

Mounting Procedure and Maintenance Spherical Plain Bearing

Installation

- (1) Do not use the product in the manner that the permissible tilting angle is exceeded since doing so may damage the product.
- (2) The Spherical Plain Bearing is designed for use under a radial load. Do not use the product if the thrust load component or the load component in the thrust direction exceeds 50% of the resultant force consisting of the radial load and the thrust load.
- (3) When installing the Spherical Plain Bearing, pay attention to the mounting orientation so that the slit of the outer ring receives a minimum load.

[Temperature Range]

The permissible temperature range of the Spherical Plain Bearing is limited between -30°C and 80°C depending on the seal material and determined by the permissible temperature range of the grease used.

Lubrication

The spherical sliding surface of the Spherical Plain Bearing is seized with a solid lubricant film of molybdenum disulfide. This enables the Spherical Plain Bearing to be used over a relatively long period without further lubrication under a static load, in low-speed rocking motion or in intermittent rotary motion. However, it is generally necessary to replenish grease on a regular basis. If a heavy load is applied, consider using lithium soap group grease containing molybdenum disulfide. The inner and outer rings of the Spherical Plain Bearing have greasing holes as a means to facilitate the flow of the lubricant inside the bearing.

[Lubrication Interval]

Since the Spherical Plain Bearing is delivered without being applied with a lubricant, it is necessary to replenish an appropriate amount of grease after installing the Spherical Plain Bearing. We recommend filling grease also to the space surrounding the Spherical Plain Bearing. It is also recommendable to shorten the lubrication interval in the start-up period in order to lighten the initial wear and extend the service life.

The lubrication interval varies according to the magnitude of the load, frequency of the vibrations and other conditions. Provide lubrication while referring to the values in Table1 as a guide.

Table1 Lubrication Interval

Type of load	Required minimum lubrication interval
Unilateral load	G/ 40
Fluctuating load	G/ 180

G: Service life of the bearing (total number of rocking motions or total number of revolutions)