

Reducing friction for greater efficiency



Environmental benefits

- · Reduced energy use
- Reduced CO₂ emissions
- Reduced maintenance



SKF Sealed Energy Efficient deep groove ball bearings reduce energy use

SKF Sealed Energy Efficient deep groove ball bearings can reduce frictional losses in the bearing by 30% or more in average*

*Depending case by case on specific loading conditions Due to the challenges related to reducing energy use, technologies that enable even a small reduction in energy consumption are important. In light-to-medium load applications, SKF Sealed Energy Efficient deep groove ball bearings can help.

Due to its improved design features, the SKF Sealed E2 deep groove ball bearing significantly reduces friction – by 30% or more in average – compared to standard SKF Explorer sealed bearings.

The new assortment of SKF Sealed E2 deep groove ball bearings is designed for applications that must operate in highly contaminated environments. These include two wheelers, water pumps, electric motors, washing machines, power tools, textile machines, conveyors, elevators, escalators, ski lifts and cableways. These sealed bearings, which

can reduce frictional losses, have a unique integral seal that effectively keeps the lubricant in and contaminants out of the bearing.



SKF BeyondZero solutions can help reduce CO_2 emissions, preserve limited resources and protect the environment from the use and spread of toxic substances. For more details, including documentation of reduced environmental impact, visit www.beyondzero.com



More efficiency for reduced energy consumption

Features

- Optimized internal geometry
- Low friction grease
- Standard ISO dimensions
- · New polymer cage
- New low friction NBR seal has a low modulus of elasticity
- Low friction seal for highly contaminated environments
- · Optimized grease fill

Benefits

- 30% or more in average friction reduction compared to the sealed SKF Explorer bearing range
- Extended service life
- Dimensionally interchangeable
- Increased speed capabilities
- Lower running temperature due to reduced friction
- Highly effective seal
- Solution can be tailored for internal radial clearance
- Improved application efficiency
- Full range available up to 52 mm OD
- Suitable for highly contaminated environments

Based on the shielded SKF Energy Efficient deep groove ball bearing launched in 2008, SKF Sealed E2 deep groove ball bearings feature an optimized internal geometry, low friction grease, a redesigned cage and a new, low friction double lip seal.

About the seal

The new double lip seal is made of oil and wear-resistant NBR that is reinforced with a sheet steel insert.

What makes this seal unique is the low modulus of elasticity that the seal exhibits, enabling it to provide optimized contact pressure against the seal counterface. This effectively keeps the lubricant in and contaminants out of the bearing, while generating a minimum amount of friction.

Sealed variant can double bearing service life

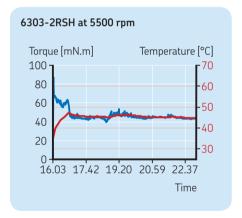
Typically, in light-to-medium load applications, the service life of a sealed bearing is determined by the service life of the grease.

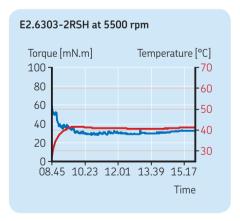
Factors that affect grease life include frictional heat generated by the bearing and the ingress of contaminants.

With sealed SKF E2 deep groove ball bearings, the impact of both of these factors is reduced. The bearing's internal design, in combination with SKF's low friction grease, reduce frictional heat and the seal, which is highly effective even in very contaminated environments, protects the lubricant.

Tests show that SKF Sealed Energy Efficient deep groove ball bearings can double bearing service life when compared to a sealed SKF Explorer bearing, to help reduce total cost of ownership.

The sealed variant is available in different sizes up to a 52 mm OD.





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