EWELLIX
MAKERS IN MOTION

**Specification sheet – Precision rail guide**

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<br>○ Yearly repeating business | Quantity, pcs | Batch size, pcs | Start of supply, YYYY MM DD | Target price / each | Currency |
| | | | | | |

## Application description

## Specification sheet – Precision rail guide

**Stroke** mm

**Rail length** mm

**Length of shorter rail** mm

**Distance $B_1$** mm or **Distance $B_1$ + A** mm

**Guiding system**
Maximum height mm
○ No constraints

**Required service life distance or time** (fill in all fields)

| Distance | Total time | Period of one cycle | Stroke of one cycle |
|---|---|---|---|
| km | h | s | mm |

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

**Maximum speed** [1] m/s

**Maximum acceleration** [1] $m/s^2$

[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

○ Humid or corrosive environment
If yes, please describe:

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

Preferred material
- ◉ No preference (standard)
- ◉ Stainless steel
- ◉ Coated steel

**Temperature [°C]**

| Minimum | Operating | Maximum |
|---|---|---|
| | | |

○ Shock loads or vibrations
If yes, please describe:

**Lubricant in use**

○ Standard (SKF grease LGEP2)

○ Other
Please specify:

**Sketch of the application** (or attach a drawing)

## Product details

**Rail designation** (if already known)

**Precision class of rail**

| | | |
|---|---|---|
| ○ P10 (Standard) | ○ P5 (Medium) | ○ P2 (High) |

**Designation of rolling element assembly** (if already known)

**Anti-creeping system needed** (recommended for high accellerations or vertical systems)

| | |
|---|---|
| ○ Yes | ○ No |

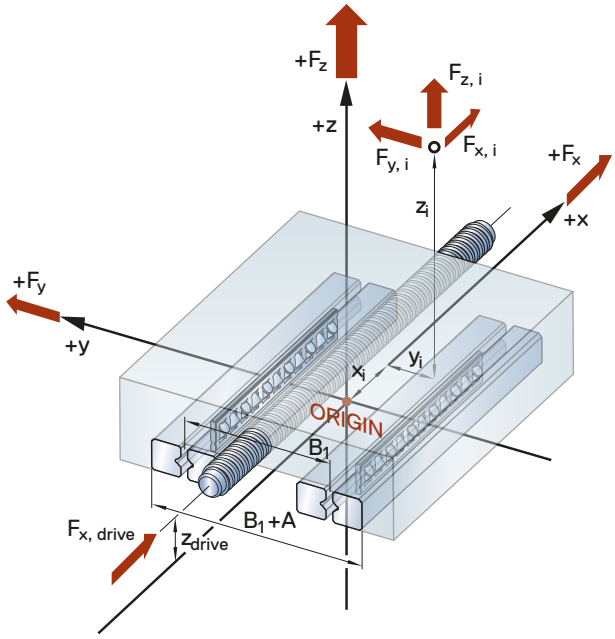
**Needed accessories** (for details see Ewellix publication Precision rail guides)

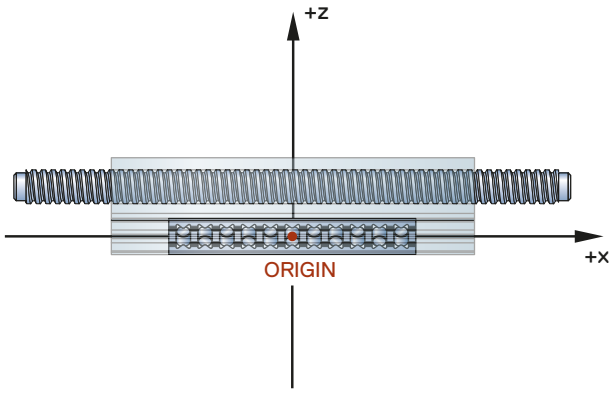
| | |
|---|---|
| ○ End pieces | Designation |
| ○ End pieces with wipers (requires long and short rails) | Designation |
| ○ Special mounting screws – LWGD | |

**Precision rail guides mounted into a complete system**

| | | |
|---|---|---|
| ○ GCL | ○ GCLA | ○ System with drive, e.g. roller screw |

## Input for dimensioning calculation




**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 graphcis above). If the application has more than 3 load phases, please copy this page.

| Load phase1 | | |
|---|---|---|
| Stroke | | mm |
| Acceleration | | mm/s² |
| Speed | | m/s |

| | Lever arms in | | |
|---|---|---|---|
| Force $F_x$ | x | y | z |
| | X | | |
| | X | | |
| | X | | |
| | X | | |
| | X | | |

| | | | |
|---|---|---|---|
| Force $F_y$ | x | y | z |
| | | X | |
| | | X | |
| | | X | |
| | | X | |
| | | X | |

| | | | |
|---|---|---|---|
| Force $F_z$ | x | y | z |
| | | | X |
| | | | X |
| | | | X |
| | | | X |
| | | | X |

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

| | Lever arms in | | |
|---|---|---|---|
| Force $F_x$ | x | y | z |
| | X | | |
| | X | | |
| | X | | |
| | X | | |
| | X | | |

| | | | |
|---|---|---|---|
| Force $F_y$ | x | y | z |
| | | X | |
| | | X | |
| | | X | |
| | | X | |
| | | X | |

| | | | |
|---|---|---|---|
| Force $F_z$ | x | y | z |
| | | | X |
| | | | X |
| | | | X |
| | | | X |
| | | | X |

| Load | | |
|---|---|---|
| Stroke | | mm |
| Acceleration | | mm/s² |
| Speed | | m/s |

| | Lever arms in | | |
|---|---|---|---|
| Force $F_x$ | x | y | z |
| | X | | |
| | X | | |
| | X | | |
| | X | | |
| | X | | |

| | | | |
|---|---|---|---|
| Force $F_y$ | x | y | z |
| | | X | |
| | | X | |
| | | X | |
| | | X | |
| | | X | |

| | | | |
|---|---|---|---|
| Force $F_z$ | x | y | z |
| | | | X |
| | | | X |
| | | | X |
| | | | X |
| | | | X |