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

33016

Single row tapered roller bearing

Single row tapered roller bearings are designed to accommodate combined radial and axial loads and provide low friction during operation. The inner ring, with rollers and cage, can be mounted separately from the outer ring. These separable and interchangeable components facilitate mounting, dismounting and maintenance. By mounting one single row tapered roller bearing against another and applying a preload, a rigid bearing application can be achieved.

- High radial and axial load carrying capacity
- Accommodate axial loads in one direction
- Low friction and long service life
- Separable and interchangeable components

Overview

Dimensions

Bore diameter	80 mm
Outside diameter	125 mm
Width, total	36 mm
Width, inner ring	36 mm
Width, outer ring	29.5 mm
Contact angle	10.5 °

Performance

Basic dynamic load rating	207 kN
Basic static load rating	285 kN
Reference speed	4 000 r/min
Limiting speed	5 000 r/min
SKF performance class	SKF Explorer

Properties

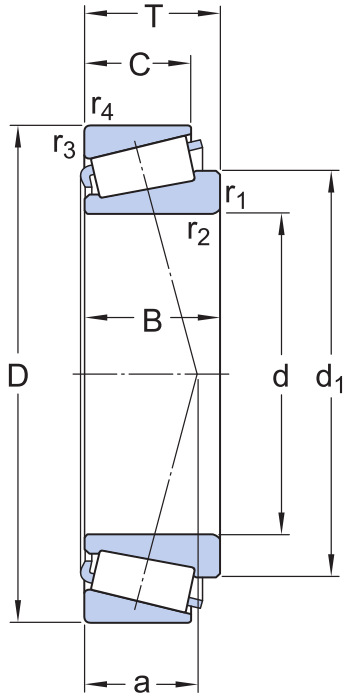
Bearing part	Complete bearing
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Arrangement of contact angle (double-row bearing)	Not applicable
Matched arrangement	No
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

Product net weight	1.6 kg
eClass code	23-05-09-10
UNSPSC code	31171516

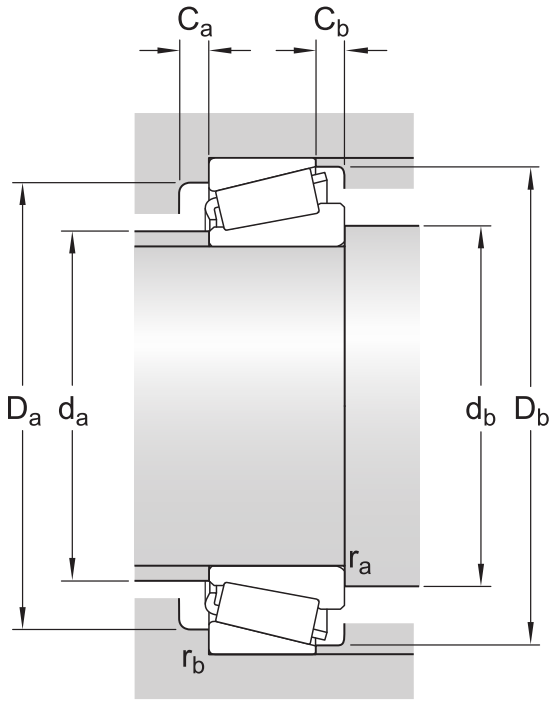
Technical specification

Dimension series	2CE



Dimensions

d	80 mm	Bore diameter
D	125 mm	Outside diameter
T	36 mm	Total width
d_1	≈ 102.3 mm	Shoulder diameter of inner ring
B	36 mm	Width of inner ring
C	29.5 mm	Width of outer ring
$r_{1,2}$	min. 1.5 mm	Chamfer dimension of inner ring
$r_{3,4}$	min. 1.5 mm	Chamfer dimension of outer ring
a	25.501 mm	Distance side face to pressure point



Abutment dimensions

d_a	max. 90 mm	Diameter of shaft abutment
d_b	min. 89.5 mm	Diameter of shaft abutment
D_a	min. 112 mm	Diameter of housing abutment
D_a	max. 116 mm	Diameter of housing abutment
D_b	min. 119 mm	Diameter of housing abutment
C_a	min. 6 mm	Minimum width of space required in housing on large side face
C_b	min. 6.5 mm	Minimum width of space required in housing on small side face
r_a	max. 1.5 mm	Radius of shaft fillet
r_b	max. 1.5 mm	Radius of housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	207 kN
Basic static load rating	C_0	285 kN
Fatigue load limit	P_u	32 kN
Reference speed		4 000 r/min
Limiting speed		5 000 r/min
Limiting value	e	0.28

Calculation factor	Y	2.1
Calculation factor	Y_0	1.1

More Information

Product details

- Designs and variants
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Design considerations
- Bearing designations
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing failure and how to prevent it

Tools

- SimPro Quick
- Bearing Select
- Engineering Calculator
- LubeSelect for SKF greases
- Heater Selection Tool
- Oil Injection Method Program
- skf.com/mount

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