1.1. Structure and Features of the Linear Ball Slide

The Linear Ball Slide is a highly corrosion resistant slide unit that has an extremely low friction coefficient because stainless steel balls roll on four stainless steel needle roller raceways that are hardened and ground.
In addition, model LSP has a pinion gear in the center and a rack on the base to prevent the cage from slipping.
A ball slide equipped with a cylinder model LSC has a cylinder for drive in the base to downsize the system and reduce the space and the weight.
It components are all made of stainless steel, which is highly resistant to corrosion. Furthermore, since its inertia is small, the slide system is highly responsive to high speed.
By simply securing the Linear Ball Slide on the mounting surface, the user can easily achieve a linear guide mechanism. Thus, this slide system is optimal for locations requiring high accuracy, such as optic measuring machines, automatic recorder, small electronic-parts assembling machine, OA equipment and its peripherals.

●A Unit Type That Allows Easy Installation

The clearance and motion of the slider is adjusted to the best state. Therefore, a highly accurate slide mechanism can be gained by simply mounting the unit on the flat-finished mounting surface.

●Lightweight and Compact

A light aluminum alloy is used in the base and the slider to reduce the weight.

●Smooth Motion

The balls and the raceway (needle roller raceway) are in point contact, which causes the smallest rolling loss, and the balls are evenly retained in the ball cage. This allows the slide system to perform rolling motion at a minimal coefficient of friction (μ = 0.0006 to 0.0012).

●Highly Corrosion Resistant

The base and the slider are made of an aluminum alloy and their surfaces are anodized.
The balls, needle roller raceways and screws are made of stainless steel, making the system highly resistant to corrosion.