

61801-2Z

Deep groove ball bearing with seals or shields



Single row deep groove ball bearings with seals or shields 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. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out.

- Integral sealing prolongs bearing service life
- Simple, versatile and robust design
- Low friction and high-speed capability
- Accommodate radial and axial loads in both directions
- Require little maintenance

Overview

Dimensions

Bore diameter	12 mm
Outside diameter	21 mm
Width	5 mm

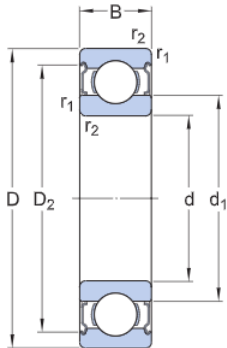
Performance

Basic dynamic load rating	1.74 kN
Basic static load rating	0.915 kN
Limiting speed	36 000 r/min
Reference speed	70 000 r/min

Properties

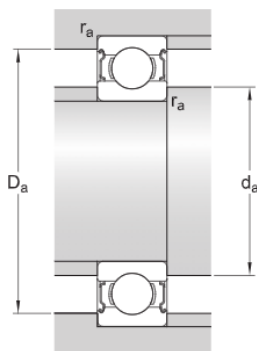
Bore type	Cylindrical
Cage	Sheet metal
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Shield on both sides
Sealing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

Technical Specification



Dimensions

d	12 mm	Bore diameter
D	21 mm	Outside diameter
B	5 mm	Width
d ₁	≈ 15 mm	Shoulder diameter
D ₂	≈ 18.95 mm	Recess diameter
r _{1,2}	min. 0.3 mm	Chamfer dimension



Abutment dimensions

d _a min.	14 mm	Diameter of shaft abutment
d _a max.	14.7 mm	Diameter of shaft abutment
D _a max.	19 mm	Diameter of housing abutment
r _a max.	0.3 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	1.74 kN
Basic static load rating	C ₀	0.915 kN
Fatigue load limit	P _u	0.039 kN
Reference speed		70 000 r/min
Limiting speed		36 000 r/min
Minimum load factor	k _r	0.015
Calculation factor	f ₀	13.4

Mass

Mass bearing	0.006 kg
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Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal

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