

Tapered Roller Bearings - Low-Friction TRB with Plastic Cage

This new Tapered Roller Bearing with plastic cage is dedicated to the automotive transmission market and enables a 20% friction reduction compared with conventional products using a steel cage. This development is particularly efficient under severe lubrication conditions such as when low viscosity transmission fluids are used or when the oil pump is shut down during the electric-motor-only mode in hybrid vehicles.

Product Features

- The new Tapered Roller Bearing features a plastic cage which enables the creation of more intricate shapes and provides the following characteristics:
- Interior bearing space requirements are minimised to avoid any surplus volume of lubricant which reduces agitation resistance
- A stable supply of lubricant to the sliding surfaces of the rollers is ensured via the addition of a dedicated oil pool
- In order to fully meet the various operating conditions, the cage is available in three plastic materials: PA46, PA66 and L-PPS (linear polyphenylene sulphide) with special additives and high temperature resistant design

Benefits

- Bearing friction reduced by 20% compared with conventional steel cage Tapered Roller Bearings
- Product capable of operating with low-viscosity oils and with a very low volume of lubricant
- Developed with NSK proprietary analysis technology which ensures an optimum cage strength for the highest reliability.

Condition Description

- Low Friction

Industries

- Automotive

