

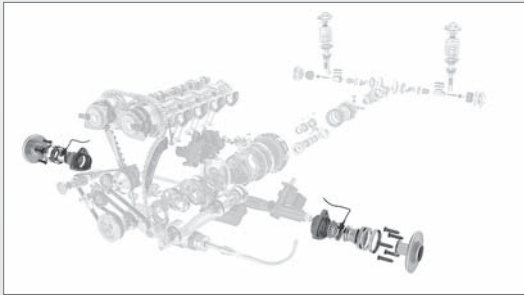
Engine  
Chassis  
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E-Mobility

**SCHAEFFLER**

# Wheel Bearing



# Wheel Bearing – Twin Tandem Design with Face Splines



## Description

- As an alternative to a double row tapered roller bearing, a four-row angular contact ball bearing has been designed
- Due to the point contact of the balls instead of the line contact of the tapered rollers, friction is reduced
- The rib friction of tapered roller bearings is eliminated, leading to a reduction in friction
- Integrated face splines

## Advantages

- Mass reduced by 10 % due to the face splines
- Torque transmission increased by 50 % by the face splines in comparison with the radial tooth set
- Economical assembly due to the face splines
- Friction reduced by 50 % in comparison with the tapered roller bearing design
- Lower fuel consumption → reduction in CO<sub>2</sub> emissions
- Rigidity increased by 10 %
- Optimized operating life due to reduction in frictional wear in comparison with the tapered roller bearing design

Comparison of frictional torque (cornering)

