



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

7209 BECBY

Single row angular contact ball bearing

These single row angular contact ball bearings can accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They can operate at high speeds and, depending on the variant, even very high speeds. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

- High-speed capability
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

Bore diameter	1.772 in
Outside diameter	3.346 in
Width	0.748 in
Contact angle	40 °

Performance

Basic dynamic load rating	8 543 lbf
Basic static load rating	6 407 lbf
Reference speed	10 000 r/min
Limiting speed	10 000 r/min
SKF performance class	SKF Explorer

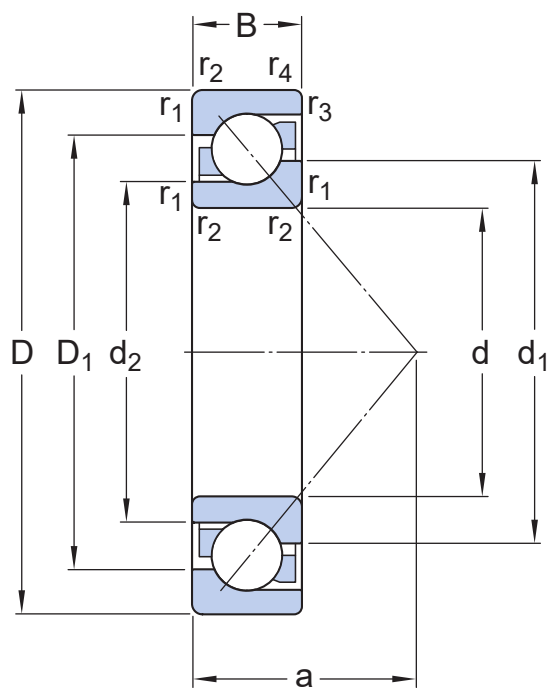
Properties

Contact type	Normal contact (two-point contact)
Number of rows	1
Locating feature, bearing outer ring	None
Ring type	One-piece inner and outer rings
Cage	Brass sheet metal
Matched arrangement	No
Universal matching bearing	Yes
Axial internal clearance	Not applicable
Matched condition (axial clearance/ preload)	Axial clearance CB
Tolerance class	Class P6 (P6)
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

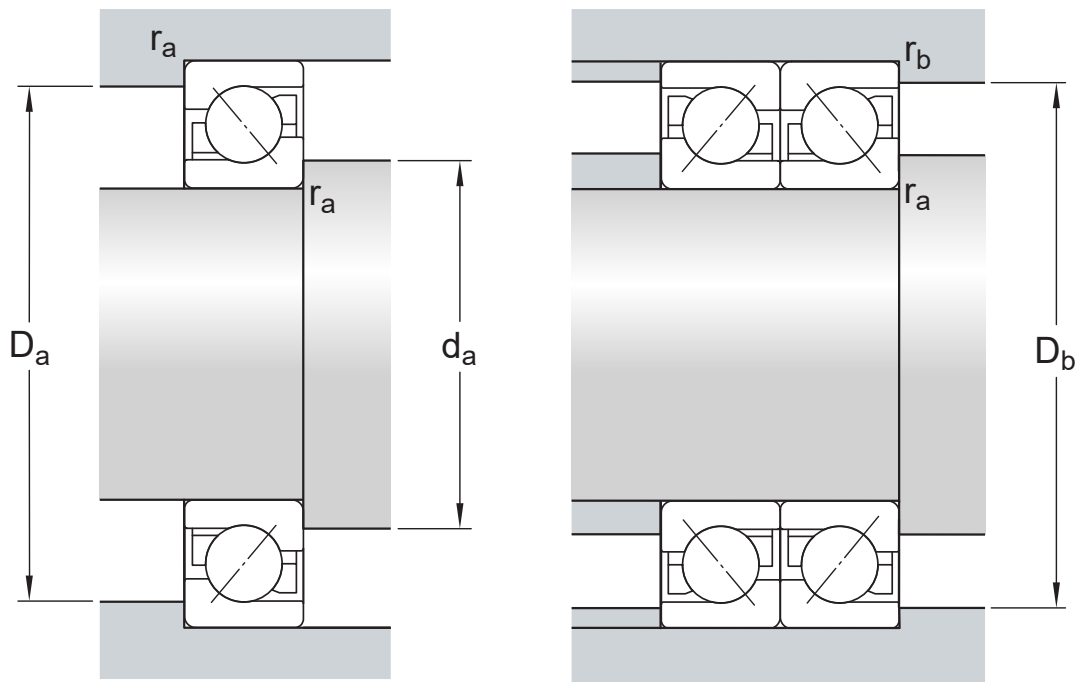
Product net weight	0.9568 lb
eClass code	23-05-08-03
UNSPSC code	31171531

Technical specification



Dimensions

d	1.772 in	Bore diameter
D	3.346 in	Outside diameter
B	0.748 in	Width
d ₁	≈ 2.396 in	Shoulder diameter of inner ring (large side face)
d ₂	≈ 2.074 in	Shoulder diameter of inner ring (small side face)
D ₁	≈ 2.762 in	Shoulder diameter of outer ring (large side face)
a	1.457 in	Distance side face to pressure point
r _{1,2}	min. 0.043 in	Chamfer dimension
r _{3,4}	min. 0.024 in	Chamfer dimension



Abutment dimensions

d_a	min. 2.047 in	Diameter of shaft abutment
D_a	max. 3.071 in	Abutment diameter housing
D_b	max. 3.181 in	Diameter of housing abutment
r_a	max. 0.039 in	Radius of fillet
r_b	max. 0.024 in	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	8 543 lbf
Basic static load rating	C_0	6 407 lbf
Fatigue load limit	P_u	274 lbf
Reference speed		10 000 r/min
Limiting speed		10 000 r/min

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS




- Tolerances: Normal (metric), P6, P5, Normal (inch)
- Internal clearance: CA+CB+CC, G

- [Preload: GA+GB+GC](#)

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

More Information

<div> Product details</div> <div><div>Designs and variants</div><div>General bearing specifications</div><div>Loads</div><div>Temperature limits</div><div>Permissible speed</div><div>Design considerations</div><div>Designation system</div></div>	<div> Engineering information</div> <div><div>Principles of rolling bearing selection</div><div>General bearing knowledge</div><div>Bearing selection process</div><div>Bearing interfaces</div><div>Seat tolerances for standard conditions</div><div>Selecting internal clearance or preload</div><div>Lubrication</div><div>Sealing, mounting and dismounting</div><div>Bearing failure and how to prevent it</div></div>	<div> Tools</div> <div><div>SKF Product select</div><div>SimPro Quick</div><div>Bearing Frequency Calculator</div><div>LubeSelect for SKF greases</div><div>Heater selection tool</div><div>SKF mounting and dismounting instructions</div></div>
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