TKZ Clutch Release Bearings

Lightweight, low-cost bearings for optimum performance and extended operating life
NSK has been a leader in the design and manufacture of clutch release bearings since 1960. Recently, in response to continued requirements for improved fuel efficiency and greater environmental friendliness, NSK has developed TKZ clutch release bearings—lightweight and low-cost self-centering bearings with resin sleeves.

**Features**

- **Reduced weight and cost**
  Substantial weight and cost reductions have been achieved by conducting a strict review of the dimensions, shape and material of previous NSK products. The weight of the new bearing has been cut approximately in half compared to NSK’s previous model.

- **Long life**
  Life exceeding two million clutch release strokes (equivalent to 200,000 km) is achieved through highly effective seals, clean bearing steel and the higher rotational accuracy facilitated by the newly designed one-time self-centering mechanism (see Figure 1).
  The bearings are prepacked with NSK’s long-life ENC grease, which has a wide temperature range and outstanding high-speed performance (see Figure 2).

- **Low torque**
  By adopting inner-ring rotation and light-contact seals, low torque is achieved while grease leakage is minimized.

- **Low noise**
  The noise level of TKZ bearings is less than 55 dB when new.

- **No shaft wear**
  With NSK’s new resin sleeve, even aluminum shafts are free from wear.