

6003-2Z

- Popular item
- SKF Explorer

Deep groove ball bearings

Bearing data

Tolerances,

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

Radial internal clearance,

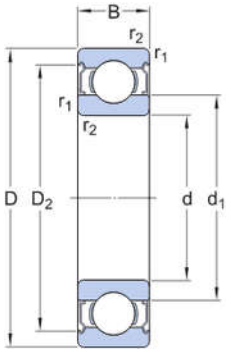
Matched bearing pairs, Stainless steel
d < 10 mm, Other bearings

Bearing interfaces

Seat tolerances for standard conditions,

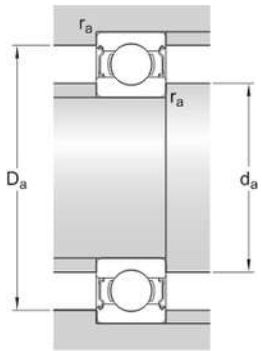
Tolerances and resultant fits

Technical specification



DIMENSIONS

d	17 mm	Bore diameter
D	35 mm	Outside diameter
B	10 mm	Width
d_1	≈ 23 mm	Shoulder diameter
D_2	≈ 31.2 mm	Recess diameter
$r_{1,2}$	min. 0.3 mm	Chamfer dimension



ABUTMENT DIMENSIONS

d_a	min. 19 mm	Diameter of shaft abutment
da	max.22.9 mm	Diameter of shaft abutment
D_a	max. 33 mm	Diameter of housing abutment
ra	max.0.3 mm	Radius of shaft or housing fillet

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		45 000 r/min
Limiting speed		22 000 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	14

MASS

Mass bearing	0.041 kg

TOLERANCE CLASS

Dimensional tolerances	P6
Radial run-out	P5

More information

Product details

- 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
- Loads
- Temperature limits
- Permissible speed
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Selecting internal clearance
- Lubrication
- Sealing, mounting and dismounting
- Bearing failure and how to prevent it

Tools

- Bearing Select
- SimPro Quick
- Engineering Calculator
- LubeSelect for SKF greases
- Heater selection tool
- Rolling bearings mounting and dismounting instructions

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