

# C 2220CARB toroidal roller bearing



## CARB toroidal roller bearing

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	100 mm
Outside diameter	180 mm
Width	46 mm

### Performance

Basic dynamic load rating	415 kN
Basic static load rating	465 kN
Reference speed	3 600 r/min
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

### Properties

Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
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

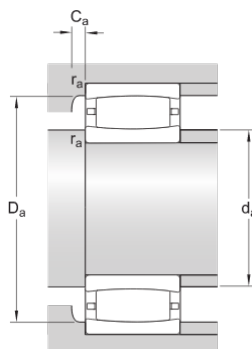
Cylindrical



## Dimensions

d	100 mm	Bore diameter
D	180 mm	Outside diameter
B	46 mm	Width
$d_2$	≈ 118 mm	Shoulder diameter of inner ring
$D_1$	≈ 157 mm	Shoulder or recess diameter of outer ring
$s_1$	max. 10.1 mm	Permissible axial displacement
$r_{1,2}$	min. 2.1 mm	Chamfer dimension

## Abutment dimensions



$d_a$	min. 112 mm	Diameter of shaft abutment
$d_a$	max. 134 mm	Diameter of shaft abutment
$D_a$	min. 146 mm	Diameter of housing abutment
$D_a$	max. 168 mm	Abutment diameter housing
$C_a$	min. 0.9 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	415 kN
Basic static load rating	$C_0$	465 kN
Fatigue load limit	$P_u$	49 kN
Reference speed		3 600 r/min
Limiting speed		4 800 r/min
Misalignment factor	$k_1$	0.108
Internal clearance factor	$k_2$	0.11

## Mass

Mass		4.95 kg
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