

**FAG**



## **Increased Efficiency for Electric Motors**

**FAG Generation C Deep Groove Ball Bearings**

**SCHAEFFLER GROUP**  
INDUSTRIAL

High Customer Benefit

Generation C

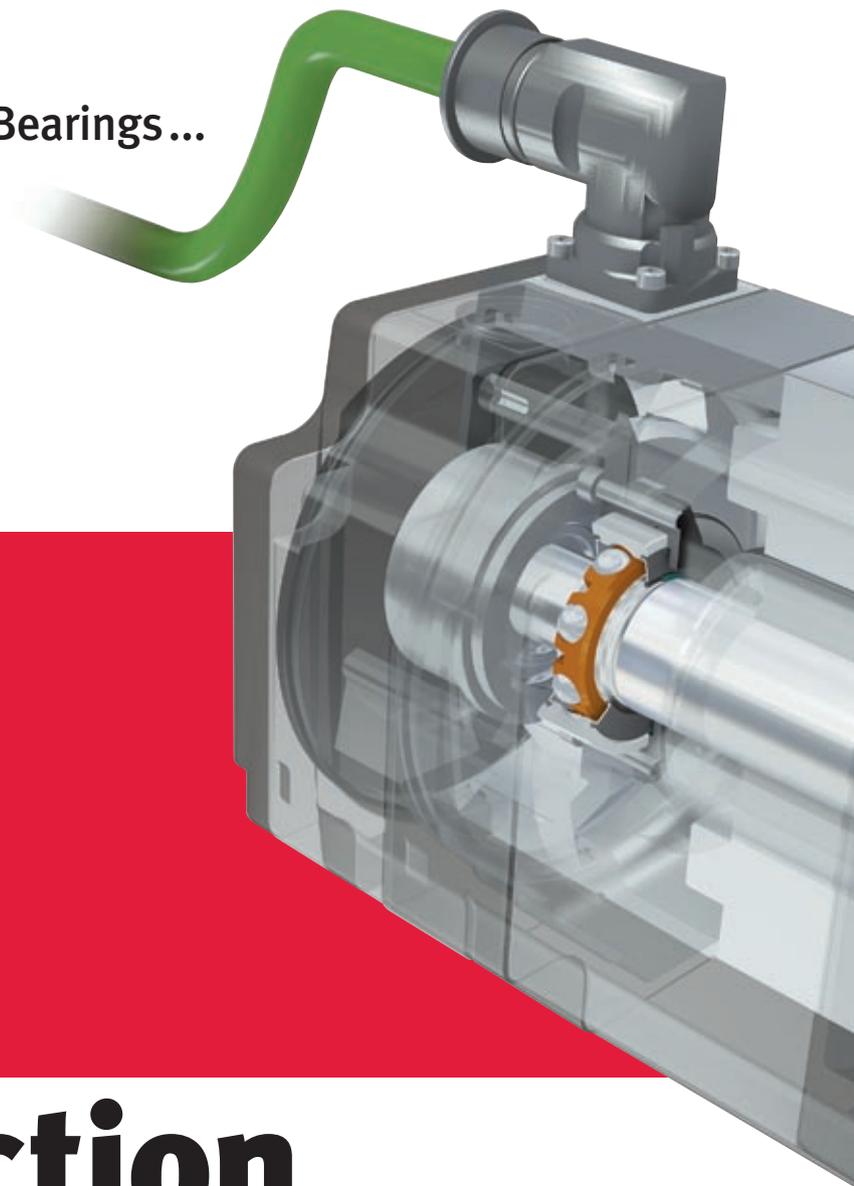
Deep Groove Ball Bearings...

35 %

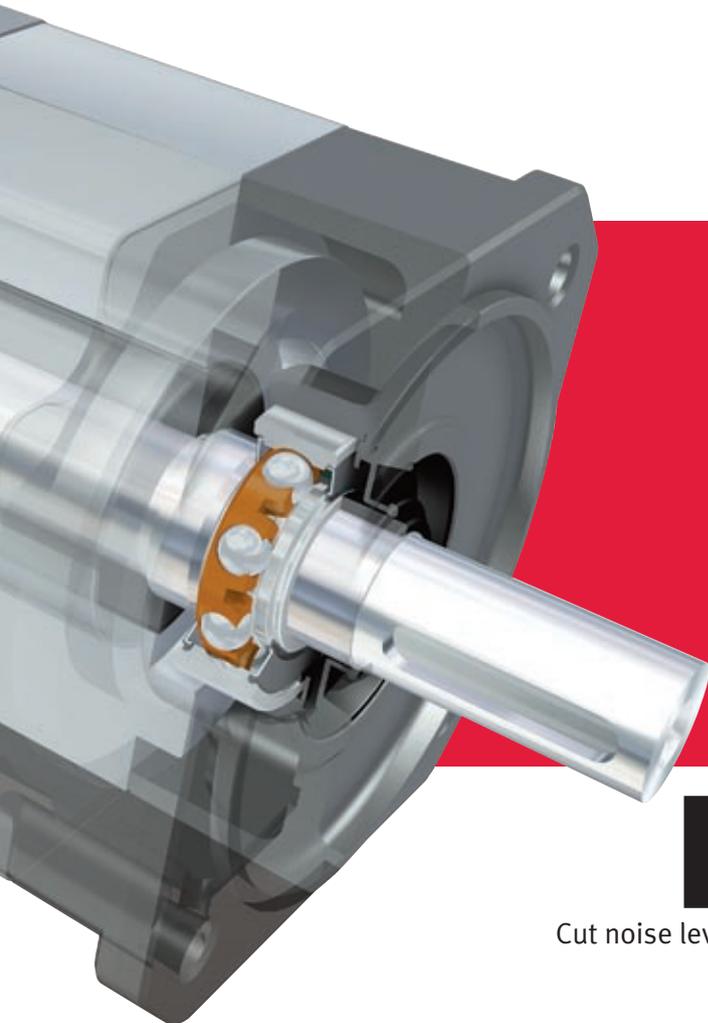
less friction

 **Low friction**

Cut energy consumption with FAG Generation C deep groove ball bearings



... Prove Their Technical  
Superiority in Electric Motors



**50%**  
less noise

**Low noise**

Cut noise levels with FAG Generation C deep groove ball bearings

## Generation C Deep Groove Ball Bearings...

### Optimized raceways

- Reduced friction
- Improved raceway surfaces
- Optimized osculation

### New cage design

- New riveted steel cage
- Higher stability yet less noise
- Suitable for higher speeds
- Less sensitive to shocks
- With polyamide cage on request

### Improved seal concept

- New HRS lip seals made from nitrile butadiene rubber
- Significantly reduced frictional torque and heat generation in particular at higher speeds
- Improved sealing effect
- Long bearing operating life
- Higher speeds





**... Have an Inside Construction That is  
Perfectly Matched to Use in Electric Motors**

**Specially tested lubricating greases**

- Long grease operating life
- Effective lifetime lubrication and anti-wear protection (verified in FE8 and FEg tests)
- Special greases matched to the application's individual temperatures and speeds

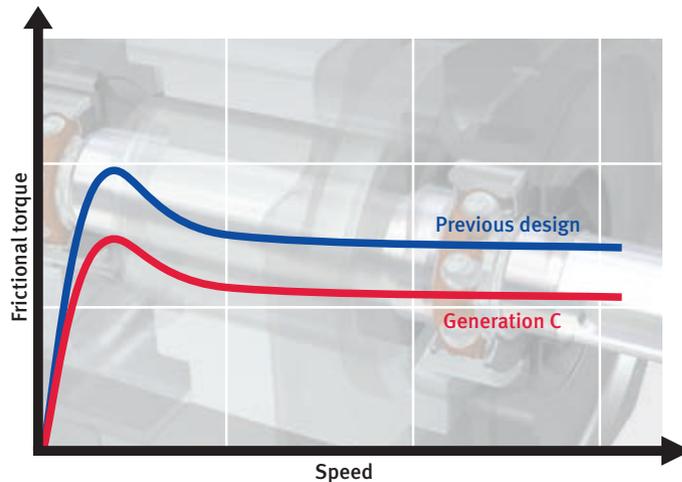
**Also available as hybrid bearings**

- Steel rings with ceramic balls
- Highly effective current insulation
- Significantly higher limiting speed
- Considerably longer grease operating life
- Good dry-running characteristics, less wear in case of insufficient lubrication
- Reduced friction and heat generation

**Surface coatings**

- Against corrosion: Corrotect®
- Against fretting corrosion: thin layer chromium plating
- Against wear: Triondur® (DLC)
- Other coatings available on request

## Generation C Deep Groove Ball Bearings are Extremely Low Friction ...



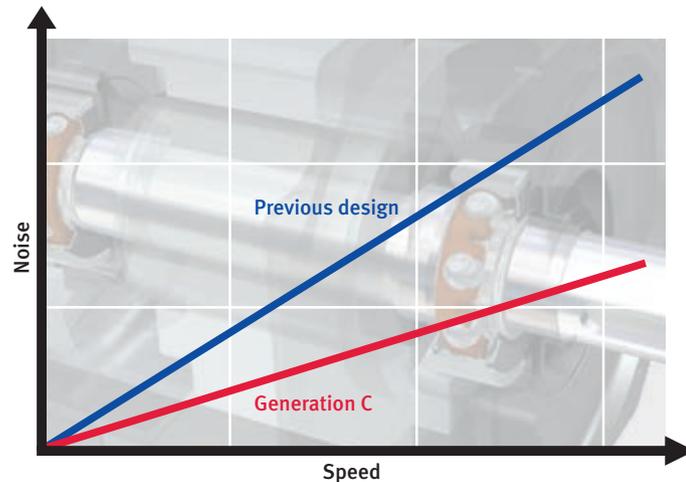
The efficiency of small electric motors with a low capacity is for the most part determined by the power loss of the bearings.

The new design and high-quality components considerably reduce the friction in the bearing. As a result, the efficiency increases significantly. This also reduces energy consumption, which in the end yields economical and ecological advantages for motor manufacturers, plant operators as well as for the environment.

# **Low friction**

Cut energy consumption with FAG Generation C deep groove ball bearings

## ... and Very Quiet and Cut the Energy Consumption of Electric Motors



Noise behavior has always been the major quality feature in the electric motor industry. The deep groove ball bearing is the machine element that separates static components from rotating components and therefore inevitably causes vibration and noise.

With our new design, we and our customers are on our way to meeting future environmental requirements.

# Low noise

Cut noise levels with FAG Generation C deep groove ball bearings



Interested? Then ask us for more information. You will find all technical data in the new publication TPI 165 “Generation C Single Row Deep Groove Ball Bearings”. Visit us online at [www.FAG-GenerationC.com](http://www.FAG-GenerationC.com) for detailed information.

### **Schaeffler KG**

Georg-Schaefer-Strasse 30  
97421 Schweinfurt (Germany)  
Internet [www.fag.com](http://www.fag.com)  
E-Mail [info@FAG-GenerationC.com](mailto:info@FAG-GenerationC.com)

In Germany:

Phone 0180 5003872

Fax 0180 5003873

From Other Countries:

Phone +49 9721 91-0

Fax +49 9721 91-3435