

**FAG**



## Wheel Bearings for Two-Wheel Vehicles

Unbeatable reliability and low friction

**SCHAEFFLER**



## “Going green” on two wheels...

Whether they're dealing with high-performance motorcycles designed for maximum fun on the road or durable two-wheelers for everyday use, riders' requirements always remain the same: To think about the environment and save fuel, even in dusty and wet conditions. We have the solution to these apparently contradictory requirements with an unbelievably simple concept: A new and extremely robust wheel bearing that reduces friction by 30%.

### Combination package from Schaeffler

How is something like this still possible today? To achieve this significant reduction in the friction values, we first adapted the internal construction and the seal of our bearing to produce maximum energy efficiency. The sealing action of the bearing has also been significantly improved thanks to the innovative design of the sealing lip. What is more, we use an especially water-resistant, high-quality grease that provides excellent wear protection.

### The following types are available:

6201-C-2ELS-L100-FX

6202-C-2ELS-L100-FX

6203-C-2ELS-L100-FX

6301-C-2ELS-L100-FX

6302-C-2ELS-L100-FX

Other types are available on request.

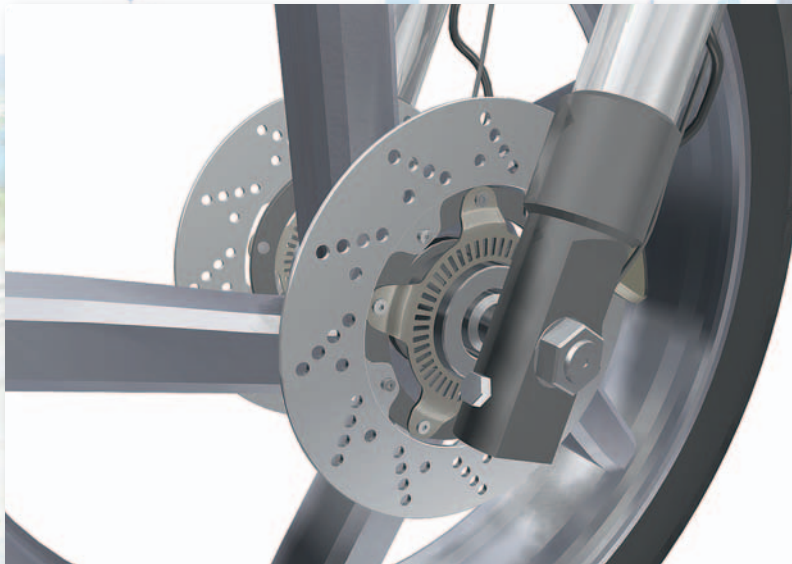
**30%**  
less friction



## ... with FAG wheel bearings

The new wheel bearing for two-wheel vehicles is a robust deep groove ball bearing with lip seals on both sides that has been specially developed for applications that utilize a rotating outer ring. Its main advantage is the unbeatable combination of reliability and energy efficiency that it provides. This is especially so at high speeds, where the bearing's frictional torque and thus the loss of power is significantly reduced.

The bearing is of course interchangeable with the standard types.



The new FAG wheel bearing ...



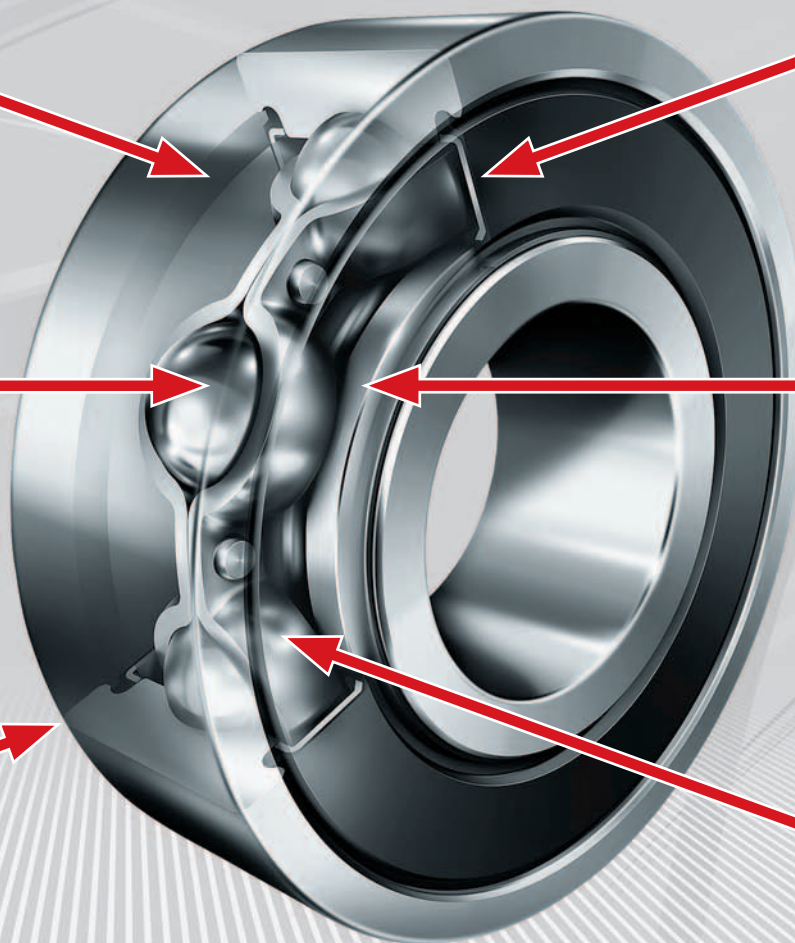
... improves your motorcycle's fuel economy and saves you money

# Reinventing the Wheel Bearing

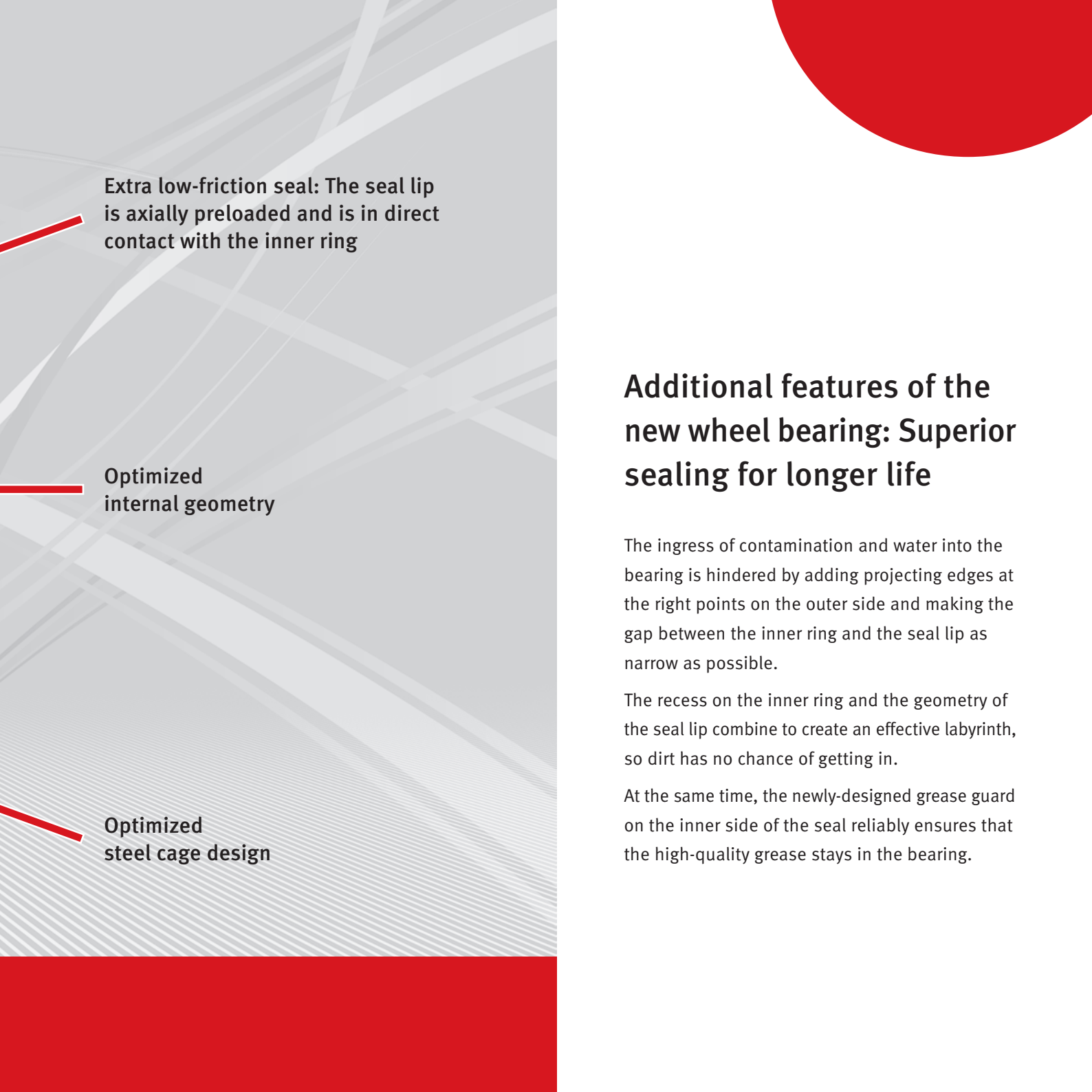
Raceways with reduced surface roughness

Premium ball quality

Dimensional and running accuracy P6,  
P5 also available on request



**Bearing redesigned. Friction reduced by one third.  
What plays the biggest part? The new seal!**



**Extra low-friction seal: The seal lip is axially preloaded and is in direct contact with the inner ring**

**Optimized internal geometry**

**Optimized steel cage design**

## **Additional features of the new wheel bearing: Superior sealing for longer life**

The ingress of contamination and water into the bearing is hindered by adding projecting edges at the right points on the outer side and making the gap between the inner ring and the seal lip as narrow as possible.

The recess on the inner ring and the geometry of the seal lip combine to create an effective labyrinth, so dirt has no chance of getting in.

At the same time, the newly-designed grease guard on the inner side of the seal reliably ensures that the high-quality grease stays in the bearing.



- Extends the operating life
- Requires little energy
- Remains very reliable even in harsh operating conditions
- Reduces maintenance outlay and operating costs



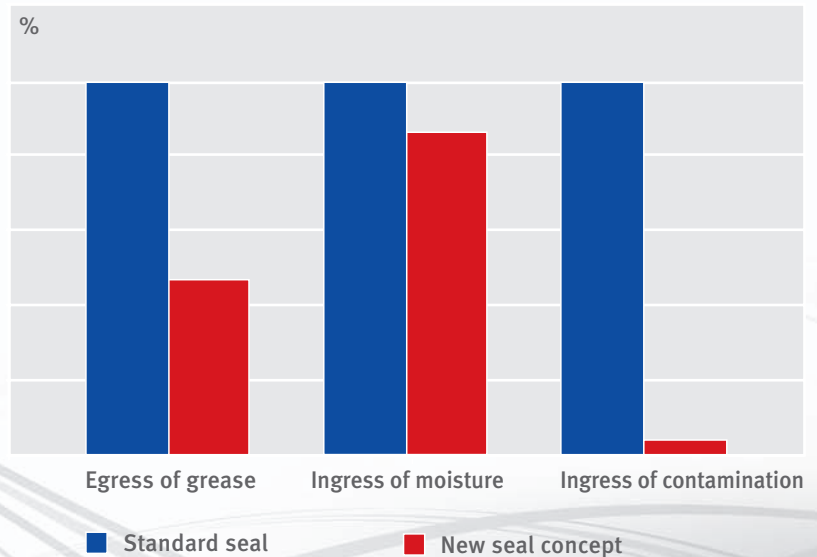
**100%**  
customer benefit

## The benefit for you: Tested quality

The efficiency of the seal and the frictional torque of the bearing were compared with those of a product from one of our premium-segment competitors in a benchmark test.

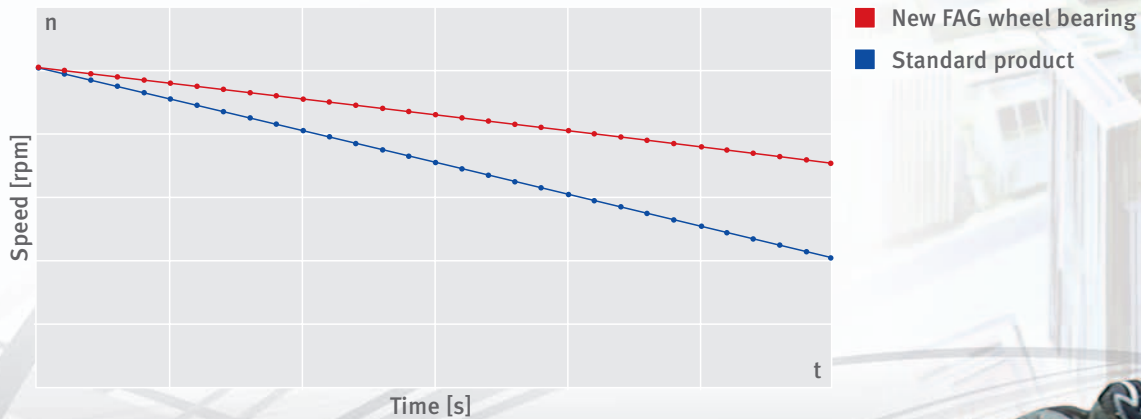
### Improved sealing action ...

In practice, this means a verifiable reduction in both the ingress of contamination and moisture and the egress of grease.



### ... and energy efficiency in tests

In a second test, we accelerated both bearings up to the same speed and measured the time that each bearing continued to run before coming to a standstill. The results speak for themselves: The rotational speed of the FAG wheel bearing with optimized friction decreases at a significantly lower rate than that of its counterpart. Conclusion: The FAG deep groove ball bearing runs for significantly longer while using the same amount of energy.



### Use our technical expertise!

We will be happy to provide you with the relevant results from our existing frictional torque measurements for the load conditions and speed in your application.



**Schaeffler Technologies AG & Co. KG**

Industriestrasse 1 – 3  
91074 Herzogenaurach  
Germany  
Internet [www.ina.com](http://www.ina.com)  
E-Mail [info@schaeffler.com](mailto:info@schaeffler.com)

In Germany:

Phone 0180 5003872  
Fax 0180 5003873

From other countries:

Phone +49 9132 82-0  
Fax +49 9132 82-4950

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