



# 6205-ZNR Deep groove ball bearing with snap ring and integral sealing

## Deep groove ball bearing with snap ring and integral sealing

Single row deep groove ball bearing, with snap ring groove and seals or shields on one or both sides, are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than other bearing types. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out.

- Snap ring facilitates axial location within housing
- Integral sealing prolongs bearing service life
- Typical benefits of single row deep groove ball bearings

## Overview

### Dimensions

Bore diameter	25 mm
Outside diameter	52 mm
Width	15 mm

### Performance

Basic dynamic load rating	14.8 kN
Basic static load rating	7.8 kN
Reference speed	28 000 r/min
Limiting speed	18 000 r/min
SKF performance class	SKF Explorer

### Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	Snap ring (fitted)
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Tolerance class	Class P6 (P6)
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on one side
Sealing type	Non-contact

Lubricant	None
Relubrication feature	Without

# Technical Specification

SKF performance class

SKF Explorer

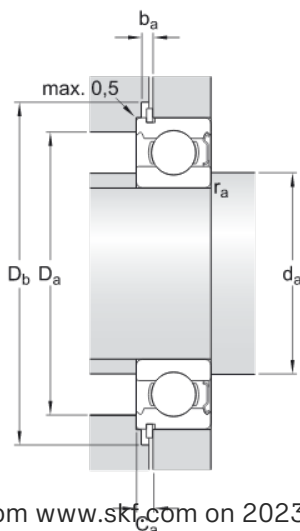


## Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
$d_1$	$\approx 34.35$ mm	Shoulder diameter
$D_2$	$\approx 46.21$ mm	Recess diameter
$D_3$	49.73 mm	Diameter of snap ring groove
$D_4$	57.9 mm	Outside diameter of snap ring
b	1.35 mm	Width of snap ring groove
C	2.46 mm	Distance from outer ring side face to snap ring groove
f	1.12 mm	Width of snap ring
$r_0$	max. 0.4 mm	Bottom radius of snap ring groove
$r_{1,2}$	min. 1 mm	Chamfer dimension

## Abutment dimensions

$d_a$	min. 30.6 mm	Diameter of shaft abutment
$d_a$	max. 34.3 mm	Diameter of shaft abutment
$D_a$	max. 46.4 mm	Diameter of housing abutment
$D_b$	min. 59 mm	Diameter of snap ring recess in the housing



$b_a$	min. 1.5 mm	Width of snap ring recess in the housing
$C_a$	max. 3.58 mm	Distance from outer ring side face to snap ring back face
$r_a$	max. 1 mm	Radius of shaft or housing fillet

## Calculation data

Basic dynamic load rating	C	14.8 kN
Basic static load rating	$C_0$	7.8 kN
Fatigue load limit	$P_u$	0.335 kN
Reference speed		28 000 r/min
Limiting speed		18 000 r/min
Minimum load factor	$k_r$	0.025
Calculation factor	$f_0$	14

## Mass

Mass bearing	0.14 kg
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## Included products

Snap ring	SP 52
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## Tolerance class

Dimensional tolerances	P6
Radial run-out	P5

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