

**FAG**

**L** **ow noise.**  
**L** **ow friction.**  
**N** **o dust. Ever.**

FAG Generation C deep groove ball bearings

SCHAEFFLER GROUP



# Low noise

Cut noise levels with FAG Generation C deep groove ball bearings

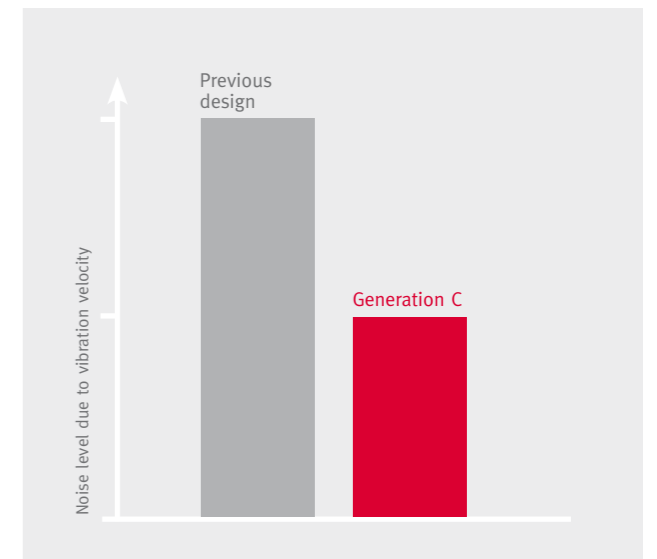
Noisy bearings are bad news for electric motors. The same applies for all equipment and appliances in the home or at the office. This is because they are all subject to strict controls regarding noise, environmental protection and occupational safety.

Although the deep groove ball bearing is one of the quietest bearings available, it can still generate some noise since it transmits vibrations to its surroundings. The main requirements placed on modern deep groove ball bearings are therefore optimum vibration behavior and low running noise without any limitations on speed, load carrying capacity and operating life.

We analyzed the causes of noise using the most up-to-date testing methods. Our findings helped us to completely improve the internal design of the bearing and this is how the new Generation C of FAG deep groove ball bearings came into being.

Your benefit:

**50 percent less noise**



#### Technical features:

- Improved raceway surfaces
- Improved ball quality
- Optimized osculation
- Narrower manufacturing tolerances
- New riveted steel cage
- Large selection of special greases



# Low friction

Cut energy consumption with FAG Generation C deep groove ball bearings

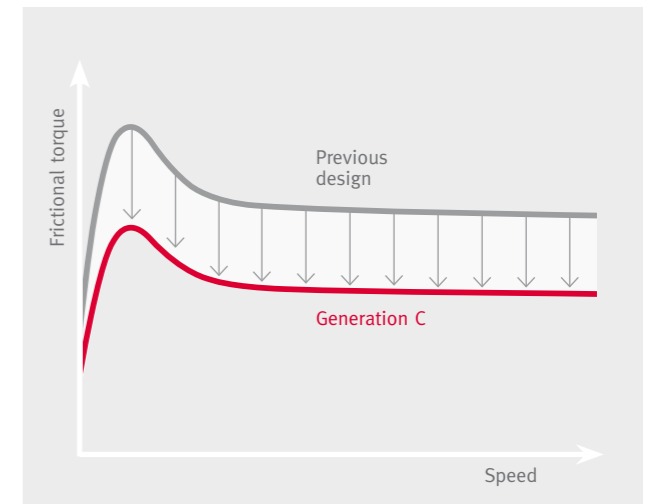
The efficiency of electric motors is constantly being increased. This target also applies for household appliances, tools and office equipment. One option is reducing the power loss of the bearing supports.

This is clearly a case for deep groove ball bearings. These bearings are characterized by particularly low frictional torque and are also especially suitable for high speeds.

By using improved manufacturing methods, we have improved the surfaces of raceways by making them “smoother” and have optimized the oscillation, in order to lower the friction even further. Low-friction FAG Generation C deep groove ball bearings.

Your benefit:

**35 percent less friction**



#### Your advantages:

- Reduced energy consumption
- Reduced heat generation
- Long grease operating life
- Long bearing operating life
- Higher speeds
- Lower overall costs



# No dust. Ever.

Increase operating life with FAG Generation C deep groove ball bearings

The operating life of a power tool often depends on the quality of the bearing seal.

The seal prevents contamination or moisture from entering the bearing, which in turn prevents premature failure of the power tool. The seal also prevents premature failure by keeping the grease inside the bearing.

Sealed FAG Generation C deep groove ball bearings offer the perfect balance between friction and sealing action. They are greased for life with high-quality grease and are also suitable for high speeds, depending on the seal type.

The star of the show is the new HRS lip seal made of nitrile butadiene rubber. At high speeds in particular, this seal has lower friction and generates less heat than the previous RSR seal. The effectiveness of the sealing action has also been increased.

Your benefit:

**Robust, reliable and durable**

Sealing action	Z	BRS	HRS
Retaining grease in the bearing	+	++	++
Dust, dry contamination	+	++	++
Damp atmospheres	+	+	++
Liquid spray	-	-	++
Rotating bearing outer ring	+	++	++
Low pressure differences	-	-	++

Use is: [++] particularly suitable [+] suitable [-] unsuitable

#### Your advantages:

- Long bearing operating life
- Maximum protection from contamination and water
- Reduced friction and heat generation
- Long grease operating life, lubricated for life
- Higher speeds
- Improved running behavior

## Extremely versatile – FAG Generation C deep groove ball bearings

Ball bearings are by far the most popular rolling bearings. They dominate the current demand at more than 80 percent of requirements. The enormous variety of designs is therefore hardly surprising.

FAG Generation C deep groove ball bearings are available in outer diameters from 26 to 90 millimeters. They are available with riveted steel cages as standard or with polyamide cages on request. They can be supplied in tolerance class P6 or P5 (on request). These bearings can be ordered with one or two gap seals (Z, 2Z), as well as with one or two lip seals (HRS, 2HRS), or on request with low friction non-contact labyrinth seals (2BRS). Of course, the bearings are also available with larger (C3, C4) or smaller (C2) radial internal clearances.

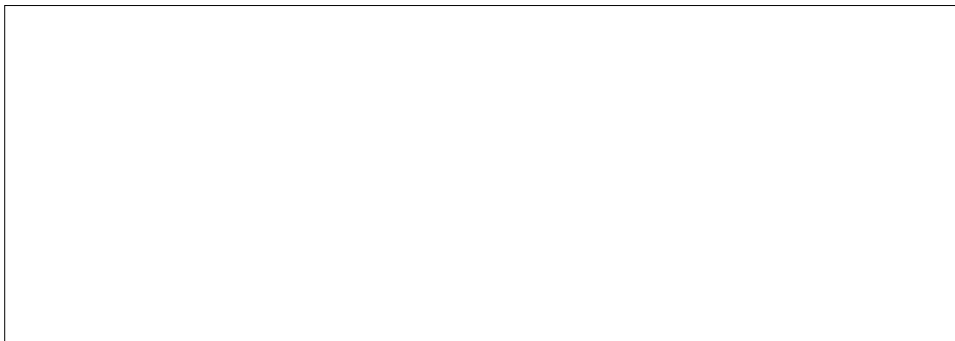
And if this is not enough, you don't have to make any compromises. We can supply you with a customized solution for your needs.

In 1883, Friedrich Fischer designed a ball grinding machine. The ball grinding machine made it possible to grind balls with high precision and in large volumes for the first time. This pioneering invention of one of our companies' founders is considered today as the starting point of the ball bearing industry.

125 years later we are reaching another historic milestone with the new FAG Generation C deep groove ball bearing.

To find out more, just request a copy of our new Technical Product Information, TPI 165. You can also download a copy at:

[www.FAG-GenerationC.com](http://www.FAG-GenerationC.com)





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FAG Generation C deep groove ball bearings Contact us at [www.FAG-GenerationC.com](http://www.FAG-GenerationC.com)

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