

C 4024 VFull complement CARB toroidal roller bearing

Full complement 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. This full complement bearing, which has a lower speed rating, uses as many rollers as possible, giving it the highest possible load rating.

- Accommodate misalignment and axial displacement within the bearing
- Very high radial load carrying capacity
- Provide frictionless axial movement
- Long bearing system life

Overview

Dimensions

Bore diameter	120 mm
Outside diameter	180 mm
Width	60 mm

Performance

Basic dynamic load rating	530 kN
Basic static load rating	880 kN
Limiting speed	1 100 r/min
SKF performance class	SKF Explorer

Properties

Number of rows	1
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	None (full complement bearing)
Radial internal clearance	CN
Tolerance class	Normal
Sealing	Without
Lubricant	None
Relubrication feature	Without

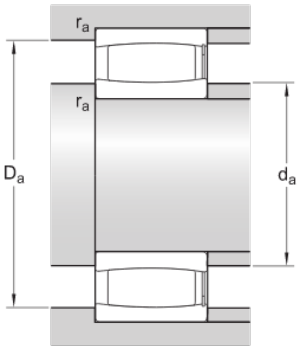
Technical Specification

SKF performance class	SKF Explorer
Bore type	Cylindrical

NOT FOUND

Dimensions

d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	60 mm	Width
d_2	≈ 140 mm	Shoulder diameter of inner ring
D_1	≈ 164 mm	Shoulder or recess diameter of outer ring
s_1	max. 12 mm	Permissible axial displacement
s_2	max. 5.2 mm	Permissible axial displacement
$r_{1,2}$	min. 2 mm	Chamfer dimension



Abutment dimensions

d_a	min. 130 mm	Diameter of shaft abutment
d_a	max. 152 mm	Diameter of shaft abutment
D_a	max. 170 mm	Abutment diameter housing
r_a	max. 2 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	530 kN

Basic static load rating	C_0	880 kN
Fatigue load limit	P_u	91.5 kN
Limiting speed		1 100 r/min
Misalignment factor	k_1	0.109
Internal clearance factor	k_2	0.103

Mass

Mass	5.55 kg

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