



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

C 2218

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 | 90 mm |
| Outside diameter | 160 mm |
| Width | 40 mm |

Performance

| | |
|---------------------------|--------------|
| Basic dynamic load rating | 325 kN |
| Basic static load rating | 380 kN |
| Reference speed | 3 800 r/min |
| Limiting speed | 5 300 r/min |
| SKF performance class | SKF Explorer |

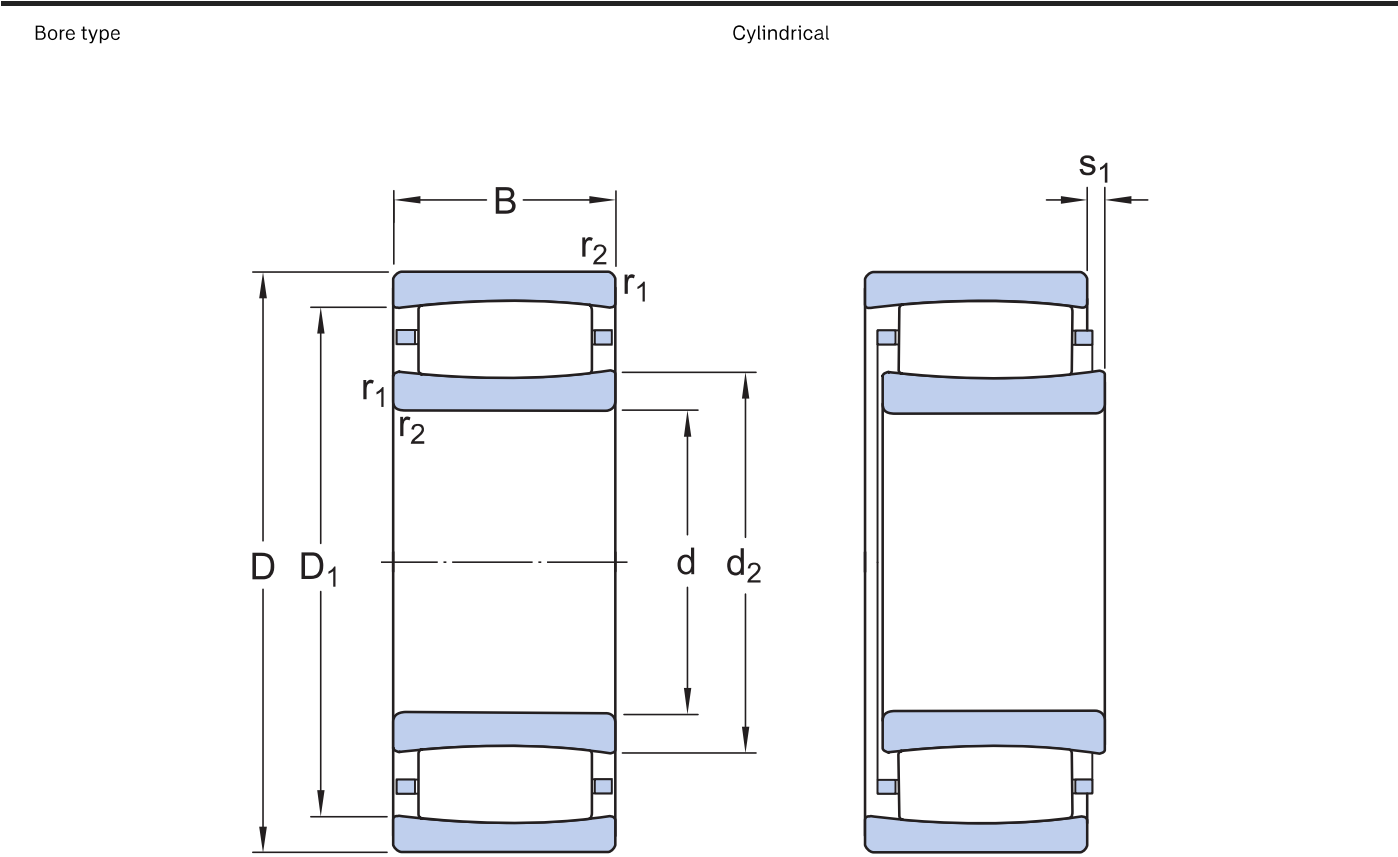
Properties

| | |
|--------------------------------------|-------------|
| Number of rows | 1 |
| Locating feature, bearing outer ring | Without |
| Bore type | Cylindrical |
| Cage | Sheet metal |
| Radial internal clearance | CN |
| Tolerance class | Normal |
| Sealing | Without |
| Lubricant | None |
| Relubrication feature | Without |
| Candidate for remanufacturing | Yes |

Logistics

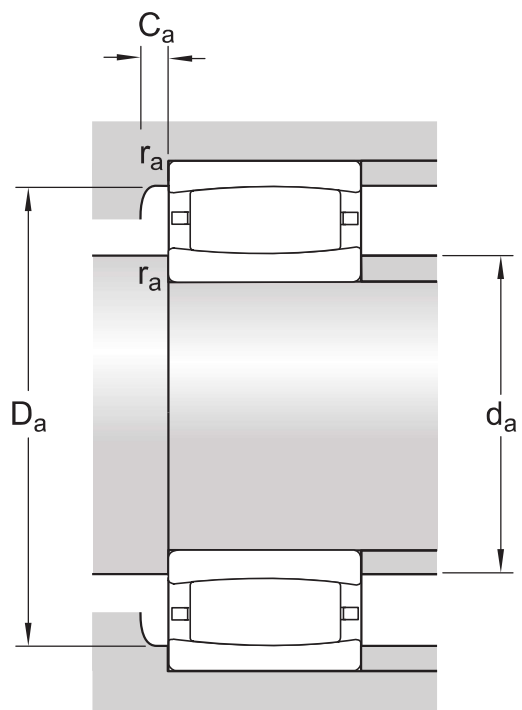
| | |
|--------------------|-------------|
| Product net weight | 3.2 kg |
| eClass code | 23-05-09-13 |
| UNSPSC code | 31171505 |

Technical specification



Dimensions

| | | |
|------------------|-------------|---|
| d | 90 mm | Bore diameter |
| D | 160 mm | Outside diameter |
| B | 40 mm | Width |
| d ₂ | ≈ 111 mm | Shoulder diameter of inner ring |
| D ₁ | ≈ 144 mm | Shoulder or recess diameter of outer ring |
| s ₁ | max. 9.5 mm | Permissible axial displacement |
| r _{1,2} | min. 2 mm | Chamfer dimension |



Abutment dimensions

| | | |
|--|-------------|--|
| d_a | min. 101 mm | Diameter of shaft abutment |
| d_a | max. 124 mm | Diameter of shaft abutment |
| D_a | min. 133 mm | Diameter of housing abutment |
| D_a | max. 149 mm | Abutment diameter housing |
| C_a | min. 1.4 mm | Minimum width of space required in housing |
| r_a | max. 2 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 | 325 kN |
| Basic static load rating | C_0 | 380 kN |
| Fatigue load limit | P_u | 41.5 kN |
| Reference speed | | 3 800 r/min |
| Limiting speed | | 5 300 r/min |
| Misalignment factor | k_1 | 0.104 |
| Internal clearance factor | k_2 | 0.117 |

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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