

63005-2RS1

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	25 mm
Outside diameter	47 mm
Width	16 mm

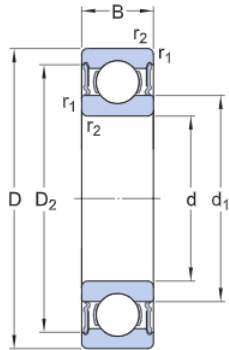
Performance

Basic dynamic load rating	11.2 kN
Basic static load rating	6.55 kN
Limiting speed	9 500 r/min

Properties

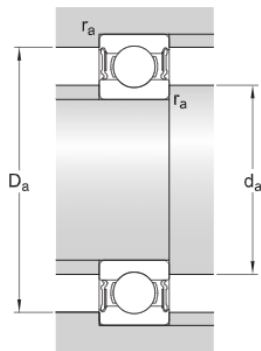
Bore type	Cylindrical
Cage	Sheet metal
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Bearing steel
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Seal on both sides
Sealing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

Technical Specification



Dimensions

d	25 mm	Bore diameter
D	47 mm	Outside diameter
B	16 mm	Width
d ₁	≈ 32 mm	Shoulder diameter
D ₂	≈ 42.2 mm	Recess diameter
r _{1,2}	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d _a min.	29.2 mm	Diameter of shaft abutment
d _a max.	31.9 mm	Diameter of shaft abutment
D _a max.	43.8 mm	Diameter of housing abutment
r _a max.	0.6 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	11.2 kN
Basic static load rating	C ₀	6.55 kN
Fatigue load limit	P _u	0.275 kN
Limiting speed		9 500 r/min
Minimum load factor	k _r	0.025
Calculation factor	f ₀	14

Mass

Mass bearing	0.11 kg
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Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal

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