

6204-2RSLTN9/HC5C3WT



Hybrid deep groove ball bearing with low-friction seals on both sides

Hybrid single row deep groove ball bearings with low-friction seals on both sides have rings made of bearing steel and rolling elements made of bearing grade silicon nitride (Si₃N₄), which make the bearings electrically insulating. The low-friction seals provide better sealing effectiveness than shields and non-contact seals, thus providing significantly prolonged bearing service life, yet they can still operate at the same speeds as shields. The silicon nitride elements not only provide protection from electric current damage but also, when compared to same-sized bearings with steel rolling elements, provide enhanced bearing performance, extended bearing service life, higher speed capability, high wear-resistance, high bearing stiffness, reduced risk of smearing and false brinelling and less sensitivity to temperature gradients, making them suitable for use in difficult conditions and contaminated environments.

- Protected against electric current damage
- Especially suited for use in difficult conditions and contaminated environments
- Typical benefits of single row deep groove ball bearings

Overview

Dimensions

Bore diameter	20 mm
Outside diameter	47 mm
Width	14 mm

Performance

Basic dynamic load rating	12.7 kN
Basic static load rating	6.55 kN
Limiting speed	18 000 r/min
Reference speed	38 000 r/min

Properties

Bore type	Cylindrical
Cage	Non-metallic
Coating	Without
Filling slots	Without
Locating feature, bearing outer ring	None
Lubricant	Grease
Matched arrangement	No
Material, bearing	Hybrid
Number of rows	1
Radial internal clearance	C3
Relubrication feature	Without

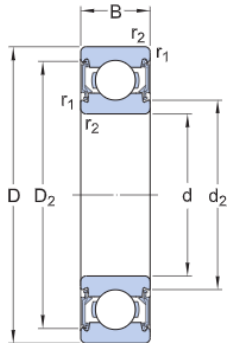
Sealing

Seal on both sides

Sealing type

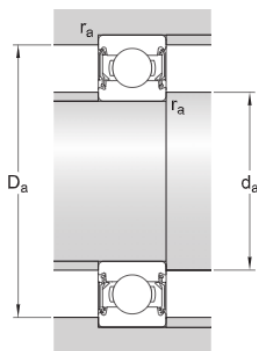
Low-friction

Technical Specification



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₂	≈ 26.3 mm	Recess diameter inner ring shoulder
D ₂	≈ 40.6 mm	Recess diameter outer ring shoulder
r _{1,2}	min. 1 mm	Chamfer dimension



Abutment dimensions

d _a	min. 25.6 mm	Abutment diameter shaft
d _a	max. 26 mm	Abutment diameter shaft
D _a	max. 41.4 mm	Abutment diameter housing
r _a	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	12.7 kN
Basic static load rating	C ₀	6.55 kN
Fatigue load limit	P _u	0.204 kN
Reference speed		38 000 r/min
Limiting speed		18 000 r/min
Calculation factor	k _r	0.025
Calculation factor	f ₀	13.1

Mass

Mass bearing

0.097 kg

Terms and conditions

By accessing and using this website / app owned and published by AB SKF (publ.) (556007-3495 · Gothenburg) ("SKF"), you agree to the following terms and conditions:

Warranty Disclaimer and Limitation of Liability

Although every care has been taken to assure the accuracy of the information on this website / app, SKF provides this information "AS IS" and DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. You acknowledge that your use of this website / app is at your sole risk, that you assume full responsibility for all costs associated with use of this website / app, and that SKF shall not be liable for any direct, incidental, consequential, or indirect damages of any kind arising out of your access to, or use of the information or software made available on this website / app. Any warranties and representations in this website / app for SKF products or services that you purchase or use will be subject to the agreed upon terms and conditions in the contract for such product or service. Further, for non-SKF websites / apps that are referenced in our website / app or where a hyperlink appears, SKF makes no warranties concerning the accuracy or reliability of the information in these websites / apps and assumes no responsibility for material created or published by third parties contained therein. In addition, SKF does not warrant that this website / app or these other linked websites / apps are free from viruses or other harmful elements.

Copyright

Copyright in this website / app copyright of the information and software made available on this website / app rest with SKF or its licensors. All rights are reserved. All licensed material will reference the licensor that has granted SKF the right to use the material. The information and software made available on this website / app may not be reproduced, duplicated, copied, transferred, distributed, stored, modified, downloaded or otherwise exploited for any commercial use without the prior written approval of SKF. However, it may be reproduced, stored and downloaded for use by individuals without prior written approval of SKF. Under no circumstances may this information or software be supplied to third parties.

This website /app includes certain images used under license from Shutterstock, Inc.

Trademarks and Patents

All trademarks, brand names, and corporate logos displayed on the website / app are the property of SKF or its licensors, and may not be used in any way without prior written approval by SKF. All licensed trademarks published on this website / app reference the licensor that has granted SKF the right to use the trademark. Access to this website / app does not grant to the user any license under any patents owned by or licensed to SKF.

Changes

SKF reserves the right to make changes or additions to this website / app at any time.