrexroth-us.com
Rexroth’s EasyHandling system is more than a modular set of mechanical components. It completes the evolutionary transition from high quality mechanical and electronic elements to a comprehensive system solution built on standardized interfaces and interoperable controls.

**Why Rexroth EasyHandling configurations for your automation application**

- Highly configurable – single or multi-axis Cartesian and Gantry solutions. Buy only what you need.
- Delivered pre-assembled or as components
- Repeatability up to 0.005 mm per axis
- Suitable for short to long reaches and light to heavy payloads
- Optimized energy use and cost for each axis, for example, electro-mechanical and/or pneumatic
- Simple to program and commission
- Open architecture and controls interface
Your Vision – Our Solution

Example configurations
Save Your Time and Money by Using Online Engineering Tools

EasySelect

Browse to our website [www.easy-handling.com](http://www.easy-handling.com), and select online tools. Follow step-by-step prompts to input application parameters.

- Optimizes selection of components
- Generates BOM
- Compiles information for transfer to CAD configurator

CAD Configurator

Use output from EasySelect or as a tool to create CAD model if your preferred components are pre-determined.

- Generates CAD models and BOMs of assemblies or individual components
- Intuitive graphic interface for selection of axis components
- Validates your component selection
Building Blocks for Automation

Centered Around Centering-Rings

Similar to the interlocking blocks from your childhood, precision centering-ring features, found on all mating components, ensure a robust and repeatable interlocking between all elements of the system.

- A wide variety of linear modules and end-effector components can be assembled in an infinite variety of configurations
- Modules with different frame sizes combine easily due to the 40mm grid between centering-ring holes on EasyHandling components
- Anything constructed can be taken apart again and re-assembled to accommodate changes required for your application

Begin at the End-effector

Our Mechatronic solutions begin at the actual work environment of your application. Rexroth offers a wide range of robot-end components including:

- Vacuum Cups and Generators
- Non-contact handling module (bernoulli)
- Grippers
- Rotary Modules
- Blank plate for your tooling
# Unsurpassed Range of Robust, High-performance Linear Modules

## Selection Guide of Core Linear Motion Modules

<table>
<thead>
<tr>
<th>Module type</th>
<th>Series name</th>
<th>Smallest frame size (mm)</th>
<th>Max L dim (mm)</th>
<th>Largest frame size (mm)</th>
<th>No. of frame sizes</th>
<th>Centering ring options on:</th>
<th>Assembly &amp; Handling</th>
<th>Packaging</th>
<th>Automotive &amp; Machine Tool</th>
<th>Key Application Features/Additional Versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original</td>
<td>MKK MKR</td>
<td>40 1000 2500</td>
<td>165 4000 12000</td>
<td>5</td>
<td>–</td>
<td>on 40 mm frame</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>Very long strokes. High speed Cam Roller version (MLR)</td>
</tr>
<tr>
<td>Compact</td>
<td>CCK CKR CKP</td>
<td>70 650 1500</td>
<td>200 6500 10000</td>
<td>5</td>
<td>✓ ✓</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>First choice for motions in general automation. Linear Motor version (CKL)</td>
</tr>
<tr>
<td>Economy</td>
<td>eCKK eCKR</td>
<td>90 680 2500</td>
<td>110 1200 2500</td>
<td>2</td>
<td>✓ ✓</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>+</td>
<td>For light duty motions</td>
</tr>
<tr>
<td>Bridge</td>
<td>BKK BKR</td>
<td>115 5000 5800</td>
<td>135 5000 5800</td>
<td>2</td>
<td>– ✓</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>Two rails at perpendicular planes. For very long unsupported spans</td>
</tr>
<tr>
<td>Precision</td>
<td>PSK</td>
<td>40 350 90 940</td>
<td>–</td>
<td>4</td>
<td>– –</td>
<td>++</td>
<td>–</td>
<td>+</td>
<td>+</td>
<td>Steel body. Very high precision in small footprint</td>
</tr>
<tr>
<td>Ball Rail Table</td>
<td>TKK</td>
<td>– – 155 2860</td>
<td>–</td>
<td>4</td>
<td>– –</td>
<td>+</td>
<td>++</td>
<td>–</td>
<td>–</td>
<td>For extremely high payloads and harsh environments</td>
</tr>
<tr>
<td>Mini-Slide</td>
<td>MSC-EL – MSC-BV</td>
<td>66 80 (str)</td>
<td>–</td>
<td>4 (5 pneu)</td>
<td>✓ ✓</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>Lowest cost for pneumatic motions &lt;200 mm stroke</td>
</tr>
<tr>
<td>Feed</td>
<td>VKK</td>
<td>– – 70 600</td>
<td>–</td>
<td>2</td>
<td>✓ –</td>
<td>++</td>
<td>+</td>
<td>++</td>
<td>+</td>
<td>Suitable for vertical motions, minimal dynamic mass</td>
</tr>
<tr>
<td>Omega</td>
<td>– OBB</td>
<td>– – 55 5500</td>
<td>120 – 5500</td>
<td>3</td>
<td>✓ ✓</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>Minimal dynamic mass, short body length, multiple independent moving carriages option</td>
</tr>
<tr>
<td>Rodless Cylinder</td>
<td>– RTC</td>
<td>16 dia – 1800 (str)*</td>
<td>63 dia – 3700 (str)*</td>
<td>10</td>
<td>✓ ✓</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>First choice for pneumatic motions with &gt;200 mm stroke</td>
</tr>
</tbody>
</table>

*L dim = body length of the module between end caps

*Pneumatically Driven
Cable Management Made Easy

- Standardized connection elements allow for easy and adjustable integration of cable management
- Available as components that fix directly to linear modules or integrated on sub-assemblies
- Energy chain and supporting components are length configurable

1x guide channel  
R0391 700 06

2x profile R0391 700 12  
2x clamping profile R0391 700 15

2x clamping profile R0391 700 15

1x guide channel  
R0391 700 10

1x cable drag chain  
R0391 700 04

1x cable drag chain  
R0391 700 00

1x profile R0391 700 13  
1x clamping profile R0391 700 14  
1x bracket R0391 700 17
Motion Realized in Minimal Time

IndraDyn high performance servo motors

- Integrated absolute multi-turn encoders for precise motion control
- Wide range of torques – 0.48 to 24 Nm
- Integrated drive version – add axes to machine without adding anything in cabinet

IndraDrive Cs compact servo drives

- Multi-protocol enabled for maximum flexibility
- Position block mode allows multi-positioning with discrete I/O
- Wide range - 100 W to 9.0 kW
- Extremely compact design for small cabinets
- Safety on Board technology compliant to EN954-1, Cat 3
- Integrated PLC version with IEC 61131-3 compliant motion control

Fast Commissioning with EasyWizard

- FREE Software tool that commissions Rexroth linear modules on Rexroth drives in a few minutes
- All required mechanical data of the axis is pre-loaded
- Enables maximum performance of mechanical components and motors on Rexroth drives
- Used when drive is controlled via Rexroth or third party controller
Your Choice of Control Solutions from Rexroth

**Comfort**
Open interface philosophy enables blending of Rexroth Motion, Safety and I/O into your controls architecture.

**Advanced**
- Complete controls solution from one source with proven interoperability from HMI to I/O.
- Scalable inline motion controllers/PLCs with simultaneous multiple bus protocol capability.
IndraWorks – a comprehensive suite of engineering software for all of your Drive & Control system requirements. Simple and user-friendly.

Within IndraWorks, we provide a wide range of function blocks specifically tailored for applications in factory automation. These industry-specific programming solutions greatly reduce your required effort and expedite machine start-up.

Select optimal function block for your controls application based on the table below.

<table>
<thead>
<tr>
<th>1 Select your industry</th>
<th>2 Select your control platform</th>
<th>3 Select your basic technologies</th>
<th>4 Your recommended function block is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Drive-based</td>
<td>Rack-based</td>
<td>Embedded-PC-based</td>
</tr>
<tr>
<td>Handling, assembly, and robotics</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Packaging technology</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Printing and converting technology</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Metal forming technology1)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Machine tools</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>(metal cutting/forming)2)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>General automation</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
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</tr>
<tr>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

1) e.g. roll feed, synchronously running separation equipment, profiling machines
2) e.g. turning machines, machining centers, bending machines
3) The Generic Application Template in IndraWorks fully supports PackML
The data specified above only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgment and verification. It must be remembered that our products are subject to a natural process of wear and aging.

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