

6024

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	120 mm
Outside diameter	180 mm
Width	28 mm

Performance

Basic dynamic load rating	88.4 kN
Basic static load rating	80 kN
Reference speed	7 500 r/min
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

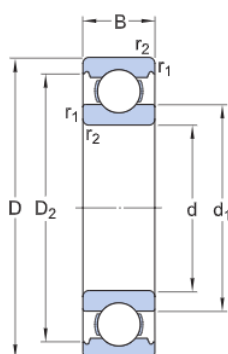
Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Technical Specification

SKF performance class

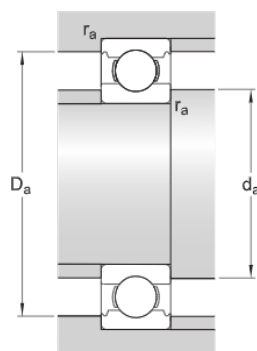
SKF Explorer

Dimensions



d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	28 mm	Width
d ₁	≈ 139.05 mm	Shoulder diameter
D ₂	≈ 165.3 mm	Recess diameter
r _{1,2}	min. 2 mm	Chamfer dimension

Abutment dimensions



d _a	min. 129 mm	Diameter of shaft abutment
D _a	max. 171 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	88.4 kN
Basic static load rating	C ₀	80 kN
Fatigue load limit	P _u	2.75 kN
Reference speed		7 500 r/min

Limiting speed		4 800 r/min
Minimum load factor	k_r	0.025
Calculation factor	f_0	15.9

Mass

Mass bearing		2.1 kg
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Tolerance class

Dimensional tolerances		P6
Radial run-out		Normal

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