

SKF inch linear bearings

LBXR

Closed bearing with steel sleeve. Available with steel or resin retainers. A stainless steel version with a resin retainer is also available. Sizes range from 1/8" to 4".



Available with or without seals integral to the bearing.*

LBXR/AJ style

Bearing with steel sleeve and slot for adjustment of preload. Available as standard with resin retainer or stainless steel with resin retainer. Sizes range from 1/4" to 2".



Available with or without seals integral to the bearing.*

LBXT style

Open bearing with steel sleeve for use with shaft on supports. Available as standard with resin retainer or stainless steel resin retainer. Sizes range from 1/2" to 2".



Available with or without seals integral to the bearing.*

LBXD/LBXF style

Self-aligning bearing with resin retainer. Allows for 1° of misalignment of the bearing. Closed style available in sizes 3/16" to 2". Open style available in sizes 1/2" to 2".



Available with or without seals integral to the bearing.*

LUXD style

Self-aligning LBXD style bearing mounted in an anodized aluminum housing. Available in sizes 1/4" to 2". Comes standard with grease fitting hole, integral seals, and retaining clips for easy replacement of bearing.



Available with or without seals integral to the bearing.*

LUXD/AJ style

Self-aligning LBXD style bearing mounted in an adjustable anodized aluminum housing. This unit allows for adjustment of clearance. Available in sizes 1/4" to 2". Comes standard with grease fitting hole, integral seals, and retaining clips for easy replacement.



Available with or without seals integral to the bearing.*

LUXF style

Self-aligning LBXF style bearing mounted in an aluminum housing. Available in sizes 1/4" to 2". Comes standard with grease fitting hole and integral seals.



Available with or without seals integral to the bearing.*

LTXD

Two self-aligning LBXD style bearings mounted in an anodized aluminum housing. Available in sizes 1/4" to 1-1/2". Comes standard with grease fitting hole, integral seals, and retaining clips for easy replacement of bearings.



Available with or without seals integral to the bearing.*

LTXD/AJ style

Two self-aligning LBXD style bearings mounted in an adjustable anodized aluminum housing. This unit allows for adjustment of clearance. Available in sizes 1/4" to 1-1/2". Comes standard with grease fitting hole, integral seals, and retaining clips for easy replacement of bearings.



Available with or without seals integral to the bearing.*

LTXF style

The self-aligning LBXF style bearings mounted in an aluminum housing. Available in sizes 1/4" to 1-1/2". Comes standard with grease fitting hole and integral seals.



Available with or without seals integral to the bearing.*

* Seals do not add length to the bearing.

SKF inch shafting

LJX

Carbon steel shafting available in sizes 1/4" to 2".

LJXR

420 stainless steel shafting available in sizes 1/4" to 2".

LJXH

Chrome plated shafting available in sizes 1/4" to 2".

LSXB shaft support rail

Aluminum support rail for use with predrilled and tapped shafting and open style bearings. Comes in lengths of 24" long, in sizes 1/2" to 2".



LSXBL low shaft support rail

AISI C-1018 steel support rail for use with predrilled and tapped shafting and open style bearings. Comes in lengths of 48" long, in sizes 1/2" to 2".



LSXS shaft end support

Supports blocks for use on ends of shafting. Available in sizes 1/4" to 2".



Technical data

Temperature

The normal operating temperature range for the SKF linear ball bearings is from 20° – 80° C (68° – 176° F). The LBXR series with the steel retainer has an operating temperature range from 20° – 110° C (68° – 230° F).

Fit

The recommended tolerance for the housing bore is H7.

Length tolerances of shafting

Shafting is stocked in lengths up to 20 ft. and is supplied to required lengths per the following chart;

diameter	length 36"	length > 36"
less than 2"	1/32"	1/16"
2" or larger	1/16"	1/8"

Special length tolerances are available upon request for all diameters.

Life calculations

The basic dynamic load rating C is used for the life calculations of linear ball bearings running under load. This gives the load which allows a rating life of 50km, without changing its magnitude and direction. The rating life can be obtained from the following equation:

$$L = \left(\frac{C}{P}\right)^3 \cdot 50$$

L=travel life (km)

C=basic dynamic load rating (N)

P=load (N)

Where the stroke length and frequency are constant, it is often easier to calculate the basic rating life in hours of operation using the following equation:

$$L_n = \frac{L \cdot 10^3}{2 \cdot s \cdot n \cdot 60}$$

L_n =nominal life in hours of operation

L=travel life (km)

s=stroke length (m)

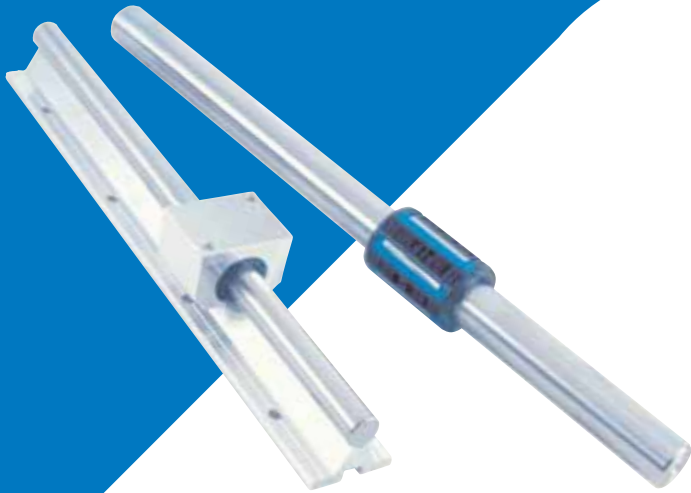
n=frequency of stroke per minute (cpm)

Quick-ship – Easy Serve Program from SKF®



Precision ground shaft

Class “L” precision ground shaft from 1/4" to 2"



- Same day shipment 1-10 pieces (Order received by 12:00N EST)
- 1-2 Day shipment 11-20 pieces
- No set-up fee
- Two regional cut centers to choose from
- Metric shafting (10 – 50mm diameter) in stock
- Ask your SKF representative about our OEM shaft stocking program

SHAFT DIAMETER	AISI 1055 Steel SKF P/N	Stainless Steel SKF P/N
4 1/4"	LJX 4 x ****	LJXR 4 x ****
6 3/8"	LJX 6 x ****	LJXR 6 x ****
8 1/2"	LJX 8 x ****	LJXR 8 x ****
10 5/8"	LJX 10 x ****	LJXR 10 x ****
12 3/4"	LJX 12 x ****	LJXR 12 x ****
16 1"	LJX 16 x ****	LJXR 16 x ****
20 1-1/4"	LJX 20 x ****	LJXR 20 x ****
24 1-1/2"	LJX 24 x ****	LJXR 24 x ****
32 2"	LJX 32 x ****	LJXR 32 x ****

**** Please indicate length in inches.

For more information on the complete line of products, contact your SKF Representative, call us at 800-541-3624 or visit us at

www.skfusa.com/inchlinearballbearings

Toll free 1-800-541-3624
Fax 610-861-3737

*Add one day for truck shipment (Weight or length restrictions may apply)
Valid for shaft cut to length, machined shaft upon request
Stainless steel and chrome-plated shaft available
Easy Serve delivery program available for profile rail guide series
Complete ball screw and spindle rebuilding capabilities*