



Image may differ from product. See technical specification for details.

C 2214 TN9

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	70 mm
Outside diameter	125 mm
Width	31 mm

Performance

Basic dynamic load rating	186 kN
Basic static load rating	196 kN
Reference speed	5 000 r/min
Limiting speed	7 000 r/min
SKF performance class	SKF Explorer

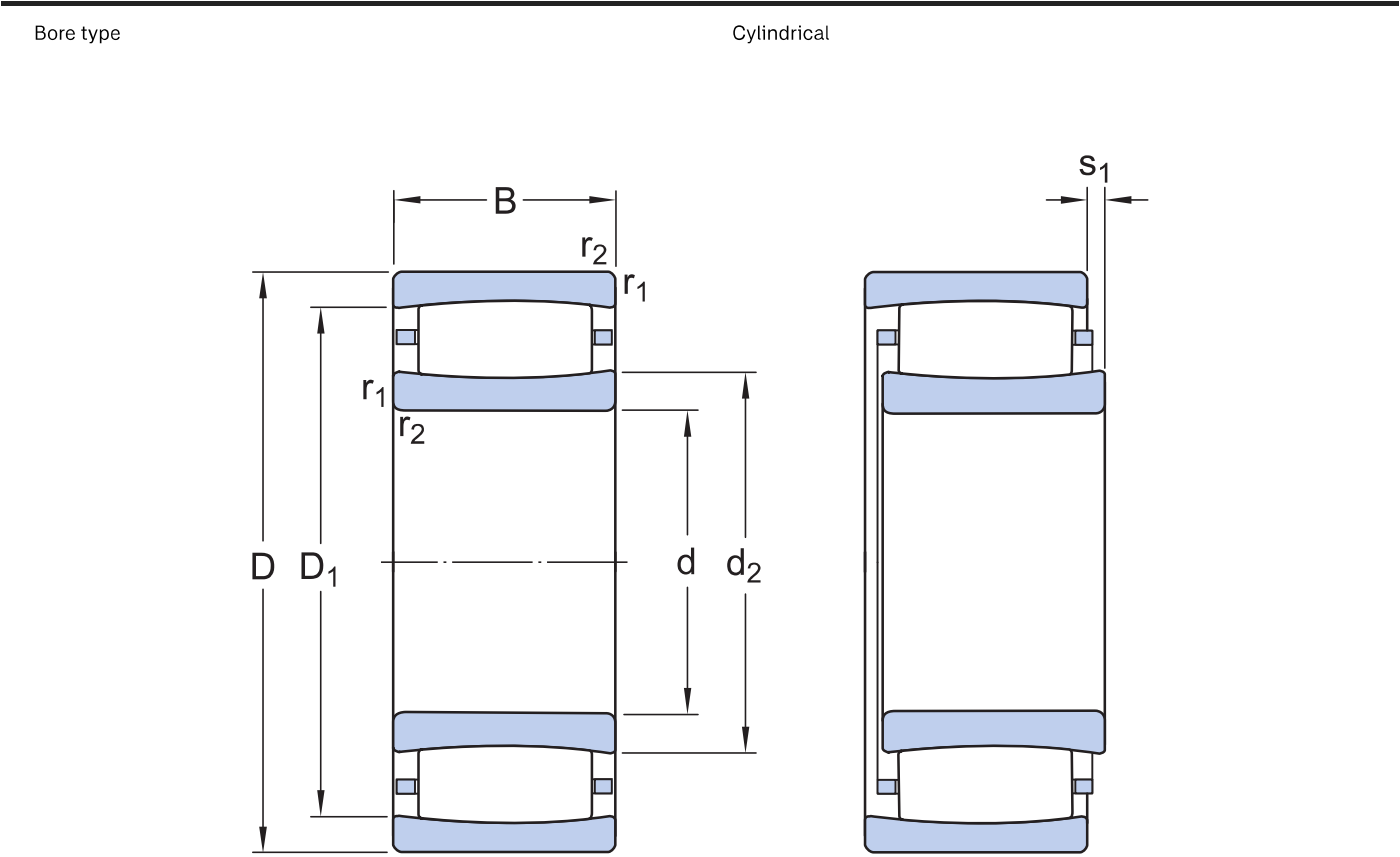
Properties

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

Logistics

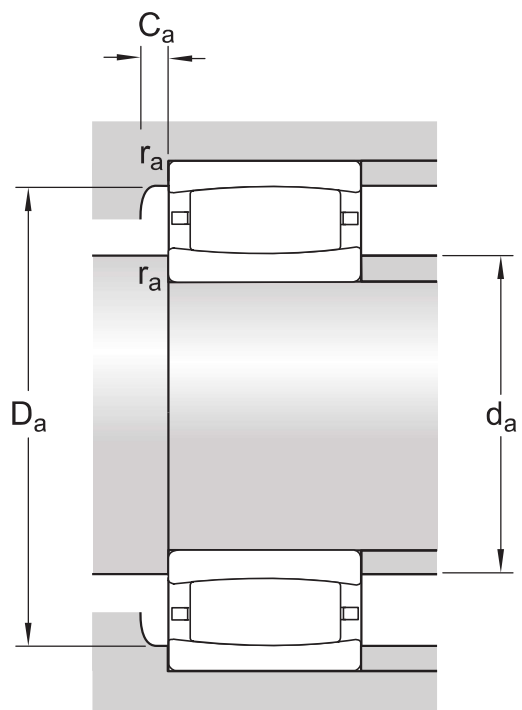
Product net weight	1.46 kg
eClass code	23-05-09-13
UNSPSC code	31171505

Technical specification



Dimensions

d	70 mm	Bore diameter
D	125 mm	Outside diameter
B	31 mm	Width
d ₂	≈ 83.7 mm	Shoulder diameter of inner ring
D ₁	≈ 111 mm	Shoulder or recess diameter of outer ring
s ₁	max. 9.6 mm	Permissible axial displacement
r _{1,2}	min. 1.5 mm	Chamfer dimension



Abutment dimensions

d_a	min. 79 mm	Diameter of shaft abutment
d_a	max. 83.7 mm	Diameter of shaft abutment
D_a	min. 107 mm	Diameter of housing abutment
D_a	max. 116 mm	Abutment diameter housing
C_a	min. 0.4 mm	Minimum width of space required in housing
r_a	max. 1.5 mm	Radius of fillet
A negative value for C_a is theoretical.		Notes - Bullet list

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	186 kN
Basic static load rating	C_0	196 kN
Fatigue load limit	P_u	22.8 kN
Reference speed		5 000 r/min
Limiting speed		7 000 r/min
Misalignment factor	k_1	0.098
Internal clearance factor	k_2	0.127

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

BEARING INTERFACES

- [Seat tolerances for standard conditions](#)
- [Tolerances and resultant fit](#)

More Information

 Product details	 Engineering information	 Tools
Designs and variants	Principles of rolling bearing selection	SimPro Quick
General bearing specifications	General bearing knowledge	SKF Product select - Select and evaluate bearing
Loads	Bearing selection process	SKF Product select - Combine bearing with housing
Temperature limits	Bearing failure and how to prevent it	LubeSelect for SKF greases
Permissible speed		Drive-up Method Program
Design considerations		Heater selection tool
Mounting		Oil Injection Method Program
Designation system		Tool and Accessory Selector for sleeves and shafts



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