

# Deep Groove Ball Bearings



**FAG**

# 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

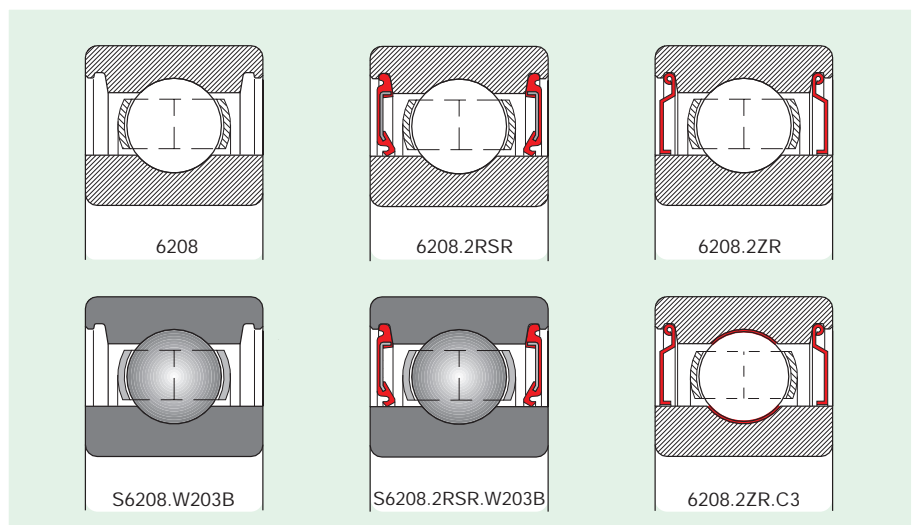
| Series | Pressed steel cage<br>(without cage suffix)<br>Bore reference number | Polyamide cage<br>(with cage suffix T)<br>Bore reference number | Machined brass cage<br>(with cage suffix M)<br>Bore reference number |
|--------|--|---|--|
| 60     | up to 30, 34   | 00 up to 28   | 32, from 36  |
| 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  |   | 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 than normal
- M machined brass cage
- 2RSR seals on both sides
- 2ZR shields on both sides
- W203B stainless steel bearing



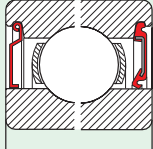


## Sealing and lubrication

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

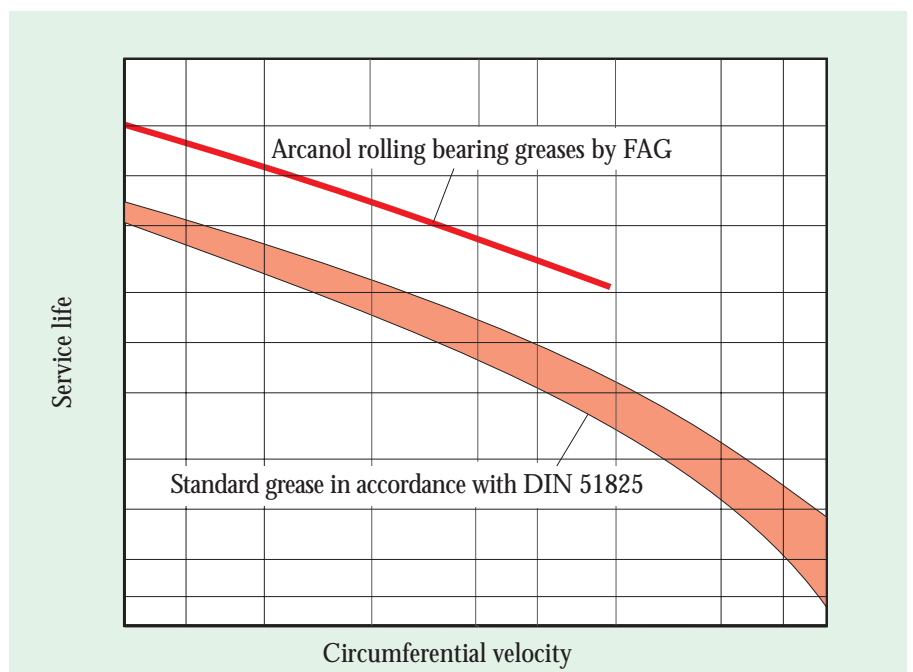
FAG seals (RSR) and shields (ZR) for deep groove ball bearings are designed according to the same criteria as radial shaft seals and labyrinths. RSR seals provide a good balance between friction and sealing effect. RSD seals with a minimized sealing gap have a small coefficient of friction as open bearings. 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.

|                              |  |  |  |
|------------------------------|---|--|---|
|                              | ZR  | RSD  | RSR   |
| <b>Sealing effect</b>        |   |  |   |
| retain grease in the bearing | Green   | Green  | Green   |
| dust, dry dirt               | Green   | Green  | Green   |
| moist atmosphere             | Yellow  | Yellow   | Green   |
| occasional splashes          | Red   | Red  | Green   |
| rotating outer ring          | Red   | Green  | Green   |
| slight pressure differences  | Red   | Red  | Green   |

■ suitable   
 ■ less suitable   
 ■ unsuitable, 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.



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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



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