305803 C-2ZCam roller (yoke-type track roller) with crowned outside surface, integral sealing and relubrication feature

Cam roller (yoke-type track roller) with crowned outside surface, integral sealing and relubrication feature

These cam rollers (yoke-type track rollers) are designed to run on all types of tracks and to be used in cam drives, conveyor systems, etc. They are based on double row angular contact ball bearings. They have a thick-walled outer ring with a crowned running surface prevents edge stresses under skewing. They are supplied greased, sealed and ready-to-mount. A lubrication hole in the inner ring facilitates relubrication.

- High radial load carrying capacity and relatively high speed capability
- Accommodate tilting moments
- Long service life
- Ready to mount
- Integral sealing, for increased reliability, with relubrication feature

Overview

Dimensions

Functional outside diameter	47 mm
Bore diameter	17 mm
Width	17.5 mm

Performance

Basic dynamic load rating	13.8 kN
Basic static load rating	7.65 kN
Limiting speed	11 000 r/min

Properties

Bearing part	Complete track roller
Rolling elements	Balls
Number of rows	2
Outer ring profile	Crowned
Axial guidance of outer ring	Yes
Number of flanges, outer ring	0

Cage	With
Radial internal clearance	Not applicable
Axial internal clearance	Normal
Tolerance class	Normal (except crowned running surface)
Material, bearing	Bearing steel
Coating	Without
Sealing	Shield on both sides
Sealing type	Non-contact
Lubricant	Grease
Relubrication feature	With

Technical Specification

Dimensions

D	47 mm	Outside diameter
d	17 mm	Bore diameter
B	17.5 mm	Width
d_1	≈ 23.3 mm	Shoulder/recess diameter inner ring
D_1	≈ 35 mm	Recess diameter outer ring
R	400 mm	Profile running surface (crown) outer ring
$r_{1,2}$	min. 0.6 mm	Chamfer dimension
a	23 mm	Distance pressure points

Calculation data

Basic dynamic load rating	C	13.8 kN
Basic static load rating	C_0	7.65 kN
Fatigue load limit	P_u	0.325 kN
Maximum dynamic radial load	F_r	max. 9.3 kN
Maximum static radial load	F_{0r}	max. 13.4 kN
Limiting speed		11 000 r/min

Mass

Mass cam roller	0.16 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.