



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

16019

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	95 mm
Outside diameter	145 mm
Width	16 mm

Performance

Basic dynamic load rating	44.9 kN
Basic static load rating	41.5 kN
Reference speed	9 500 r/min
Limiting speed	6 000 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

Product net weight	0.874 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification



Dimensions

d	95 mm	Bore diameter
t _{Δdmp}	-15 – 0 μm	Deviation limits of mid-range bore diameter
D	145 mm	Outside diameter
t _{ΔDmp}	-15 – 0 μm	Deviation limits of mid-range outside diameter
B	16 mm	Width
t _{ΔBs}	-100 – 0 μm	Deviation limits of ring width
d ₁	≈ 111.7 mm	Shoulder diameter
D ₁	≈ 128.2 mm	Shoulder diameter
r _{1,2}	min. 1 mm	Chamfer dimension
P6 and tighter width tolerance		ISO tolerance class for dimensions



Abutment dimensions

d_a	min. 99.6 mm	Diameter of shaft abutment
D_a	max. 140 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of shaft or housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	44.9 kN
Basic static load rating	C_0	41.5 kN
Fatigue load limit	P_U	1.63 kN
Reference speed		9 500 r/min
Limiting speed		6 000 r/min
Minimum load factor	k_r	0.02
Calculation factor	f_0	16.4

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{kia}	25 μ m
Range of section height at outer ring of assembled bearing	t_{kea}	40 μ m

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	Principles of rolling bearing selection	SKF Product select
Stainless steel deep groove ball bearings	General bearing knowledge	SimPro Quick
Single row deep groove ball bearings with filling slots	Bearing selection process	Bearing Frequency Calculator
Double row deep groove ball bearings	Bearing interfaces	LubeSelect for SKF greases
General bearing specifications	Seat tolerances for standard conditions	Heater selection tool
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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