



## 6003

- 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
d1	≈23 mm	Shoulder diameter
D2	≈31.2 mm	Recess diameter
r1,2	min.0.3 mm	Chamfer dimension

#### ABUTMENT DIMENSIONS

da	min.19 mm	Diameter of shaft abutment
Da	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 <sub>0</sub>	3.25 kN
Fatigue load limit	P <sub>u</sub>	0.137 kN
Reference speed		45 000 r/min
Limiting speed		28 000 r/min
Minimum load factor	k <sub>r</sub>	0.025
Calculation factor	f <sub>0</sub>	14

## MASS

Mass bearing	0.038 kg
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## TOLERANCE CLASS

Dimensional tolerances	P6
Radial run-out	P5

## More information

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

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