



# 63003-2RS1

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

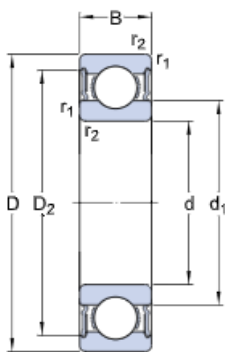
Matched bearing pairs, Stainless steel  
d < 10 mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

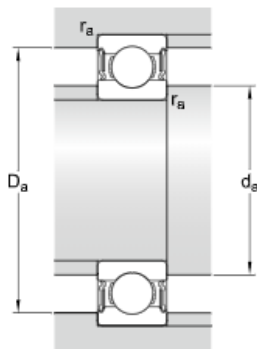
[Tolerances and resultant fits](#)

## Technical specification



### DIMENSIONS

d	17 mm
D	35 mm
B	14 mm
d <sub>1</sub>	≈ 23 mm
D <sub>2</sub>	≈ 31.2 mm
r <sub>1,2</sub>	min. 0.3 mm



### ABUTMENT DIMENSIONS

d <sub>a</sub>	min. 19 mm
d <sub>a</sub>	max. 22.9 mm
D <sub>a</sub>	max. 33 mm
r <sub>a</sub>	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		13 000 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

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