

C 3160 K

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	11.811 in
Outside diameter	19.685 in
Width	6.299 in

Performance

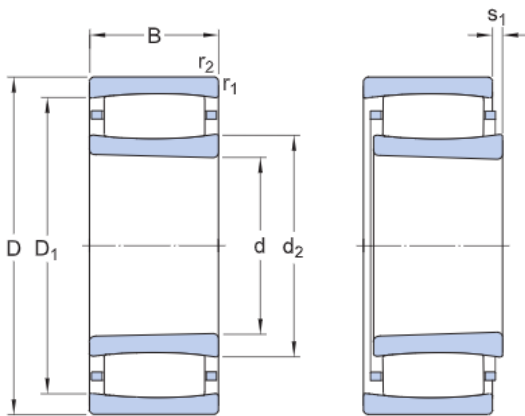
Basic dynamic load rating	730 629 lbf
Basic static load rating	1 169,007 lbf
Limiting speed	1 300 r/min
Reference speed	950 r/min
SKF performance class	SKF Explorer

Properties

Bore type	Tapered 1:12
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

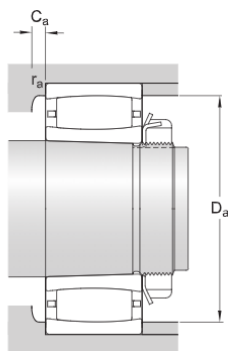
SKF performance class	SKF Explorer
Bore type	Tapered 1:12



Dimensions

d	11.811 in	Bore diameter
D	19.685 in	Outside diameter
B	6.299 in	Width
d ₂	≈ 14.252 in	Shoulder diameter of inner ring
D ₁	≈ 17.638 in	Shoulder or recess diameter of outer ring
s ₁	max. 1.2008 in	Permissible axial displacement
r _{1,2}	min. 0.197 in	Chamfer dimension

Abutment dimensions



D _i	min. 16.614 in	Diameter of housing abutment
D _o	max. 18.898 in	Abutment diameter housing
C _ε	min. 0.193 in	Minimum width of space required in housing
r _a	max. 0.157 in	Radius of fillet
A negative value for C _a		

Calculation data

Basic dynamic load rating	C	730 629 lbf
Basic static load rating	C ₀	1 169,007 lbf

Fatigue load limit	P_u	89 924 lbf
Reference speed		950 r/min
Limiting speed		1 300 r/min
Misalignment factor	k_1	0.106
Internal clearance factor	k_2	0.106

Mass

Mass		264.555 lb
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