

Features

QZAK

Standard products are made from stainless steel

As all parts are composed of stainless steel and plastic, this item suits to environment where rust is not allowed.

Compact design

Being lightened and designed to minimum size as much as possible, a miniature linear guide suits to high-speed driving (Max:3m/s).

Long life design

Raceway grooves are form of gothic arc that have high load capacity, therefore this item has long-life and has structure which can carry the load from all direction.

Maintenance is simple

Bearings are delivered in the state which Li-soap based grease is beforehand enclosed with. However, please supply grease periodically from oil hole of both sides.

Types

QZAK

1.LGM:

This bearing is the type generally used, and this is used by two rails and four bearings.

2.LGM-L:

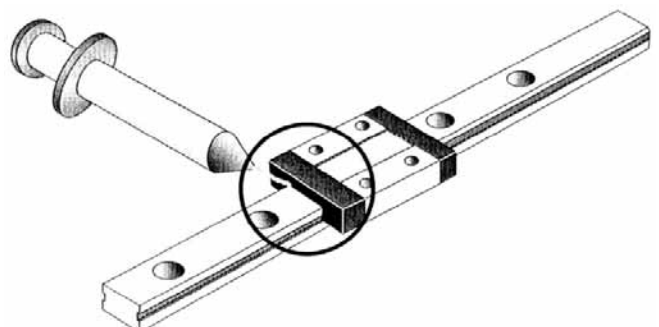
Designed long, this bearing suits to use by two rails and two bearings.

3.LGM-W:

Designed wide, this bearing suits to use by one rail and two bearings.

4.LGM-WL:

Designed wide and long, this bearing suits to use by one rail and one bearing.



Precision Standards

The following table5 shows precision standards for the LGM series.

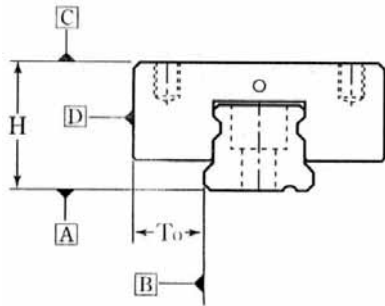
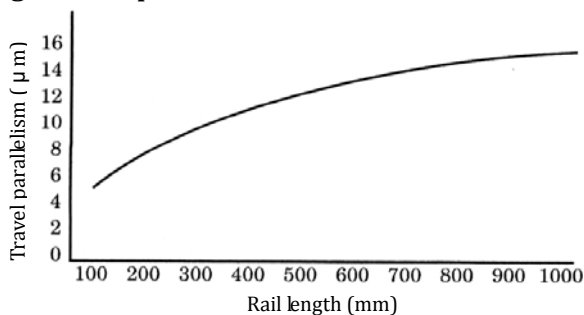


Table5: Precision standards unit:mm

Item	accuracy
H tolerance	± 0.020
H deviation between paired rails	0.015
T ₀ tolerance	± 0.025
T ₀ deviation between paired rails	0.020
C-face travel parallelism against A-face	See Fig2.
D-face travel parallelism against B-face	
Clearance	0 ~ +0.015

Fig2: Travel parallelism



Applicable temperature: -20 ~ +80

Rated Life

The rated life of the LGM series can be calculated by the following formula.

$$L_{10} = \left(\frac{C}{f_s \cdot P} \right)^3 \cdot 50km \quad (1)$$

L₁₀: Rated Life km

C: Basic dynamic load rating N

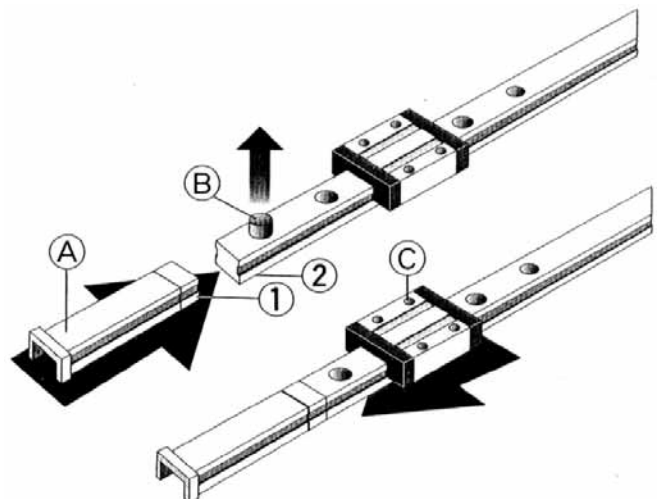
P: Acting radial load N

f_s: Impulse, vibration and/or speed factor; see table6

Table6: Impulse, vibration and speed factor

Conditions	f _s
When the reciprocating motion speed is V=300mm/sec or less without impact or vibration	1 ~ 1.5
When the reciprocating motion speed is V=1000mm/sec or less with slight impact or vibration	1.5 ~ 2.0
When the reciprocating motion speed is V=1000mm/sec or more with heavy impact or vibration	2.0 ~ 4.0

Installation



1. Installation of a bearing that inserted in a plastic rail A for assistance
Remove a end stopper B. With setting positioning pegs 1 of plastic rail A to one end of guiderail 2, insert carefully a bearing C into a guiderail
- 2.To remove a bearing C from guiderail, act in a reverse procedure carefully.