EWELLIX

Specification sheet – Linear Ball bearing

Please complete the form with all available information and send it to your Ewellix representative or authorized distributor for product selection.

Ewellix contact	Date

General information

Customer

Company		
Address 1		
Address 2		
Post code / Zip	City	State
Country		

Contact

Contact name	
Job title	
Department	
Phone (including country code)	Mobile (including country code)
Mail	

Project title

Reason for request

Current product / brand		Description
○ Replacement	○ New design	○ Other

Application / Industry

○ Factory automation	○ Food and beverage	○ Machine tools	Description
○ Medical	○ Semiconductor	○ Other	

Export control and Ewellix policy (mandatory to mark)

○ The application is not subsidiary or part of industry of national defence and/or nuclear (also not with details of the function). The application is civil.

Commercial information

General

○ One shot business ○ Yearly repeating business	Quantity, pcs	Batch size, pcs	Start of supply, YYYY MM DD	Target price / each	Currency

Application description

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Stroke
mm

Shaft length
mm

Center distance between
bearings, c: mm
shafts, d: mm

or Short part dimensions
Length: mm
Width: mm

Guiding system
Maximum height: mm
○ No constraints

Required service life distance or time (fill in all fields)
Distance: km
Total time: h
Period of one cycle: s
Stroke of one cycle: mm

Required static safety (in accordance to your business and application)

Maximum speed 1)
m/s

Maximum acceleration 1)
m/s²

1) Here the maximum values. Enter load phase specific values in table "External loads and load phases"

Rigidity of guiding system
N/µm
○ No specific requirements

Running accuracy of guiding system
Parallelism in height: µm
Parallelism in sideward direction: µm

Environment

Presence of dust, dirt or fluids
- ○ Clean environment, e.g. laboratory
- ○ Standard industrial environment
- ○ Dirty environment, e.g. milling machine

Requirements on friction
- ○ Lowest possible friction
- ○ Standard friction
- ○ No requirement

Preferred sealing variant
- ○ With shields
- ○ With 1 double lip seal (-LS)
- ○ With 2 double lip seals (-2LS)
- ○ Additional sealing

○ Humid or corrosive environment
If yes, please describe:

Preferred material
- ○ No preference (standard)
- ○ Stainless steel balls and raceways (/HV6)
- ○ Stainless steel shaft
- ○ Chrome plated shaft

Temperature [°C]

Minimum	Operating	Maximum

○ Shock loads or vibrations
If yes, please describe:

Lubricant
- ○ Standard pre-lubrication by Ewellix, as stated in the catalogue.
- ○ Other — Please specify

Sketch of the application (or attach a drawing)

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Product details

Product designation (if already known)

Range
- ○ Compact range
- ○ Standard range

Bearing type
- ○ Linear ball bearing
- ○ Linear plain bearing

Bearing design
- ○ Closed design
- ○ Open design (for supported shafts)

- ○ Rigid (permissible shaft deflection without reduction ±5' of arc)
- ○ Self-aligning (permissbile shaft deflection ±30' of arc)

Needed accessories (for details see Ewellix publication Linear ball bearings and units)

○ Shaft	Designation: LJ ...	Length: mm	Shafting standard: ESSC ...	
○ Housing	Designation			
○ Single shaft block	Designation: LS ...			
○ Tandem shaft block	Designation: LE ...			

Linear ball bearings mounted as a complete system

○ System	Designation: LZ ...	○ System with drive, e.g. ball screw

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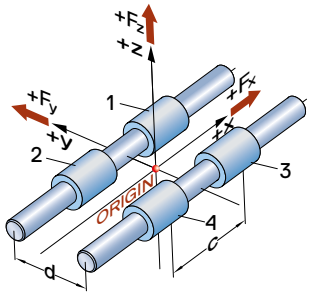
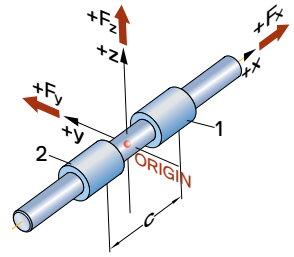
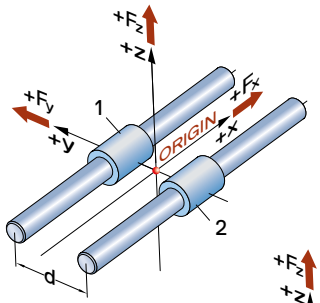
Input for dimensioning calculation



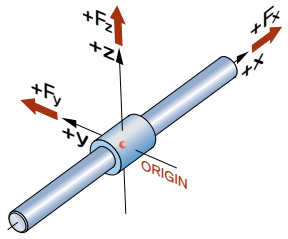
○ Config 24



○ Config 12



○ Config 22



○ Config 11

○ No preference ○ Other	If yes, please describe:

Moving direction (set coordinate system accordingly)

○ Horizontal ○ Vertical ○ Other	Please specify:

External loads and load phases

Forces in N, Lever arms in mm measured from defined origin (see graphics above). If the application has more than 3 load phases, please copy this page.

Load phase 1	
Stroke	mm
Acceleration	mm/s²
Speed	m/s

	Lever arms in		
Force F_x	x	y	z

Force F_y	x	y	z

Force F_z	x	y	z

Load phase 2	
Stroke	mm
Acceleration	mm/s²
Speed	m/s

	Lever arms in		
Force F_x	x	y	z

Force F_y	x	y	z

Force F_z	x	y	z

Load phase 3	
Stroke	mm
Acceleration	mm/s²
Speed	m/s

	Lever arms in		
Force F_x	x	y	z

Force F_y	x	y	z

Force F_z	x	y	z