



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

# **7205 BEGAP**

### 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	0.984 in
Outside diameter	2.047 in
Width	0.591 in
Contact angle	40 °

### Performance

Basic dynamic load rating	3 507 lbf
Basic static load rating	2 248 lbf
Reference speed	16 000 r/min
Limiting speed	17 000 r/min
SKF performance class	SKF Explorer

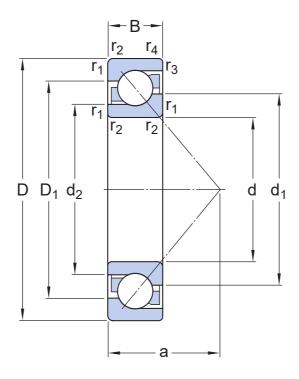
## **Properties**

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	Non-metallic
Matched arrangement	No
Universal matching bearing	Yes
Axial internal clearance	Not applicable
Matched condition (axial clearance/ preload)	Light preload
Tolerance class	Class P6 (P6)
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

## Logistics

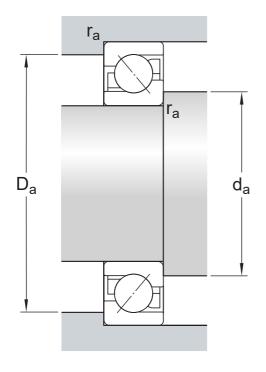
Product net weight	0.2771 lb
eClass code	23-05-08-03
UNSPSC code	31171531

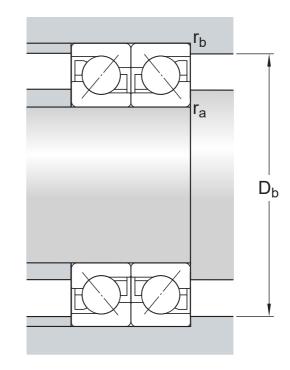
## **Technical specification**



## Dimensions

d	0.984 in	Bore diameter
D	2.047 in	Outside diameter
В	0.591 in	Width
$d_1$	≈ 1.411 in	Shoulder diameter of inner ring (large side face)
$d_2$	≈ 1.215 in	Shoulder diameter of inner ring (small side face)
$D_1$	≈ 1.634 in	Shoulder diameter of outer ring (large side face)
a	0.945 in	Distance side face to pressure point
r <sub>1,2</sub>	min. 0.039 in	Chamfer dimension
r <sub>3,4</sub>	min. 0.024 in	Chamfer dimension





### Abutment dimensions

da	min. 1.205 in	Diameter of shaft abutment
Da	max. 1.827 in	Abutment diameter housing
D <sub>b</sub>	max. 1.882 in	Diameter of housing abutment
ra	max. 0.039 in	Radius of fillet
r <sub>b</sub>	max. 0.024 in	Radius of fillet

### Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	С	3 507 lbf
Basic static load rating	$C_0$	2 248 lbf
Fatigue load limit	$P_{u}$	97 lbf
Reference speed		16 000 r/min
Limiting speed		17 000 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**

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



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