



Bosch Rexroth Linear Motion Technology

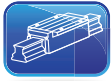
Rexroth
Bosch Group

know-how makes the difference

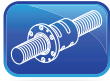
ERIKS



Ball Bushings



Profile Rail



Ballscrews



Actuators

Introduction

The partnership between Bosch Rexroth and ERIKS UK stretches back many years. Our combined expertise means you receive Bosch Rexroth’s unrivalled market leading linear motion products managed and delivered by the extensive ERIKS distribution network.

The deciding factors in achieving high performing linear technology components are accuracy, dynamics and load bearing capabilities. All achieved in a wide range of conceivable environments for every imaginable motion task.

Introducing our linear product range

Guidance

Whatever your requirements for guidance are, we will deliver the optimal solution from an extensive range of products. Bosch Rexroth’s experienced engineering team will develop the right solution for you.



POSITIVE ENERGY REDUCTION

Rolling element guidance systems use up to 90% less energy.

This is achieved through using rolling element principles rather than the traditional sliding guides. They are highly durable, whatever the load, ensuring consistent precision over the entire service life.

Our extensive range of guidance components will help you to build machines and equipment with a clear edge in technical performance.

- Bosch Rexroth undergoes regular testing to ensure all load capacities and ratings are precise so that you benefit from the most accurate products on the market
- Bosch Rexroth runs repeated endurance tests to monitor the quality of its products so you can trust the reliability of Rexroth components every time

Products

- Ball bushing and shafts
- Profile rail
- Ball and roller

Benefits:

- On-site consultation
- Bosch external technical support
- UK based technical services centre

Drive units

To provide the necessary thrust for machining processes involving high forces, or to achieve precise and smooth motion under load.

Products

- Electromechanical cylinders
- Ball screw drives

Handling

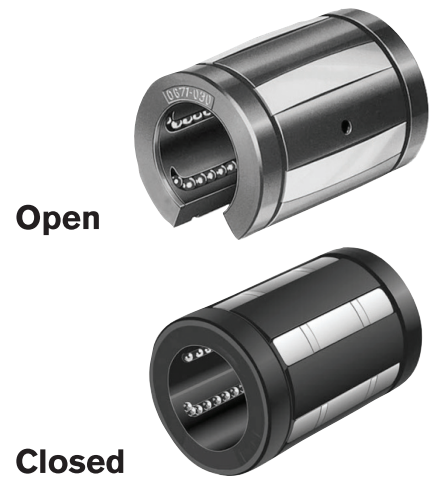
Our linear motion systems range from single axis to sophisticated, preconfigured complete solutions precisely engineered to meet your specific requirements and application needs – compact and ready to install.




Products

- Single axis actuators
- Complete systems

Linear Bushings & Shafts

Bosch Rexroth linear bushings and shafts are available in a wide selection so whatever your requirement, we have the solution for you.

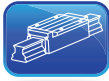


	Compact	Standard	Super A
			
Description	The Compact Linear Bushing is distinguished by its compact dimensions, and is also available in corrosion resistant format	The Standard Linear Bushing is especially durable due to its steel enclosure and is suitable for applications with high contamination, for example in the woodworking industry	The Super "A" Linear Bushing, featuring built in misalignment which compensates for the angle between the housing and shaft up to 0.5 degrees tilt without reducing the capacity due to angular pressure
Size range (Shaft Diameter Ø)	8mm to 50mm	5mm to 80mm closed 12mm to 80mm open	10mm to 50mm closed 12mm to 50mm open
Characteristics			
Load carrying	++	++	+++
Extra smooth running	++	++	+++
Performance in highly contaminated environments	•	+++	•
Ease of installation	+++	++	++
Attributes and variants			
Self aligning			✓
Extra compact design	✓		
Corrosion resistant version available	✓	✓	
Open type available		✓	✓
High temp version available		✓	

KEY	
•	Not recommended for use
++	Good
+++	Excellent
✓	Available



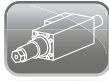
Ball Bushings



Profile Rail



Ballscrews



Actuators

Profile Rail - Ball Systems

EXCELLENT RIGIDITY

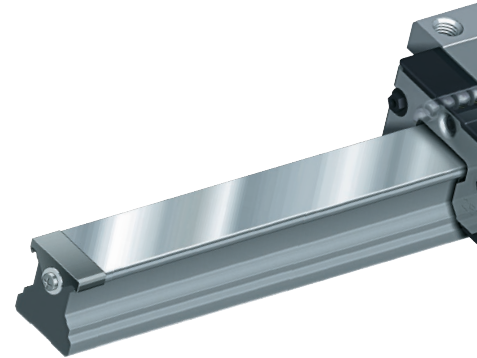
Ball Rail systems offer outstanding performance and long life, and are primarily designed for use in general machine construction.

Thanks to different types of corrosion protection, harsh conditions of use are not a problem. Our high-quality long-term lubrication concept and minimal-quantity lubrication systems combined, with the wear-resistance typical of rolling-element guides, assure a high level of operational reliability and consistent precision throughout the service life of these components.

Benefits:

- Limitless interchangeability; all ball runner block versions can be combined with all ball guide rail versions
- Excellent dynamic characteristics; speed up to 10 m/s, acceleration up to 500 m/s²
- Integrated all-around sealing as standard; additional seals for a variety of application cases
- Same load capacities in all four major planes of load application
- Optimum system rigidity through O-arrangement of raceways

- Different formats including special designs such as high precision, high speed, and self-alignment capabilities, as well as versions in aluminium or different corrosion-resistance grades, e.g. food & packaging applications



Miniature Ball Rail Systems

The Miniature versions of the Ball Rail Systems are particularly suitable for precision engineering operations, i.e. for the production of optical or electronic devices.

Standard High Precision Runner Blocks



R1651

Steel, sizes 15-65
Resist NR, sizes 15-35
Resist CR, sizes 45-65
High precision, sizes 15-45
For high rigidity requirements, high load-bearing capacity



R1622

Steel, sizes 15-65
Resist NR, sizes 15-35
Resist CR, sizes 45-65
High precision, sizes 15-45
For restricted space in the transverse direction, high load-bearing capacity



R1665

Steel, sizes 15-35
Resist NR, sizes 15-35
Restricted space in longitudinal direction, medium load-bearing capacity, for mounting from above and below, supplementary to DIN 645-1



R1666

Steel, sizes 15-35
Resist NR, sizes 15-35
For restricted space in longitudinal and transverse direction, medium load-bearing capacity, for mounting from above



R1631

Aluminum
Sizes 15-35
For lightweight designs, for compensating slight tolerances in the adjoining structure, for mounting from above or below

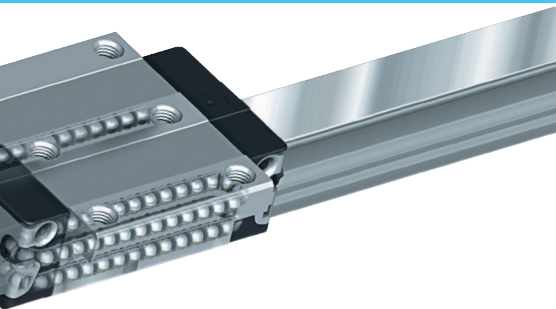


R1632

Aluminum
Sizes 15-35
For lightweight designs, for compensating slight tolerances in the adjoining structure, for mounting from above or below

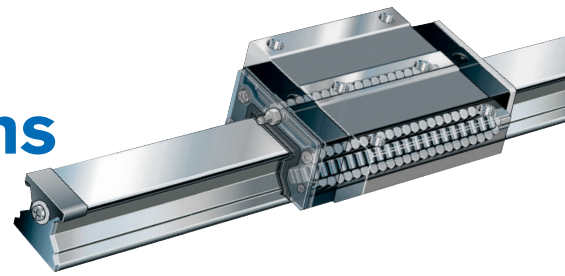
KEY: Resist NR: Corrosion Protection
Resist NR11: All parts made from corrosion resistant material as per EN10088
Resist CR: Corrosion resistant runner block with matt silver hard chrome plating

OPTIONS: Cover Strip / Low Friction Seals / High Efficiency Seal / Ball Chain / High Speed Runner Blocks 10m/s / Wide Low Profile Runner Blocks / Long Blocks to support extra loads / Bellows / Lubrication Plate
Accuracy Class: Normal / High / Precision
Preload Class: C0 without preload / C1 2% preload / C2 8% Preload



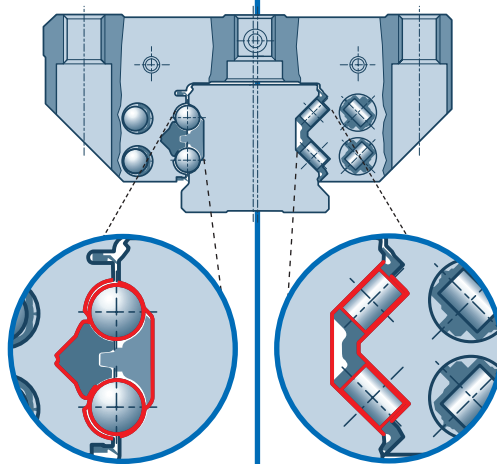
Profile Rail - Roller Systems

EXTREME RIGIDITY



Roller Rail Systems from Rexroth are designed to meet the highest expectations on precision and rigidity in linear motion and are ideal for the most demanding operating conditions.

The rolling element design gives you energy saving efficiency of up to 90% relative to sliding guides.

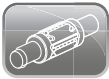


Benefits:

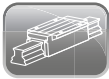
- Different formats offering highest precision in standard, wide, extra-long and heavy-duty versions
- Unrestricted interchangeability, resulting in full combinability of all roller runner block and guide rail variants
- Extremely high load capacities in all four main directions of loading, high torque load capacity
- Maintenance-friendly lube ports, on all sides, if so desired
- Integrated all-around sealing as standard
- Mounting of attachments to runner block from above or below

R2001	R2011
Resist NR II Sizes 15-35	Resist NR II Sizes 15-35
High rigidity, high load capacity, for mounting from above and below	For restricted space in the transverse direction, high load-bearing capacity, for mounting from above

Standard Roller Runner Blocks		Heavy Duty Roller Runner Blocks
R1851	R1821	R1861
Oil/grease lubrication Sizes 25-65	Oil/grease lubrication Sizes 25-65	Sizes 100, 125
One-point oil lubrication* Sizes 35-55	One-point oil lubrication* Sizes 35-55	Exceptionally rigid, extremely high load capacity, for mounting from above and below
OPTIONS: Cover Strip Options / Long Blocks to support extra loads / *Lubrication Plate / Bellows Accuracy Class: High / Precision / Super Precision / Ultra Precision Preload Class: C2 8% Preload / 13% Preload Resist CR: Corrosion resistant runner block with matt silver hard chrome plating		



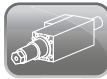
Ball Bushings



Profile Rail



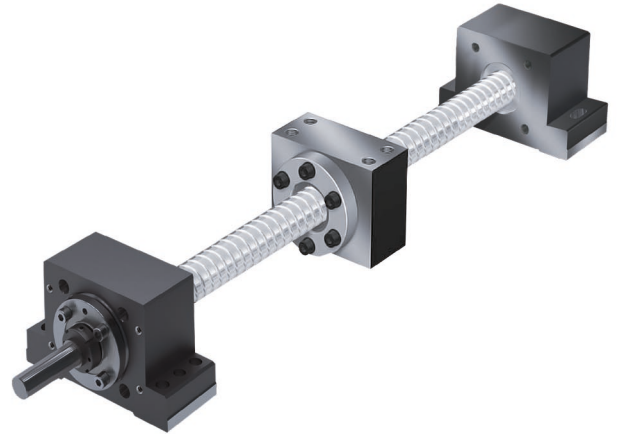
Ballscrews



Actuators


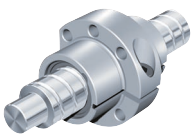

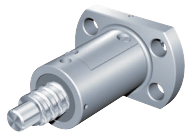
Ball Screw Drives

Ball Screw Assemblies are the efficient solution for precise conversion of rotary to linear motion. Whether you are looking for highest linear speeds, maximum load ratings or minimal installation lengths, we can supply the right solution.



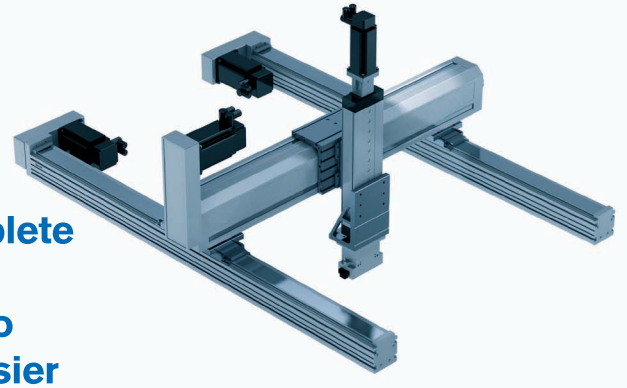
Benefits:

- Broad diversity; a match for every requirement
- Consistent and stable functionality
- Especially smooth running due to optimised ball pickup and recirculation
- High load ratings due to large number of balls
- Short ball nut design
- Easy-to-mount ball nuts; direction of mounting for each customer specification
- Adjustable preload single nuts
- Extensive range with various series in stock

DIN Standard Ballscrew Nuts		High Speed Ballscrew Nuts	Miniature Series
			
R1502	R1512	R2522	R1532
Flanged Single Nut FEM-E-C Sizes 16 x 5R-80 x 20R With standard seals, reinforced seals available as an option, with backlash or reduced backlash preload 2%, 3%, 5%	Adjustable-preload Single Nut SEM-E-C Sizes 16 x 5R-80 x 20R With standard seals, reinforced seals available as an option, adjustable preload	Flanged Single Nut with re-circulation caps FEP-E-S Sizes 20 x 40R-32 x 64R Speed Series With seals, with backlash, reduced backlash or preload 2%, with plastic recirculation caps	Miniature Flanged Single Nut FEM-E-B Sizes 6 x 1R - 12 x 10R Miniature Series With seals, with backlash or reduced backlash; delivered only as a complete ball screw assembly
OPTIONS: End Bearing Supports / DIN Shaft End Machining / Low Friction Seal Rolled Shaft Accuracy Grades: T5 23microns / T7 52microns / T9 130microns Preloaded Nuts: 2%, 3% or 5%			

Actuators

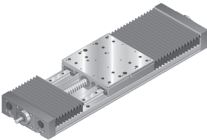


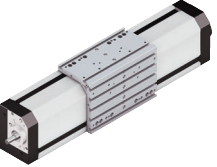
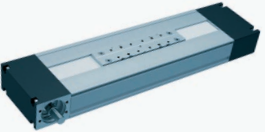
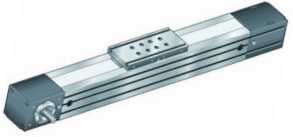
Actuators range from a cost effective single axes to a sophisticated, pre-configured complete solution precisely engineered to meet your specific requirements – compact and ready to install. They help you to get ahead faster, easier and more efficiently.



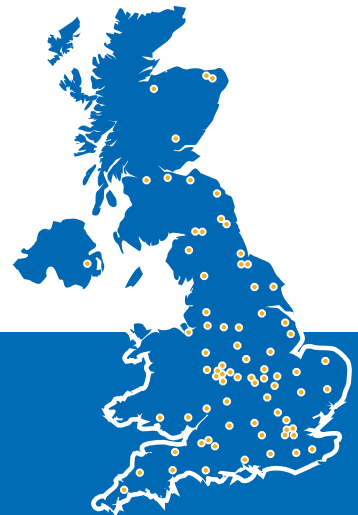
With our extensive know how in guidance technologies, development and manufacturing expertise, along with our special steel insert technology, we can provide you with an unrivalled performance to volume ratio.

Benefits:

- Complete product range for assembly and handling systems, as standard solutions or individually adaptable for use in almost any industry
- Scaleable, customisable linear axes
- Cost effective, so you no longer need to match up the guide and drive element
- Reduced design and manufacturing effort due to high degree of standardisation
- Extensive range of attachments and accessories
- Configuration with motor attachment, drive amplifier and control unit to produce complete systems
- Outstanding service through experienced sales and development team

Ball Rail Table TKK	Compact Module CKK with ball screw drive	Linear Module MKK with ball screw drive	Bridge Modules
	 Extremely compact precision-extruded aluminum profile (frame) with two integrated Ball Rail Systems. Precision ball screw drive in tolerance grade 7 with zero-backlash nut system. Available in five sizes in lengths up to 10,000mm. With travelling gap seal made of PU tape reinforced with steel cords. CKK 25-200 can also be supplied with screw supports to increase the travel speed over large distances.	 Linear Module with high thrust forces, ideally suited for applications requiring high loads capacities and high positioning accuracy and repeatability. Available in five sizes in lengths up to 4,900mm. Precision ball screw drive with rolled screw and zero-backlash cylindrical single nut. Depending on the size, the drive unit may be covered with a special plastic sealing strip, or high-quality bellows. Optionally also available with screw supports (MKK 25-110)	
For medium to very high loads, base plate in aluminum or steel. Available in four sizes in lengths up to 2,860mm with finely graduated length increments. Switches adjustable over the entire travel range, switch mounting either internal (protected) or external (freely accessible). Optional high-quality measuring system (glass scale).	 Extremely compact precision-extruded aluminum profile with two integrated Ball Rail Systems. Available in five sizes in lengths up to 12,000mm. Aluminium carriage in two different lengths to accommodate different loads. Idler (non-drive) end enclosure with integrated belt-tensioning system. Pulley ball bearings are lubricated for life. High travel speeds combined with high precision and smooth running. The toothed belt also acts as a gap seal and is guided laterally by the aluminum strips.	 Linear Module with integrated zero-clearance Cam Roller Guide with special design makes this module ideal for very high speeds up to 10m/s. Available in two sizes up to a length of 12,000mm. Longer lengths can also be configured by joining modules end-to-end. With integrated belt tensioning system. The belt pulley system is equipped with ball bearings lubricated for life. Gear reducer with a choice of gear ratios for optimal matching of external load to motor inertia.	Bridge Modules provide neat solutions for applications that could otherwise only be served by costly custom designs. They supplement the broad spectrum of Linear Motion Systems by enabling optimal combination of all axes while bridging larger distances. Available in five sizes up to a length of 5,500mm. Two versions: with ball screw drive (BKK) or toothed belt (BKR), optimized for high torsional stiffness and load carrying capacity.

Call 0845 006 6000
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know-how makes the difference



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