

WHY EWELLIX

Linear ball bearings

Maximum flexibility and ease of use



Ewellix linear ball bearings are designed for unlimited stroke applications

Ewellix offers two different linear ball bearing ranges, the compact and the standard range. Where the compact bearing fits best in applications with limited space, the standard range is optimised for higher load ratings.

They are widely used in a variety of easy to implement linear guide systems.

The wide range of diameters combined with the different types of bearings, housings and shafts make it easy to use and assemble supporting a variety of applications.

Linear ball bearings, also called ball bushings or shaft guides, translate rolling motion into linear motion. Like in a normal ball bearing, the rolling elements allow nearly frictionless linear movements even under load.

Linear ball bearings are precise machine elements that can transport and position nearly any type of load along the shaft. The balls within the linear ball bearing continuously recirculate allowing precise movement with low energy consumption.

Thanks to the Ewellix global network of sales units and distributors, standard components are available worldwide in stock for quick delivery.

Common applications

- Pick and place in automation
- 3D Printers
- Filling station – beverage machines
- Pneumatic slides
- Machine doors
- Edge band machines
- Labelling machines
- Leg press machines

General features



High performance

Long rating life with nearly no maintenance.



Self-holding functionality for compact bearings

The cage design is made for a perfect press fit into the right housing tolerance.



Pre-lubricated from the factory

Ready to install and environmentally friendly as only the necessary amount for initial greasing is applied.



Optional double lip seal

This perfectly fitted seal safely keeps contamination out and grease inside the linear bearing.



Self-aligning capability for standard range bearings

Allows the whole bearing to accommodate misalignment of ± 30 minutes of arc.



Full range of bearing units

Single, tandem, quadro and flange. Flexible design to build a variety of different slides.

Ewellix range overview

Linear ball bearings

LBBR

Compact bearing



LBCT

Standard bearing, open design



LBCR

Standard bearing



LBCF

Standard bearing, open design, self-aligning



LBCTD

Standard bearing, self-aligning



LBHT

Standard heavy duty bearing open design



Linear plain bearings

LPBR

Compact plain bearing



LPAR

Standard plain bearing



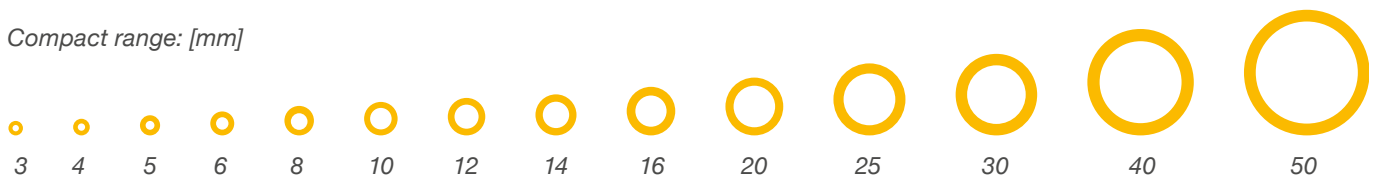
LPAT

Standard plain bearing open design

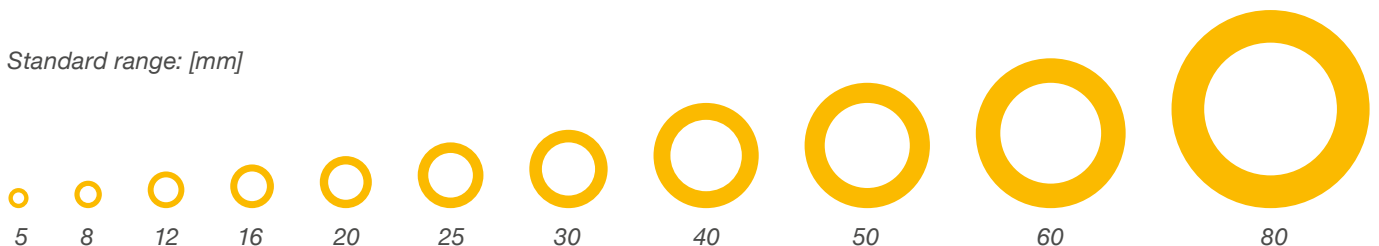


Size overview

Compact range: [mm]



Standard range: [mm]



Application examples

Pick and place - Automation industry

Precise linear motion in up to 3 axes for handling small machine parts, doing testing or liquid handling. Linear ball bearings can be used in one or several axes to boost productivity.

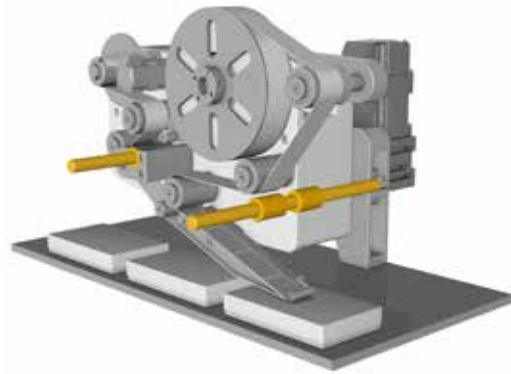
- Easy integration and installation
- Made for high speed and acceleration
- Nearly no maintenance with double lip seal
- High precision by predefined clearance or preload



Labelling machine – Packaging industry

Product labels need to be fixed on products at different positions. The precise position of the labeller is adjusted by linear ball bearings.

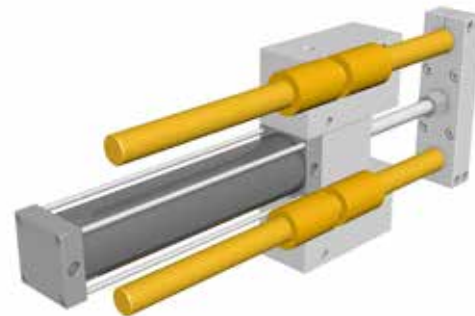
- Easy to setup with standard bearing units
- Shafts used as guide and structure element
- Stainless steel variant and shaft for corrosion protection
- Low maintenance as bearings are pre-lubricated



Pneumatic slides – Automation industry

Common, pneumatic driven linear slide in automation. It has been used for many applications and industries for lifting, pushing, transporting and handling.

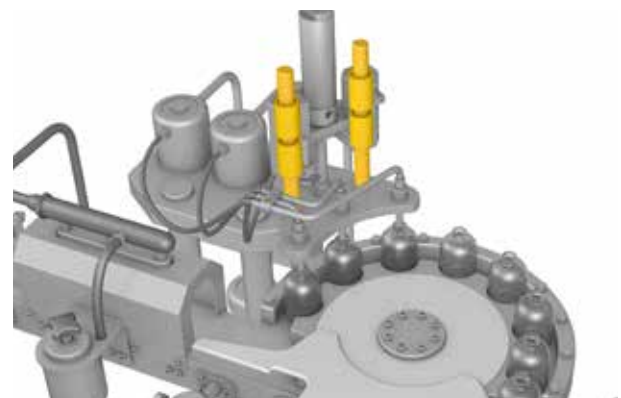
- Easy to mount self-holding bearing
- Nearly maintenance-free with factory pre-lubrication
- Robust against slight misalignment or bending
- Small sizes in mini slides follow miniaturisation trend



Filling station – Beverage machine

To fill bottles with any liquid, the fillers move up and down in the production line. The vertical movement of the filler is supported by linear ball bearings.

- Customised grease options for food industry
- Extremely good sealing performance with round shaft
- Corrosion resistance by using stainless steel bearings
- Long service life by using standard range bearings



Ewellix linear ball bearings: how are they different?

Flexible design and integration

- Easy to design and install linear slide solutions
- Suitable for virtually any application
- Easy to integrate into machine designs
- LBC linear ball bearings offer a flexible, drop-in replacement for existing machines designs using ISO Series 3 bearings

Fit and forget

- Best solution of all linear guide solutions to cope with misalignments and imprecise machine structures or machine bends
- Easy to maintain, long service life and best sealing functionality
- Compact range is greased for life under normal use

Available in stainless steel

- For corrosive or harsh environment applications
- Linear ball bearings and shafts are available as stainless steel version

Bearing units, shafts and accessories



- As a complement to the linear ball bearings from Ewellix, there are a large number of single linear bearing units, tandem and quadro units. We also offer a variety of lightweight units and shaft blocks.
- Ewellix precision shafts and shafts guides ensure low-friction guidance and are characterised by their exceptionally high dimensional stability and long service life.
- Shafts can be ordered cut to length with various options of shaft end machining like chamfers, axial or radial threads, or according to customer drawing.
- Ewellix precise shafts are hardened and available in different steel types like high grade steel, stainless steel and hard chrome plated. Hollow shafts are also available.



For more detailed information see our **Linear bearing, units and shafts** catalogue.

ewellix.com

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