



Image may differ from product. See technical specification for details.



Deep groove ball bearing

Single row deep groove ball bearings are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than many other bearing types.

- Simple, versatile and robust design
- Low friction
- High-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	6 mm
Outside diameter	19 mm
Width	6 mm

Performance

Basic dynamic load rating	2.34 kN
Basic static load rating	0.95 kN
Reference speed	80 000 r/min
Limiting speed	50 000 r/min
SKF performance class	SKF Explorer

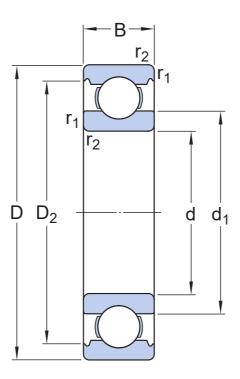
Properties

Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

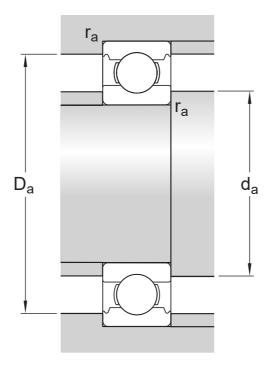
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Product net weight	0.0079 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	6 mm	Bore diameter
$t_{\Delta dmp}$	-0.007 – 0 mm	Deviation limits of mid-range bore diameter
D	19 mm	Outside diameter
t _{∆Dmp}	-0.008 – 0 mm	Deviation limits of mid-range outside diameter
В	6 mm	Width
$t_{\Delta Bs}$	-0.06 – 0 mm	Deviation limits of ring width
d1	≈ 11.1 mm	Shoulder diameter
D2	≈ 16.5 mm	Recess diameter
r _{1,2}	min. 0.3 mm	Chamfer dimension
	P6 and tighter width tolerance	ISO tolerance class for dimensions



Abutment dimensions

d _a	min. 8.4 mm	Diameter of shaft abutment
Da	max. 16.6 mm	Diameter of housing abutment
ra	max. 0.3 mm	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	2.34 kN
Basic static load rating	C ₀	0.95 kN
Fatigue load limit	Pu	0.04 kN
Reference speed		80 000 r/min
Limiting speed		50 000 r/min
Minimum load factor	k _r	0.025
Calculation factor	f ₀	13

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t _{Kia}	4 μm
Maximum run-out of inner ring side face to the bore	t _{Sd}	7 μm

Maximum axial run-out of inner ring of assembled bearing	t _{Sia}	7 μm
Range of section height at outer ring of assembled bearing	t _{Kea}	6 μm
Perpendicularity of outer ring outside surface	t _{SD}	4 μm
Maximum axial run-out of outer ring of assembled bearing	t _{Sea}	8 µm
ISO tolerance class for geometrical tolerances		P5

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Radial internal clearance: Classes C2 to C5

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits

More Information

Product details	Engineering information	🔊 Tools
Single row deep groove ball bearings		SKF Product select
Stainless steel deep groove ball	Principles of rolling bearing selection	SimPro Quick
bearings	General bearing knowledge	Bearing Frequency Calculator
Single row deep groove ball bearings with filling slots	Bearing selection process	LubeSelect for SKF greases
Double row deep groove ball bearings	Bearing interfaces	Heater selection tool
General bearing specifications	Seat tolerances for standard conditions	
Loads	Selecting internal clearance	
Temperature limits	Lubrication	
Permissible speed	Sealing, mounting and dismounting	
Designation system	Bearing failure and how to prevent it	



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