

C 3148

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	9.449 in
Outside diameter	15.748 in
Width	5.039 in

Performance

Basic dynamic load rating	521 557 lbf
Basic static load rating	775 591 lbf
Limiting speed	1 700 r/min
Reference speed	1 300 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

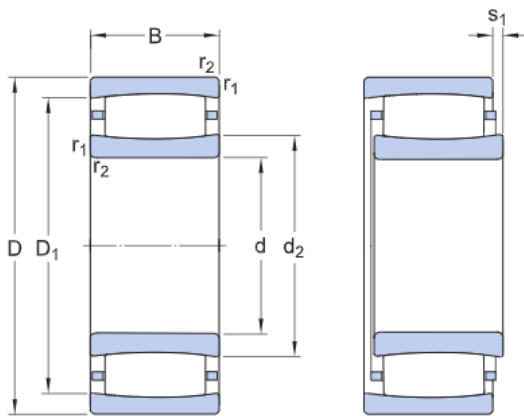
Technical Specification

SKF performance class

SKF Explorer

Bore type

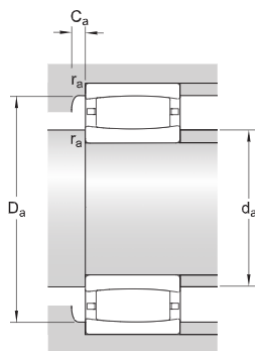
Cylindrical



Dimensions

d	9.449 in	Bore diameter
D	15.748 in	Outside diameter
B	5.039 in	Width
d ₂	≈ 11.063 in	Shoulder diameter of inner ring
D ₁	≈ 14.055 in	Shoulder or recess diameter of outer ring
s ₁	max. 0.8032 in	Permissible axial displacement
r _{1,2}	min. 0.157 in	Chamfer dimension

Abutment dimensions



d _e	min. 10.118 in	Diameter of shaft abutment
d _e	max. 12.165 in	Diameter of shaft abutment
D _i	min. 13.15 in	Diameter of housing abutment
D _i	max. 15.079 in	Abutment diameter housing
C _e	min. 0.146 in	Minimum width of space required in housing
r _a	max. 0.118 in	Radius of fillet
A negative value for C _a		

Calculation data

Basic dynamic load rating

C

521 557 lbf

Basic static load rating	C_0	775 591 lbf
Fatigue load limit	P_u	64 071 lbf
Reference speed		1 300 r/min
Limiting speed		1 700 r/min
Misalignment factor	k_1	0.116
Internal clearance factor	k_2	0.095

Mass

Mass		141.096 lb
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