

## C 3224 K



## 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	120 mm
Outside diameter	215 mm
Width	76 mm

## Performance

Basic dynamic load rating	750 kN
Basic static load rating	980 kN
Reference speed	2 400 r/min
Limiting speed	3 200 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
Sealing	Without
Lubricant	None
Relubrication feature	Without

# Technical Specification

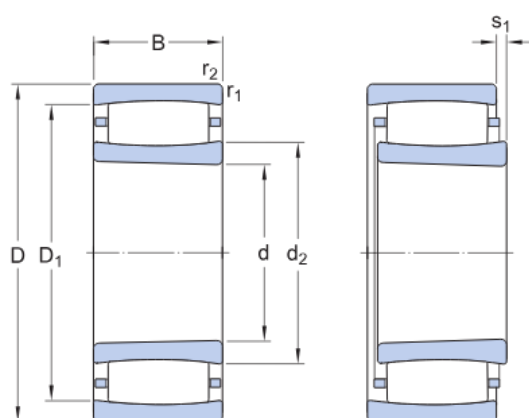
SKF performance class

SKF Explorer

Bore type

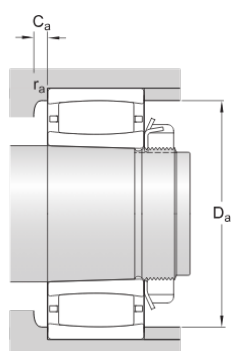
Tapered 1:12

## Dimensions



d	120 mm	Bore diameter
D	215 mm	Outside diameter
B	76 mm	Width
d <sub>2</sub>	≈ 149 mm	Shoulder diameter of inner ring
D <sub>1</sub>	≈ 190 mm	Shoulder or recess diameter of outer ring
s <sub>1</sub>	max. 17.1 mm	Permissible axial displacement
r <sub>1,2</sub>	min. 2.1 mm	Chamfer dimension

## Abutment dimensions



D <sub>i</sub>	min. 179 mm	Diameter of housing abutment
D <sub>i</sub>	max. 203 mm	Abutment diameter housing
C <sub>e</sub>	min. 2.4 mm	Minimum width of space required in housing
r <sub>a</sub>	max. 2 mm	Radius of fillet
A negative value for C <sub>a</sub>		

## Calculation data

Basic dynamic load rating	C	750 kN
Basic static load rating	C <sub>0</sub>	980 kN
Fatigue load limit	P <sub>u</sub>	98 kN

Reference speed		2 400 r/min
Limiting speed		3 200 r/min
Misalignment factor	$k_1$	0.103
Internal clearance factor	$k_2$	0.108

## Mass

Mass		11.5 kg
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