



Image may differ from product. See technical specification for details.

6207-ZNR

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	1.378 in
Outside diameter	2.835 in
Width	0.669 in

Performance

Basic dynamic load rating	6 070 lbf
Basic static load rating	3 440 lbf
Reference speed	20 000 r/min
Limiting speed	13 000 r/min
SKF performance class	SKF Explorer

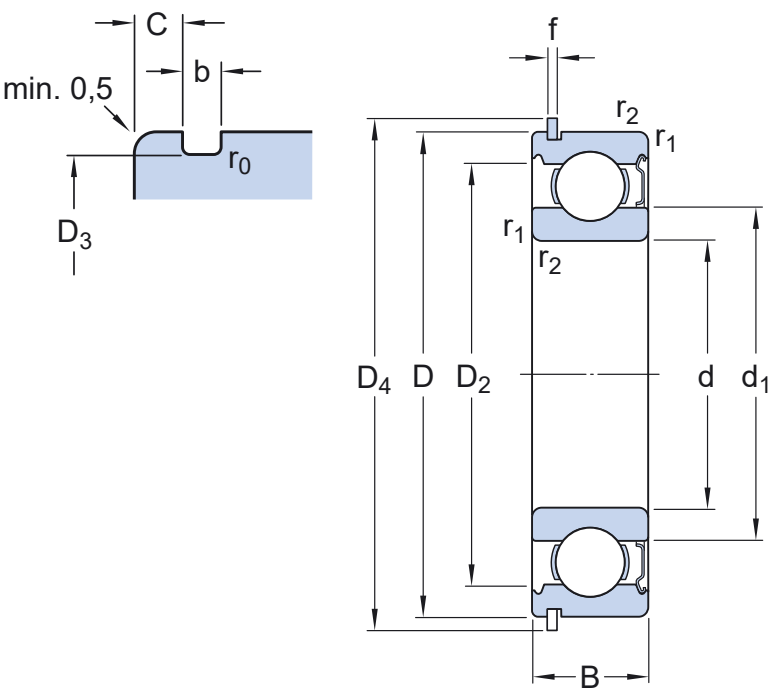
Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	Snap ring (fitted)
Bore type	Cylindrical
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on one side
Sealing type	Non-contact
Lubricant	None
Relubrication feature	Without

Logistics

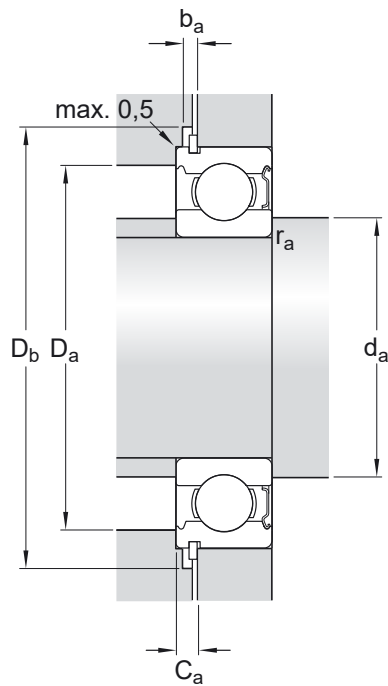
Product net weight	0.6504 lb
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	1.378 in	Bore diameter
t _{Δdmp}	-10 – 0 μm	Deviation limits of mid-range bore diameter
D	2.835 in	Outside diameter
t _{ΔDmp}	-11 – 0 μm	Deviation limits of mid-range outside diameter
B	0.669 in	Width
t _{ΔBs}	-60 – 0 μm	Deviation limits of ring width
d ₁	≈ 1.848 in	Shoulder diameter
D ₂	≈ 2.468 in	Recess diameter
D ₃	2.709 in	Diameter of snap ring groove
D ₄	3.094 in	Outside diameter of snap ring
b	0.075 in	Width of snap ring groove
C	0.129 in	Distance from outer ring side face to snap ring groove
f	0.067 in	Width of snap ring
r ₀	max. 0.024 in	Bottom radius of snap ring groove
r _{1,2}	min. 0.043 in	Chamfer dimension
P6 and tighter width tolerance		ISO tolerance class for dimensions



Abutment dimensions

d_a	min. 1.654 in	Diameter of shaft abutment
d_a	max. 1.843 in	Diameter of shaft abutment
D_a	max. 2.559 in	Diameter of housing abutment
D_b	min. 3.15 in	Diameter of snap ring recess in the housing
b_a	min. 0.087 in	Width of snap ring recess in the housing
C_a	max. 0.196 in	Distance from outer ring side face to snap ring back face
r_a	max. 0.039 in	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	6 070 lbf
Basic static load rating	C_0	3 440 lbf
Fatigue load limit	P_u	147 lbf
Reference speed		20 000 r/min
Limiting speed		13 000 r/min

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{kia}	10 μm
Range of section height at outer ring of assembled bearing	t_{kea}	13 μm
ISO tolerance class for geometrical tolerances		P6

Included products

Snap ring	SP 72
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Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Radial internal clearance: Classes C2 to C5

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

 Product details	 Engineering information	 Tools
Single row deep groove ball bearings	Principles of rolling bearing selection	SKF Product select
Stainless steel deep groove ball bearings	General bearing knowledge	SimPro Quick
Single row deep groove ball bearings with filling slots	Bearing selection process	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing interfaces	LubeSelect for SKF greases
General bearing specifications	Seat tolerances for standard conditions	Heater selection tool
Loads	Selecting internal clearance	
Temperature limits	Lubrication	
Permissible speed	Sealing, mounting and dismounting	
Designation system	Bearing failure and how to prevent it	

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