



16018

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	90 mm
Outside diameter	140 mm
Width	16 mm

Performance

Basic dynamic load rating	43.6 kN
Basic static load rating	39 kN
Limiting speed	6 300 r/min
Reference speed	10 000 r/min
SKF performance class	SKF Explorer

Properties

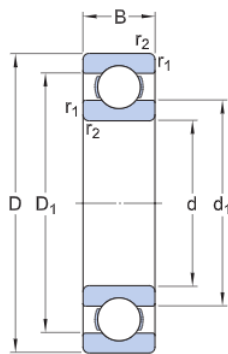
Bore type	Cylindrical
Cage	Sheet metal
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	None
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Without

Technical Specification

SKF performance class

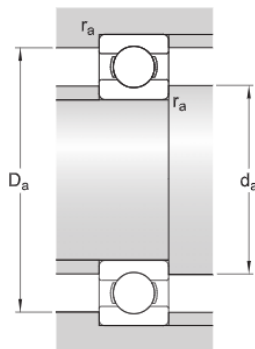
SKF Explorer

Dimensions



d	90 mm	Bore diameter
D	140 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 106.7 mm	Shoulder diameter
D ₁	≈ 123.2 mm	Shoulder diameter
r _{1,2}	min. 1 mm	Chamfer dimension

Abutment dimensions



d _a	min. 94.6 mm	Diameter of shaft abutment
D _a	max. 135 mm	Diameter of housing abutment
r _a	max. 1 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	43.6 kN
Basic static load rating	C ₀	39 kN
Fatigue load limit	P _u	1.56 kN
Reference speed		10 000 r/min

Limiting speed		6 300 r/min
Minimum load factor	k_r	0.02
Calculation factor	f_0	16.3

Mass

Mass bearing	0.85 kg
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Tolerance class

Dimensional tolerances	P6
Radial run-out	Normal

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