



# 63003-2RS1

## 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
$B$	14 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	6.05 kN
Basic static load rating	$C_0$	3.25 kN
Fatigue load limit	$P_u$	0.137 kN
Limiting speed		13000 r/min
Calculation factor	$k_r$	0.025
Calculation factor	$f_0$	14

## MASS

Mass bearing		0.052 kg
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More information

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

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