



6003-Z

SKF Explorer

Deep groove ball bearings

Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

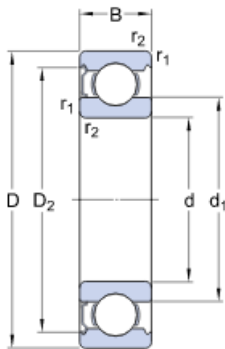
$d < 10$ mm, Other bearings

Bearing interfaces

[Seat tolerances for standard conditions,](#)

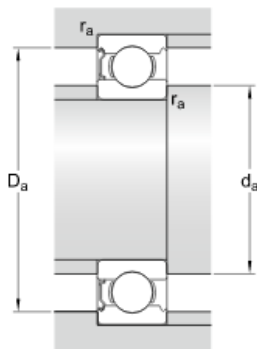
[Tolerances and resultant fits](#)

Technical specification



DIMENSIONS

d	17 mm
D	35 mm
B	10 mm
d_1	≈ 23 mm
D_2	≈ 31.2 mm
$r_{1,2}$	min. 0.3 mm



ABUTMENT DIMENSIONS

d_a	min. 19 mm
d_a	max. 22.9 mm
D_a	max. 33 mm
r_a	max. 0.3 mm

CALCULATION DATA

Basic dynamic load rating	C	6.37 kN
Basic static load rating	C_0	3.25 kN
Fatigue load limit	P_u	0.137 kN
Reference speed		45000 r/min
Limiting speed		28000 r/min
Calculation factor	k_f	0.025
Calculation factor	f_0	14

MASS

Mass bearing		0.039 kg
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More information

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

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