

C 2211 TN9CARB 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	55 mm
Outside diameter	100 mm
Width	25 mm

Performance

Basic dynamic load rating	116 kN
Basic static load rating	114 kN
Reference speed	6 300 r/min
Limiting speed	9 000 r/min
SKF performance class	SKF Explorer

Properties

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

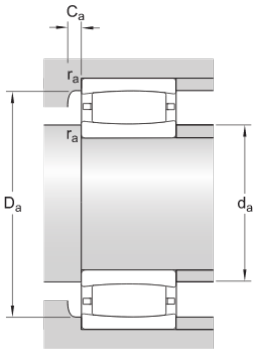
Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical

NOT FOUND

Dimensions

d	55 mm	Bore diameter
D	100 mm	Outside diameter
B	25 mm	Width
d_2	≈ 65.8 mm	Shoulder diameter of inner ring
D_1	≈ 86.7 mm	Shoulder or recess diameter of outer ring
s_1	max. 8.6 mm	Permissible axial displacement
$r_{1,2}$	min. 1.5 mm	Chamfer dimension



Abutment dimensions

d_a	min. 64 mm	Diameter of shaft abutment
d_a	max. 65.8 mm	Diameter of shaft abutment
D_a	min. 83.1 mm	Diameter of housing abutment
D_a	max. 91 mm	Abutment diameter housing
C_a	min. 0.3 mm	Minimum width of space required in housing
r_a	max. 1.5 mm	Radius of fillet

A negative value for C_a

Calculation data

Basic dynamic load rating	C	116 kN

Basic static load rating	C_0	114 kN
Fatigue load limit	P_u	13.4 kN
Reference speed		6 300 r/min
Limiting speed		9 000 r/min
Misalignment factor	k_1	0.094
Internal clearance factor	k_2	0.133

Mass

Mass	0.8 kg

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