

C 2210 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	50 mm
Outside diameter	90 mm
Width	23 mm

Performance

Basic dynamic load rating	98 kN
Basic static load rating	100 kN
Reference speed	7 000 r/min
Limiting speed	9 500 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

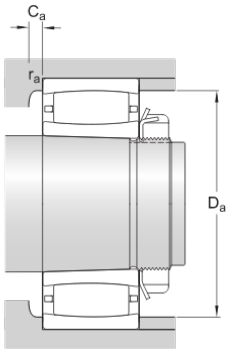
Technical Specification

SKF performance class	SKF Explorer
Bore type	Tapered 1:12

NOT FOUND

Dimensions

d	50 mm	Bore diameter
D	90 mm	Outside diameter
B	23 mm	Width
d_2	≈ 61.9 mm	Shoulder diameter of inner ring
D_1	≈ 79.4 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. 76.7 mm	Diameter of housing abutment
D_a	max. 83 mm	Abutment diameter housing
C_a	min. -0.8 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	98 kN
Basic static load rating	C_0	100 kN

Fatigue load limit	P_u	11.8 kN
Reference speed		7 000 r/min
Limiting speed		9 500 r/min
Misalignment factor	k_1	0.097
Internal clearance factor	k_2	0.128

Mass

Mass	0.58 kg

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