

Why SKF?

SKF Explorer four-point contact ball bearings



A number of optimized design features enable SKF four-point contact ball bearings to run longer and more reliably, while reducing heat, noise and vibration levels. The bearings are made from extremely clean steel that has undergone a unique SKF heat treatment to provide outstanding strength, stiffness and wear-resistance. An improved brass cage is lighter, to reduce inertia forces. It also provides better ball guidance. A PEEK cage, which combines the advantages of light-weight plastic with the durability and performance of a brass cage is also available.

A shoulder recess on the inner ring provides additional lubrication improvements, and a redesigned raceway shoulder transition makes the bearings capable of carrying increased thrust loads.

SKF Explorer four-point contact ball bearings, which are manufactured to P6 dimensional and running accuracy, have a 35° contact angle.

Common applications

- Compressors
- Industrial transmissions
- Railway drive systems
- Automotive drive systems

Product features

- Improved brass cage
- P6 running accuracy and P6 dimensional accuracy
- High degree of stiffness
- Manufactured from ultra-clean steel
- Unique heat treatment
- Unique raceway-shoulder transition
- High performance PEEK cage
- Unique inner ring design

User benefits

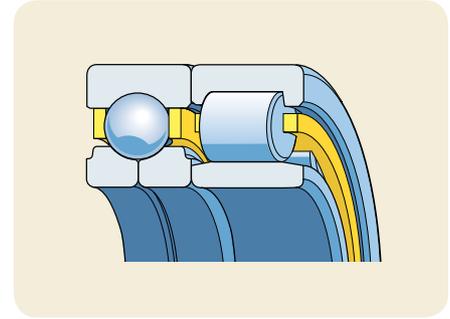
- Extended bearing service life
- Accommodates heavier axial loads
- Reduced lubricant consumption
- Reduced noise and vibration levels
- Reduced heat generated by the bearing



Redesigned inner ring

SKF Explorer four-point angular contact bearings feature a newly designed inner ring that has recessed shoulders. The recessed shoulder design improves oil flow into the bearing and optimizes stress levels in the inner ring cross section. The result is lower heat generation and a reduced risk of fretting

corrosion. The design improvement also minimizes ring deformations that could affect the contact angle and clearance.



Re-engineered brass cage

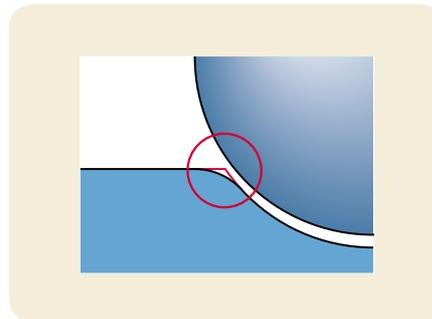
The re-engineered machined brass cage reduces heat, vibration and noise levels generated by the bearing. It also maximizes the effectiveness of the lubricant. Together, these benefits contribute to extended bearing service life. The re-engineered machined-brass cage is lighter than previous designs to reduce inertia forces.

It also improves ball contact in the cage pocket, improves lubrication and running accuracy, and lowers imbalance forces. Alternatively, a PEEK cage, which combines the advantages of light weight with the performance and durability of brass, is also available.



Improved raceway-shoulder transition

The ground transition between the bearing raceway and shoulders reduce contact and edge stresses, making SKF Explorer four-point angular contact ball bearings capable of carrying increased thrust loads. This unique transition also provides extended bearing service life and a higher safety factor.



Unique heat treatment

Manufactured from ultra-clean steel and using an unique heat treatment process, SKF Explorer four-point contact ball bearings offer maximum hardness for optimum wear-resistance, and dimensional stability up to +150 °C for longer service life. Additional benefits include an increased safety factor and uptime.



Improved running accuracy

SKF has upgraded the balls in SKF Explorer four-point contact ball bearings to improve running accuracy and reduce heat, vibration and noise levels generated by the bearings. The upgraded balls also contribute to decreased lubricant consumption and longer bearing service life.



An SKF Documented Solution specialist can show you the approximate return on investment (ROI) you can expect to receive by using this product in your application. Ask your SKF Authorized Distributor or SKF representative for more details.

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