

C 3040 KCARB toroidal roller bearing with tapered bore (1:12)

CARB toroidal roller bearing with tapered bore (1:12)

CARB toroidal roller bearings are unique: as well as accommodating misalignment without increased stress levels, they also provide frictionless axial movement within the bearing in the non-locating position in self-aligning bearing arrangements. Being SKF Explorer bearings, they can accommodate higher load levels and provide significantly extended service life.

- Accommodate misalignment and axial displacement within the bearing
- High radial load carrying capacity
- Provide frictionless axial movement
- Long bearing system life
- Reduce noise and vibration levels

Overview

Dimensions

Bore diameter	200 mm
Outside diameter	310 mm
Width	82 mm

Performance

Basic dynamic load rating	1 120 kN
Basic static load rating	1 730 kN
Reference speed	1 700 r/min
Limiting speed	2 400 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
Cage	Sheet metal
Radial internal clearance	CN
Tolerance class	Normal
Sealing	Without
Lubricant	None
Relubrication feature	Without

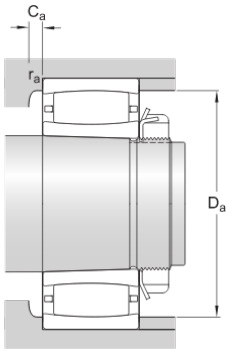
Technical Specification

SKF performance class	SKF Explorer
Bore type	Tapered 1:12

NOT FOUND

Dimensions

d	200 mm	Bore diameter
D	310 mm	Outside diameter
B	82 mm	Width
d_2	≈ 235 mm	Shoulder diameter of inner ring
D_1	≈ 285 mm	Shoulder or recess diameter of outer ring
s_1	max. 15.2 mm	Permissible axial displacement
$r_{1,2}$	min. 2.1 mm	Chamfer dimension



Abutment dimensions

D_a	min. 272 mm	Diameter of housing abutment
D_a	max. 299 mm	Abutment diameter housing
C_a	min. 2.9 mm	Minimum width of space required in housing
r_a	max. 2 mm	Radius of fillet

A negative value for C_a

Calculation data

Basic dynamic load rating	C	1 120 kN
Basic static load rating	C_0	1 730 kN

Fatigue load limit	P_u	153 kN
Reference speed		1 700 r/min
Limiting speed		2 400 r/min
Misalignment factor	k_1	0.123
Internal clearance factor	k_2	0.095

Mass

Mass	21.5 kg

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