



BTW 90 CTN9/SPD Double direction angular contact thrust ball bearing, super-precision, basic design

Double direction angular contact thrust ball bearing,
super-precision, basic design

Double direction angular contact thrust ball bearings are designed to locate spindle shafts axially in both directions. These bearings are intended for mounting in combination with cylindrical roller bearings, and consist of two single row angular contact thrust ball bearings arranged back-to-back. The large number of balls enables these bearings to accommodate high axial loads in both directions and provides a high degree of system rigidity.

- Accommodate high axial loads in both directions
- Offer maximum load carrying capacity and maximum system rigidity
- Available for shaft diameters from 35 to 200 mm
- Available with either steel or ceramic balls
- Separable

Technical Specification

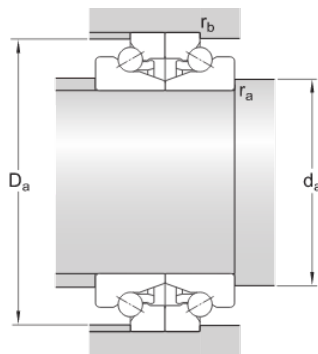


Dimensions

d	90 mm	Bore diameter
D	140 mm	Outside diameter
H	60 mm	Height
d ₁	118.9 mm	Shoulder diameter shaft washer (high shoulder)
2C	30 mm	Height of both housing washers
r _{1,2}	min. 1.5 mm	Shaft washer chamfer radius
r _{3,4}	min. 0.6 mm	Housing washer small chamfer radius

Abutment dimensions

d _a	min. 109 mm	Abutment diameter shaft
D _a	min. 130.9 mm	Abutment diameter shaft
D _a	max. 132 mm	Abutment diameter housing
r _a	max. 1.5 mm	Fillet radius
r _b	max. 0.6 mm	Fillet radius



Calculation data

Basic dynamic load rating	C	55.9 kN
Basic static load rating	C ₀	173 kN
Fatigue load limit	P _u	7.65 kN
Attainable speed for grease lubrication		5 000 r/min
Attainable speed for oil-air lubrication		6 000 r/min
Contact angle	α	60 °
Preload		625 N

Static axial stiffness		792 N/ μ m
Reference grease quantity	G_{ref}	14.4 cm ³

Mass

Mass bearing		2.7 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.

Third Party Services

When viewing YouTube content via the SKF website(s) (i.e. using YouTube API Services), you agree to be bound by the YouTube Terms of Service.

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.