LH Series
Identification Number Ball Slide

**K1 Maintenance**

**-Free Lubrication System**

The NSK K1 lubrication system is a compact and effective oil lubrication unit that can be used as an auxiliary lubrication system. The unit is efficient and cost-effective, maintaining high levels of lubrication in various applications. It is designed to maintain long-term, maintenance-free usage.

**Features:**
1. **Long-term, maintenance-free usage.**
   - In mechanical environments where lubrication is difficult to apply, long-term running efficiency is maintained by using the NSK K1 in combination with grease.
2. **Prevention of oil-related environmental pollution.**
   - In conditions where oil affects the environment, or in situations with severe hygiene restrictions, sufficient lubrication is provided using the NSK K1 in combination with grease.
3. **Effective in environments where the lubricant is washed away.**
   - In facilities where lubricants are washed away with water or subjected to severe weather conditions, long-term running efficiency is maintained by using the NSK K1 in combination with grease. It is especially effective under hygienic conditions where oil cannot be dispersed.
4. **Maintains efficiency in dusty environments.**
   - In environments where oil and grease-whetting dust is produced, long-term efficiency is maintained by using the NSK K1 in combination with grease.

**Slide Dimensions with K1**

The table below provides dimensions for the various types of LH Series ball slides with K1 lubrication units. These dimensions are crucial for ensuring proper selection and integration of the slides in your mechanical systems.

**Assembly Instructions**

**K1 Lubricating Unit for Linear Guides**

1. **Slide linear bearing on to the linear rail, using the plastic provisional rail supplied.**
2. **Prevent the grease fitting from the end of the bearing.**
3. **Remove the Phillips screws (2 pairs).**
4. **Remove the end seal and oil seal (removed).**
5. **For maintenance-free operation, install a breakable plug for engineering options, see points 10 & 11 below.**
6. **Install the outer plate on the K1™ lubricating unit, against the seal.**
7. **Install K1™ lubricating unit without fixing rings, so it can be removed over the seal.**
8. **Put the times (3) fixing rings in position on the K1™ lubricating unit.**
9. **Replace the outer ring, in front of the K1™ lubricating unit.**
10. **Install connector screws for grease fitting.**
11. **Replace the grease fitting or connection screws.**
12. **Install the extension Phillips screws (2 pieces, supplied with the K1™ seal kit).**

**Protector and Double Seal**

Travel length is reduced by the thickness of the end seal on the rail side. Check the value of “V” in the table below when calculating the travel length.

**End Cap**

The protector consists of a steel plate at the side end or a cast iron plate at the rail end.

**Protector Seal**

The protector spans a maximum flange width of 100 mm, and spans a maximum rail width of 100 mm.

**Adapters**

These parts connect piping to the tapped hole when the external fitting is frequently replaced.

**Fig. 7** Protector and Double Seal

**Fig. 8** Protector and Double Seal