

SKF Hybrid pinion unit

This pre-assembled unit is a solution for pinion shafts that combines an arrangement of an angular contact ball bearing and a tapered roller bearing.

In power take-off unit applications as well as rear differentials constant high guiding accuracy of the pinion shaft is essential for the optimal working conditions of the pinion arrangement. A major problem is the correct adjustment of the bearing preload. Also temperature and settings influence the preload and the tolerances of the bearing arrangement. In order to cope with these problems as well as to reduce the number of parts to be assembled it is a competitive advantage to use the SKF Hybrid Pinion Unit.

Available applications

- Final drive/rear drive unit
- Power take-off unit

Features of the product

- Combined outer ring
- Pre-assembled unit
- Tapered roller bearing and angular contact ball bearing combined in one unit
- Replaces traditional single bearing arrangements

- Pre-adjusted clearance
- Ready to fit

Design features

- Pinion unit and internal geometry are customized to the particular conditions of the application
- Flanged and non-flanged versions possible
- Integrated seal function as an option

Benefits of the product

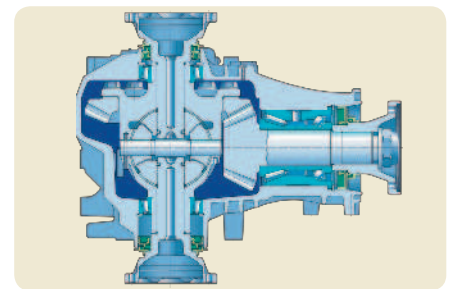
- Provides correct and stable position of pinion shaft
- Less power loss
- Stiffer shaft support in light alloy housing under all operating conditions
- Reduces the operating temperature
- Less tolerances to be respected by customer
- Minimized impact due to temperature change
- No setting effect
- Very easy preload adjustment
- Reduces noise

Competitive advantages

- Higher efficiency rate
- Cost reduction potential reduction potential by simplified assembly process
- Improved fuel efficiency
- Simplified adjustment process
- Simpler logistics due to less parts



SKF Hybrid Pinion Unit is a combined arrangement of a tapered roller bearing and an angular contact ball bearing



SKF Hybrid Pinion Unit for power take-off units and final drives

- Improved bearing service life
- No knuckling when changing from driving to coasting operation

SKF is the leading bearing supplier for automotive gearboxes. Through our long and in depth cooperation with gearbox producers all around the world we have acquired unique know-how. Supported by our own bearing lifetime calculation software, we are the ideal partner for developing optimized solutions for gearbox design and production.

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