

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

7411 BGBM

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	2.165 in
Outside diameter	5.512 in
Width	1.299 in
Contact angle	40 °

Performance

Basic dynamic load rating	24 954 lbf
Basic static load rating	17 198 lbf
Reference speed	6 300 r/min
Limiting speed	8 000 r/min

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	Machined brass
Matched arrangement	No
Universal matching bearing	Yes
Axial internal clearance	Not applicable
Tolerance class	Class P6 (P6)
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

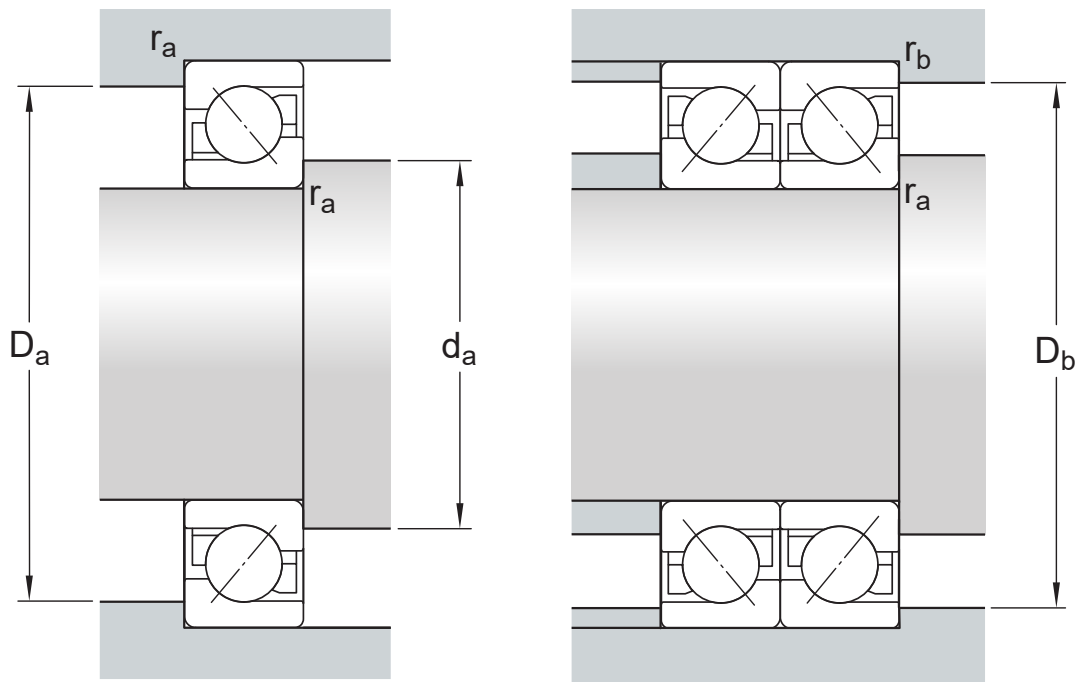
Product net weight	5.864 lb
eClass code	23-05-08-03
UNSPSC code	31171531

Technical specification



Dimensions

d	2.165 in	Bore diameter
D	5.512 in	Outside diameter
B	1.299 in	Width
d ₁	≈ 3.484 in	Shoulder diameter of inner ring (large side face)
d ₂	≈ 2.835 in	Shoulder diameter of inner ring (small side face)
D ₁	≈ 4.268 in	Shoulder diameter of outer ring (large side face)
a	2.276 in	Distance side face to pressure point
r _{1,2}	min. 0.083 in	Chamfer dimension
r _{3,4}	min. 0.083 in	Chamfer dimension



Abutment dimensions

d_a	min. 2.638 in	Diameter of shaft abutment
D_a	max. 5.039 in	Abutment diameter housing
D_b	max. 4.988 in	Diameter of housing abutment
r_a	max. 0.079 in	Radius of fillet
r_b	max. 0.079 in	Radius of fillet

Calculation data

Basic dynamic load rating	C	24 954 lbf
Basic static load rating	C_0	17 198 lbf
Fatigue load limit	P_u	731 lbf
Reference speed		6 300 r/min
Limiting speed		8 000 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

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

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