# Deep Groove Ball Bearings



# World champions in the field of application

Deep groove ball bearings are the most frequently used rolling bearings. They have proven their worth, for instance in electric motors, transmissions, household appliances, automobile engines, rolling stands, motor saws, boring and drilling machines, conveyor plants, ventilators, compressors, inline skates ... FAG is continuously improving the quality of these bearings, adapting them to the increasing, often very diverse requirements of industry. This also includes that deep groove ball bearings are reasonably priced, available at short notice, and require little maintenance. As a rule, the following applies for all FAG deep groove ball bearings: By directly implementing the FAG research results in practical application, the internal design of the FAG deep groove ball bearings was continuously perfected.

This is shown by the continuously reduced running noise, even that of misaligned bearings, as the cycling conditions were significantly improved.

The running noise is also reduced by the improved microstructure and macrostructure of the ball and raceway surfaces.

- very good value
- suitable for extremely high speeds
- quiet running
- long service life
- minimum requirements on lubrication and maintenance

## **Delivery programme**

Series	<b>Pressed steel cage</b> (without cage suffix)	<b>Polyamide cage</b> (with cage suffix T)	<b>Machined brass cage</b> (with cage suffix M)	
	Bore reference number	Bore reference number	Bore reference number	
60	up to 30, 34		32, from 36	
62	up to 30		from 32	-
63	up to 24		from 26	
64	up to 14		from 15	
160	up to 52		from 56	
161	00, 01			
618	30 up to 56	00 up to 28	from 60	
619	up to 48, 56		52, from 60	
622	up to 12			
623	up to 10			
630	up to 09			

# Standardized variety

FAG manufacture numerous designs in series production. They are easily identified by their suffixes:

C3	radial clearance larger				
Μ	machined brass cage				
2RSR	seals				
	on both sides				
2ZR	shields				
	on both sides				
I.I.OOOD					

W203B stainless steel bearing







S6208.W203B







S6208.2RSR.W203B



6208.2ZR



6208.2ZR.C3



# Sealing and lubrication

The simplest and safest way is to use sealed deep groove ball bearings which are greased for life. In these, the grease type, grease quantity and sealing are optimally coordinated.

#### Seals and shields

FAG seals (RSR) and shields (ZR) for deep groove ball bearings are designed according to the same criteria as radial shaft seals and labyrinths. RSR seals provide a good balance between friction and sealing effect. RSD seals with a minimized sealing gap have a small coefficient of friction as open bearings. ZR shields are cost-effective solutions for applications where requirements on the sealing effect are not so high and where friction is to be reduced considerably.

Sealing effect	ZR	RSD	RSR		
retain grease in the bearing					
dust, dry dirt					
moist atmosphere					
occasional splashes					
rotating outer ring					
slight pressure differences					
suitable less suitable problems cannot be ruled out					

#### Lubrication

Sealed FAG deep groove ball bearings are filled, when being assembled at the production plant, with a high-quality grease tested in accordance with FAG specifications. The grease, if suitably adapted to the operating conditions, counteracts premature wear and fatigue, reduces the running noise and protects the bearings from corrosion. In addition to the standard greases, a number of special greases for specific applications are available. Arcanol rolling bearing greases by FAG clearly surpass the requirements defined in DIN 51825.



### FAG OEM und Handel AG

A company of the FAG Kugelfischer Group Postfach 1260 · D-97419 Schweinfurt Telephone (0 97 21) 91-0 · Telefax (0 97 21) 91 34 35

The FAG quality management system is certified in accordance with DIN EN ISO 9001.



#### New!

**FAG Deep Groove Ball Bearings with an Integrated Sensor** Precise and cost-effective speed measurement in an extremely limited space



Every care has been taken to ensure the correctness of the information contained in this publication but no liability can be accepted for any errors or omissions. We reserve the right to make changes in the interest of technical progress.