6309 N

SKF Explorer

Deep groove ball bearings

Bearing data

Tolerances,

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

Radial internal clearance,
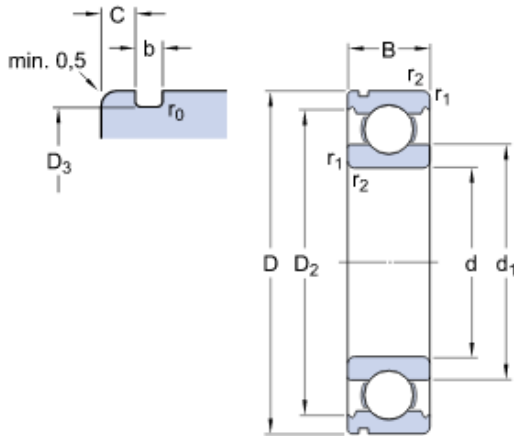
Matched bearing pairs, Stainless steel
d < 10 mm, Other bearings

Bearing interfaces

Seat tolerances for standard
conditions,
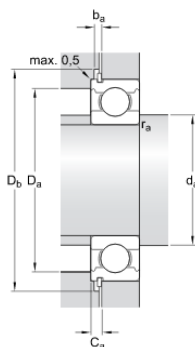
Tolerances and resultant fits

Technical specification

DIMENSIONS

d	45 mm
D	100 mm
B	25 mm
d_1	≈ 62.18 mm
D_2	≈ 86.7 mm
D_3	96.8 mm
b	2.7 mm
C	3.28 mm
r_0	max. 0.6 mm
$r_{1,2}$	min. 1.5 mm

ABUTMENT DIMENSIONS

d_a	min. 54 mm
D_a	max. 91 mm
D_b	min. 108 mm
b_a	min. 3 mm
C_a	max. 5.74 mm
r_a	max. 1.5 mm

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		15000 r/min
Limiting speed		9500 r/min
Calculation factor	k_r	0.03
Calculation factor	f_0	13

MASS

Mass bearing	0.83 kg

More information

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

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