



# C 2209 KTN9CARB 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	45 mm
Outside diameter	85 mm
Width	23 mm

### Performance

Basic dynamic load rating	93 kN
Basic static load rating	93 kN
Reference speed	7 500 r/min
Limiting speed	11 000 r/min
SKF performance class	SKF Explorer

### Properties

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

# Technical Specification

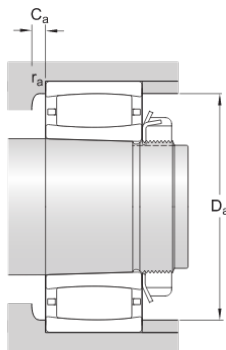
SKF performance class	SKF Explorer
Bore type	Tapered 1:12



## Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B	23 mm	Width
$d_2$	$\approx 55.6$ mm	Shoulder diameter of inner ring
$D_1$	$\approx 73.1$ mm	Shoulder or recess diameter of outer ring
$s_1$	max. 7.1 mm	Permissible axial displacement
$r_{1,2}$	min. 1.1 mm	Chamfer dimension

## Abutment dimensions



$D_a$	min. 70.4 mm	Diameter of housing abutment
$D_a$	max. 78 mm	Abutment diameter housing
$C_a$	min. 0.3 mm	Minimum width of space required in housing
$r_a$	max. 1 mm	Radius of fillet
A negative value for $C_a$		

## Calculation data

Basic dynamic load rating	C	93 kN
Basic static load rating	$C_0$	93 kN

Fatigue load limit	$P_u$	10.8 kN
Reference speed		7 500 r/min
Limiting speed		11 000 r/min
Misalignment factor	$k_1$	0.095
Internal clearance factor	$k_2$	0.128

## Mass

Mass		0.55 kg
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