

## 309-Z

### Deep groove ball bearings

#### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

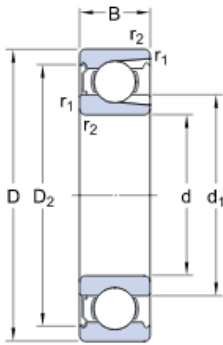
$d < 10$  mm, Other bearings

#### Bearing interfaces

[Seat tolerances for standard conditions,](#)

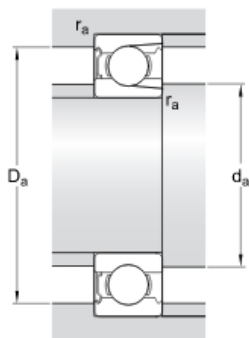
[Tolerances and resultant fits](#)

### Technical specification



#### DIMENSIONS

$d$	45 mm
$D$	100 mm
$B$	25 mm
$d_1$	$\approx 62.18$ mm
$D_2$	$\approx 86.7$ mm
$r_{1,2}$	min. 1.5 mm



#### ABUTMENT DIMENSIONS

$d_a$	min. 54 mm
$d_a$	max. 62 mm
$D_a$	max. 91 mm
$r_a$	max. 1.5 mm

## CALCULATION DATA

Basic dynamic load rating	C	55 kN
Basic static load rating	$C_0$	44 kN
Fatigue load limit	$P_u$	1.86 kN
Reference speed		13000 r/min
Limiting speed		7500 r/min
Calculation factor	$k_f$	0.05

## MASS

Mass bearing		0.88 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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