



# 6301-Z

SKF Explorer

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

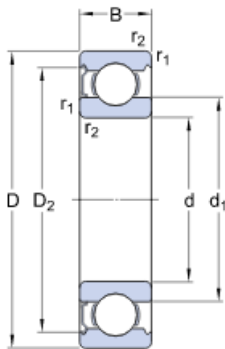
Matched bearing pairs, Stainless steel  
d < 10 mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

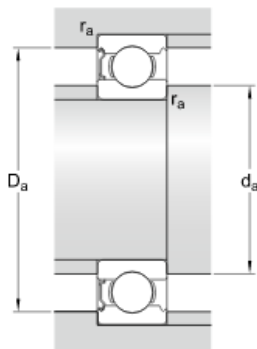
[Tolerances and resultant fits](#)

## Technical specification



### DIMENSIONS

d	12 mm
D	37 mm
B	12 mm
d <sub>1</sub>	≈ 19.51 mm
D <sub>2</sub>	≈ 31.48 mm
r <sub>1,2</sub>	min. 1 mm



### ABUTMENT DIMENSIONS

d <sub>a</sub>	min. 17.6 mm
d <sub>a</sub>	max. 19.4 mm
D <sub>a</sub>	max. 31.4 mm
r <sub>a</sub>	max. 1 mm

## CALCULATION DATA

Basic dynamic load rating	C	10.1 kN
Basic static load rating	$C_0$	4.15 kN
Fatigue load limit	$P_u$	0.176 kN
Reference speed		45000 r/min
Limiting speed		22000 r/min
Calculation factor	$k_f$	0.03
Calculation factor	$f_0$	11

## MASS

Mass bearing		0.06 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>
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<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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