

# 61800-2Z



# 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

#### Performance

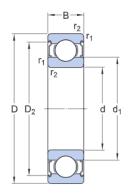
Bore diameter	10 mm	Basic dynamic load rating	1.72 kN
Outside diameter	19 mm	Basic static load rating	0.83 kN
Width	5 mm	Limiting speed	38 000 r/min
		Reference speed	80 000 r/min

#### Properties

Bore type	Cylindrical
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

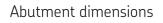


# Technical Specification



#### Dimensions

d	10 mm	Bore diameter
D	19 mm	Outside diameter
В	5 mm	Width
d <sub>1</sub>	≈12.74 mm	Shoulder diameter
D <sub>2</sub>	≈17.15 mm	Recess diameter
r <sub>1,2</sub>	min. 0.3 mm	Chamfer dimension



d <sub>a</sub> min. 12 mm	Diameter of shaft abutment
d <sub>a</sub> max. 12.5 mm	Diameter of shaft abutment
D <sub>a</sub> max. 17 mm	Diameter of housing abutment
r <sub>a</sub> max. 0.3 mm	Radius of shaft or housing fillet

#### Calculation data

Da

da

Basic dynamic load rating	С	1.72 kN
Basic static load rating	C <sub>O</sub>	0.83 kN
Fatigue load limit	P <sub>u</sub>	0.036 kN
Reference speed		80 000 r/min
Limiting speed		38 000 r/min
Minimum load factor	k <sub>r</sub>	0.015
Calculation factor	f <sub>0</sub>	14.8



#### Mass

Mass bearing

0.005 kg

#### Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal



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