



6217 NR

Deep groove ball bearing with snap ring

Single row deep groove ball bearings with a snap ring groove 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 many other bearing types. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings.

- Snap ring facilitates axial location within housing
- Simple, versatile and robust design
- Low friction and high-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	85 mm
Outside diameter	150 mm
Width	28 mm

Performance

Basic dynamic load rating	87.1 kN
Basic static load rating	64 kN
Limiting speed	5 600 r/min
Reference speed	9 000 r/min
SKF performance class	SKF Explorer

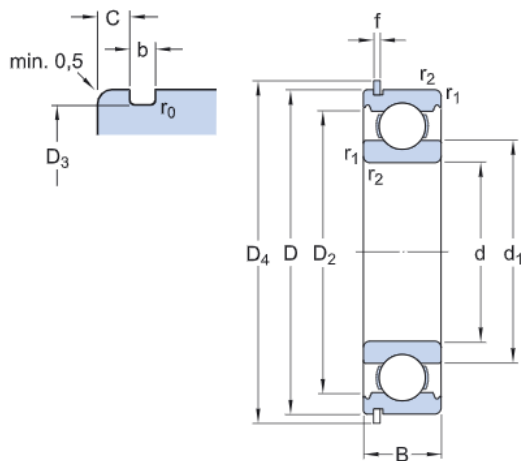
Properties

Bore type	Cylindrical
Cage	Sheet metal
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	Snap ring (fitted)
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Without

Technical Specification

SKF performance class

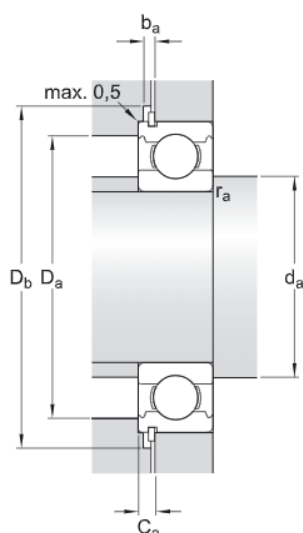
SKF Explorer



Dimensions

d	85 mm	Bore diameter
D	150 mm	Outside diameter
B	28 mm	Width
d ₁	≈ 106.05 mm	Shoulder diameter
D ₂	≈ 134.3 mm	Recess diameter
D ₃	145.24 mm	Diameter of snap ring groove
D ₄	159.7 mm	Outside diameter of snap ring
b	3.1 mm	Width of snap ring groove
C	4.9 mm	Distance outer ring from side face to snap ring groove
f	2.82 mm	Width of snap ring
r ₀	max. 0.6 mm	Bottom radius of snap ring groove
r _{1,2}	min. 2 mm	Chamfer dimension

Abutment dimensions



d _a	min. 96 mm	Diameter of shaft abutment
D _c	max. 139 mm	Diameter of housing abutment
D _i	min. 162 mm	Diameter of snap ring recess in the housing
b _a	min. 3.5 mm	Width of snap ring recess in the housing
C _e	max. 7.72 mm	Distance from outer ring side face to snap ring back face

r_a max. 2 mm

Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	87.1 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	2.5 kN
Reference speed		9 000 r/min
Limiting speed		5 600 r/min
Minimum load factor	k_T	0.025
Calculation factor	f_0	15

Mass

Mass bearing	1.85 kg
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Included products

Snap ring	SP 150
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Tolerance class

Dimensional tolerances	P6
Radial run-out	Normal

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