Image may differ from product. See technical specification for details.

W 6304

Stainless steel deep groove ball bearing

Stainless steel single row deep groove ball bearings provide greater chemical and corrosion resistance. As with deep groove ball bearings generally, they 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.

- Greater chemical and corrosion resistance
- 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	20 mm
Outside diameter	52 mm
Width	15 mm

Performance

Basic dynamic load rating	13.8 kN
Basic static load rating	7.8 kN
Reference speed	34 000 r/min
Limiting speed	20 000 r/min

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
Tolerance class	Normal
Material, bearing	Stainless steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

Product net weight	0.135 kg
eClass code	23-05-08-01
UNSPSC code	31171504

Technical specification
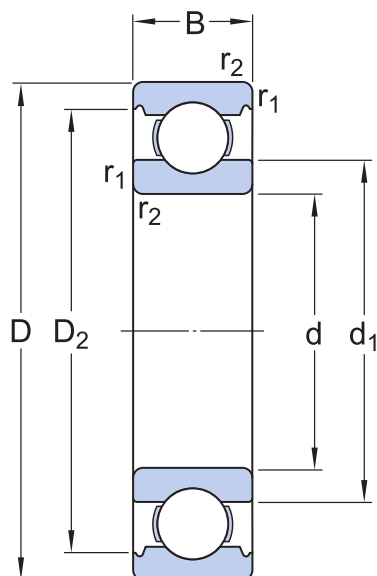
Dimensions

d	20 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d_1	≈ 30 mm	Shoulder diameter
D_2	≈ 45.4 mm	Recess diameter
$r_{1,2}$	min. 1.1 mm	Chamfer dimension
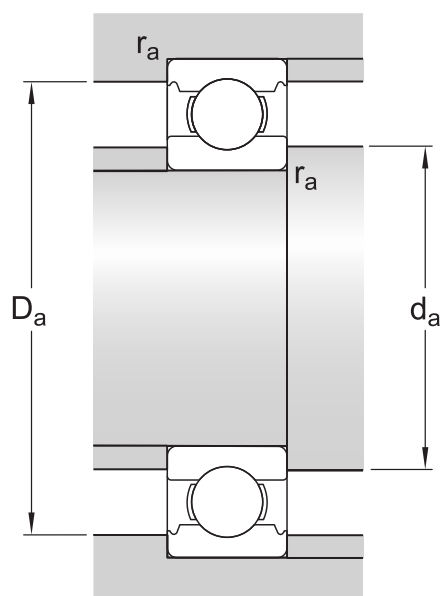
Abutment dimensions

d_a	min. 26.5 mm	Diameter of shaft abutment
D_a	max. 46 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of shaft or housing fillet

Calculation data

Basic dynamic load rating	C	13.8 kN
Basic static load rating	C_0	7.8 kN
Fatigue load limit	P_u	0.335 kN
Reference speed		34 000 r/min
Limiting speed		20 000 r/min
Minimum load factor	k_r	0.035
Calculation factor	f_0	12.3

Mass

Mass bearing	0.14 kg

Tolerance class

Dimensional tolerances	Normal
Radial run-out	Normal