

6309-2Z

- Popular item
- SKF Explorer

Deep groove ball bearings

Bearing data

[Tolerances](#),

Normal (metric), P6, P5, Normal (inch),

[Radial internal clearance](#),

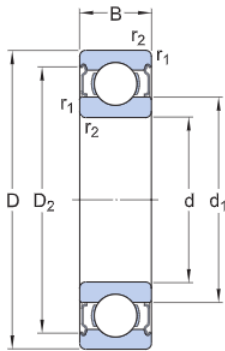
Classes C2 to C5

Bearing interfaces

[Seat tolerances for standard conditions](#),

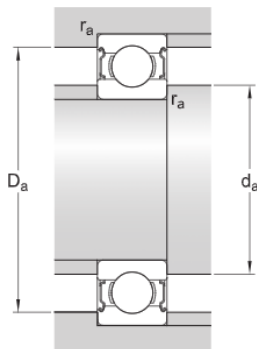
[Tolerances and resultant fits](#)

Technical specification



DIMENSIONS

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d ₁	≈ 62.18 mm	Shoulder diameter
D ₂	≈ 86.7 mm	Recess diameter
r _{1,2}	min. 1.5 mm	Chamfer dimension



ABUTMENT DIMENSIONS

d _c min.	54 mm	Diameter of shaft abutment
d _c max.	62.1 mm	Diameter of shaft abutment
D _i max.	91 mm	Diameter of housing abutment
r _a max.	1.5 mm	Radius of shaft or housing fillet

CALCULATION DATA

Basic dynamic load rating	C	55.3 kN
Basic static load rating	C ₀	31.5 kN
Fatigue load limit	P _u	1.34 kN
Reference speed		15 000 r/min
Limiting speed		7 500 r/min
Minimum load factor	k _r	0.03
Calculation factor	f ₀	13

MASS

Mass bearing	0.87 kg
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TOLERANCE CLASS

Dimensional tolerances	P6
Radial run-out	P6

More information

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

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