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

JM 515649/610

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	3.15 in
Outside diameter	5.118 in
Width, total	1.378 in
Width, inner ring	1.339 in
Width, outer ring	1.122 in
Contact angle	14.517 °

Performance

Basic dynamic load rating	48 559 lbf
Basic static load rating	61 822 lbf
Reference speed	4 000 r/min
Limiting speed	4 800 r/min
SKF performance class	SKF Explorer

Properties

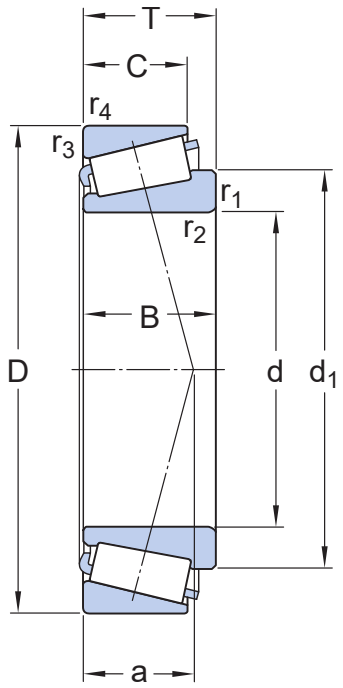
Bearing part	Complete bearing
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Sheet metal
Arrangement of contact angle (double-row bearing)	Not applicable
Matched arrangement	No
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Unit system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

Logistics

Product net weight	3.902 lb
eClass code	23-05-09-10
UNSPSC code	31171516

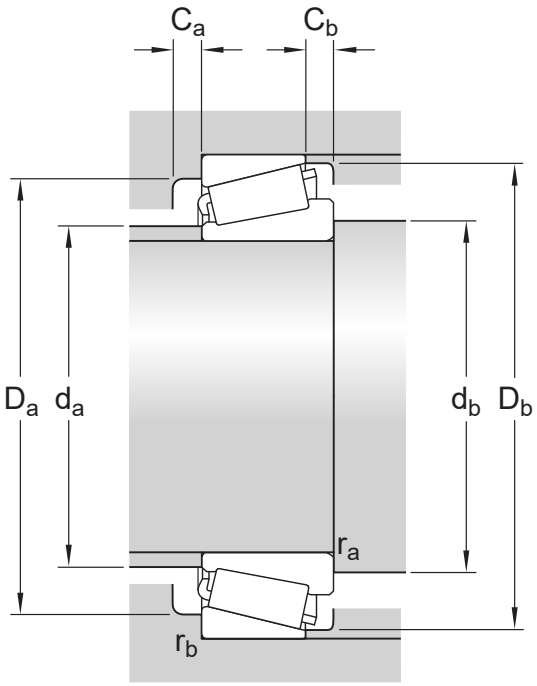
Technical specification

Dimension series	M 515600



Dimensions

d	3.15 in	Bore diameter
D	5.118 in	Outside diameter
T	1.378 in	Total width
d_1	≈ 4.132 in	Shoulder diameter of inner ring
B	1.339 in	Width of inner ring
C	1.122 in	Width of outer ring
$r_{1,2}$	min. 0.118 in	Chamfer dimension of inner ring
$r_{3,4}$	min. 0.098 in	Chamfer dimension of outer ring
a	1.141 in	Distance side face to pressure point



Abutment dimensions

d_a	max. 3.543 in	Diameter of shaft abutment
d_b	min. 3.661 in	Diameter of shaft abutment
D_a	min. 4.488 in	Diameter of housing abutment
D_a	max. 4.685 in	Diameter of housing abutment
D_b	min. 4.882 in	Diameter of housing abutment
C_a	min. 0.236 in	Minimum width of space required in housing on large side face
C_b	min. 0.256 in	Minimum width of space required in housing on small side face
r_a	max. 0.118 in	Radius of shaft fillet
r_b	max. 0.098 in	Radius of housing fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	48 559 lbf
Basic static load rating	C_0	61 822 lbf
Fatigue load limit	P_u	6 969 lbf
Reference speed		4 000 r/min
Limiting speed		4 800 r/min

GENERAL BEARING SPECIFICATIONS

- Tolerances:
  metric bearings: Normal and CL7C, CLN
  inch bearings: Normal and CL, deviating width

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

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

Terms of use

By accessing and using this website / app owned and published by AB SKF (publ.) (556007-3495 · Gothenburg) (“SKF”), you agree to the following terms and conditions:

Warranty Disclaimer and Limitation of Liability

Although every care has been taken to assure the accuracy of the information on this website / app, SKF provides this information "AS IS" and DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. You acknowledge that your use of this website / app is at your sole risk, that you assume full responsibility for all costs associated with use of this website / app, and that SKF shall not be liable for any direct, incidental, consequential, or indirect damages of any kind arising out of your access to, or use of the information or software made available on this website / app.

Any warranties and representations in this website / app for SKF products or services that you purchase or use will be subject to the agreed upon terms and conditions in the contract for such product or service.

Further, for non-SKF websites / apps that are referenced in our website / app or where a hyperlink appears, SKF makes no warranties concerning the accuracy or reliability of the information in these websites / apps and assumes no responsibility for material created or published by third parties contained therein. In addition, SKF does not warrant that this website / app or these other linked websites / apps are free from viruses or other harmful elements.

Third Party Services

When viewing YouTube content via the SKF website(s) (i.e. using YouTube API Services), you agree to be bound by the YouTube Terms of Service.

Copyright

Trademarks and Patents

Changes

SKF reserves the right to make changes or additions to this website / app at any time.