



C 2314

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	2.756 in
Outside diameter	5.906 in
Width	2.008 in

Performance

Basic dynamic load rating	91 048 lbf
Basic static load rating	96 668 lbf
Limiting speed	5 000 r/min
Reference speed	3 800 r/min
SKF performance class	SKF Explorer

Properties

Bore type	Cylindrical
Cage	Sheet metal
Locating feature, bearing outer ring	Without
Lubricant	None
Number of rows	1
Radial internal clearance	CN
Relubrication feature	Without
Sealing	Without

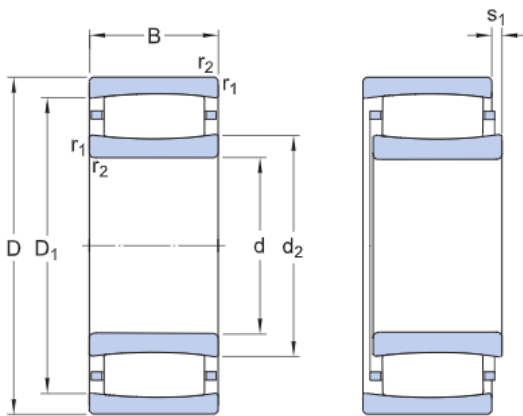
Technical Specification

SKF performance class

SKF Explorer

Bore type

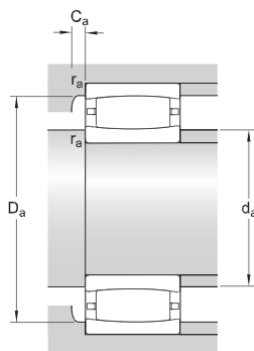
Cylindrical



Dimensions

d	2.756 in	Bore diameter
D	5.906 in	Outside diameter
B	2.008 in	Width
d ₂	≈ 3.598 in	Shoulder diameter of inner ring
D ₁	≈ 5.118 in	Shoulder or recess diameter of outer ring
s ₁	max. 0.3583 in	Permissible axial displacement
r _{1,2}	min. 0.083 in	Chamfer dimension

Abutment dimensions



d _a	min. 3.228 in	Diameter of shaft abutment
d _a	max. 4.173 in	Diameter of shaft abutment
D _ç	min. 4.685 in	Diameter of housing abutment
D _ç	max. 5.433 in	Abutment diameter housing
C _ç	min. 0.087 in	Minimum width of space required in housing
r _a	max. 0.079 in	Radius of fillet
A negative value for C _a		

Calculation data

Basic dynamic load rating

C

91 048 lbf

Basic static load rating	C_0	96 668 lbf
Fatigue load limit	P_u	11 016 lbf
Reference speed		3 800 r/min
Limiting speed		5 000 r/min
Misalignment factor	k_1	0.11
Internal clearance factor	k_2	0.099

Mass

Mass		9.48 lb
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