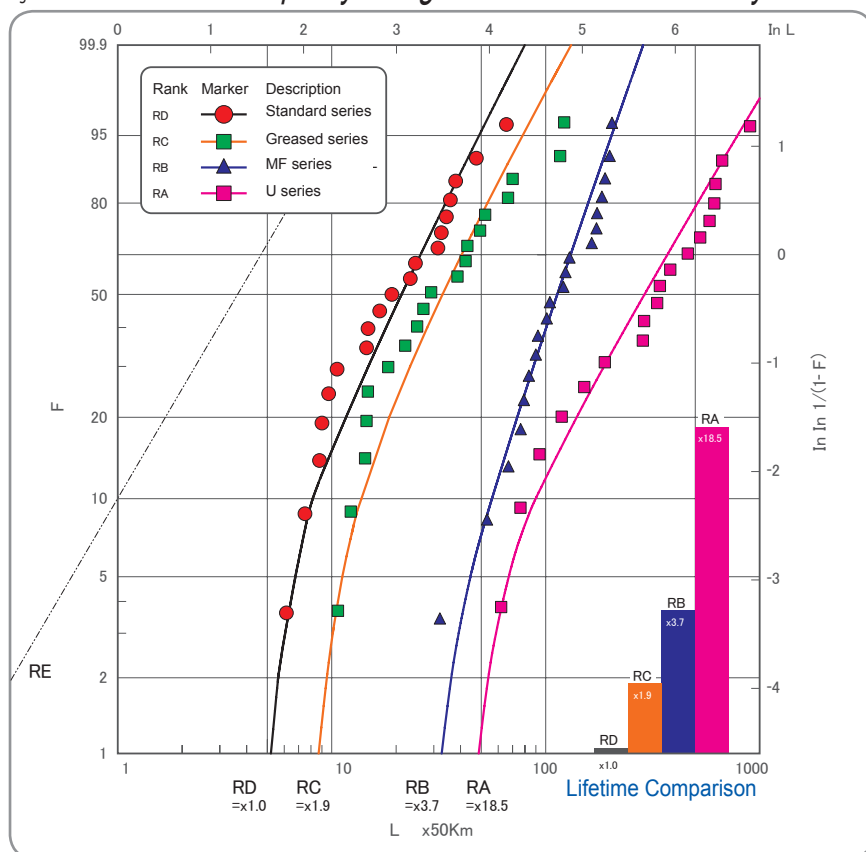


Fig.1 *OZAK is the best quality and guaranteed under reliability test.*



## Criterion of Selection for reliability design (RA to RD)

RD : Standard series : Standard reliability

RC : Greased series : Stable reliability under grease lubrication

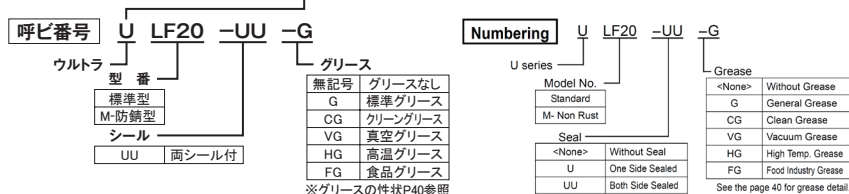
G, CG, VG, HG, FG 5 types of grease

RB : MF(Maintenance Free) series : High reliability with clean operation

RA : U(Ultra-Long life) series : Higher reliability under heavy moment load application

Every linear bearings can be U series.

Put "U" letter on the head. It means the bearing is U series.



## Selection for reliability design

### 1. RankA : U series (Ultra-Long Life)

To use of linear bearings, there are many instances where acts moment load such as shown in Fig.2. Even in such harsh conditions, U series durability of 18 times more than RankD (Standard product) by the processing technology and many years of experience of OZAK is guaranteed by the experimental data shown in Fig.1. In addition, you can greatly reduce maintenance cost.

In OZAK linear bearings, every models can be "U" ultra series. Please put "U" letter on the head of standard model number listed in the catalogue when you order.

We have explained in detail to the next page (28 to 29) with regard to the load distribution (edge load) and life calculation method under moment load acting. Please consult us when moment load is quite heavy. We will submit a technical calculation report.

### 2. RankB : MF series (Maintenance Free)

In order to fulfill much demands for clean circumstances and reduction of maintenance cost in recent years, the special seal was developed. As special seal structure shown in Fig.3 prevents almost grease leakage and forms enough oil film onto rolling contact area, MF series durability of 3.7 times more than RankD is guaranteed by the experimental data shown in Fig.1. Therefore you can greatly reduce maintenance cost.

In addition, rustproof type is also standardized and is suited to environments required corrosion resistance.

### 3. RankC : G series (Grease Lubrication)

In reciprocating mechanism for example linear bearings, linear guides, ball screws ball splines and so on, rolling elements must stop and go back to opposite direction. This means rolling elements speed(rotation and revolution) becomes zero in certain instant. Therefore oil film is eliminated and the life is affected adversely by occurring a slip of rolling elements. It's quite difficult to prevent occurrence of this phenomenon on the mechanism of the reciprocating motion bearing. The method of lubrication is the best solution from cost and performance points of views. Conventionally, we have requested customers to replenish appropriate grease of appropriate amount. OZAK revised the concept and arranged greased series that are suited to customers environment. G series durability of 2 times more than RankD is guaranteed by the experimental data shown in Fig.1.

OZAK prepares 5 types of grease as shown in Fig.4 (For general industry, clean room, vacuum, high temperature and food industry).

Fig.2

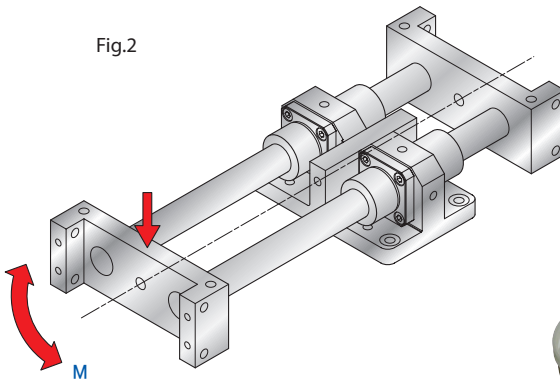


Fig.3

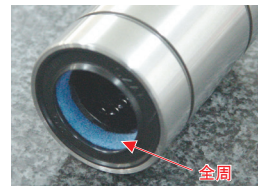


Fig.4