



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

7210 ACCBM

Single row angular contact ball bearing with 25° contact angle

These single row angular contact ball bearings, with 25° contact angle, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have Normal axial internal clearance and are suitable for universal matching, where two bearings can be arranged back-to-back or face-to-face. They have a ball-centred brass cage. They can operate at 20% higher speeds than equivalent bearings with 40° contact angle.

- 25° contact angle
- Brass cage
- Suitable for universal matching
- Can operate at very high speeds
- Accommodate relatively high radial loads and large unilateral axial loads

Overview

Dimensions

| Bore diameter | 50 mm |
|------------------|-------|
| Outside diameter | 90 mm |
| Width | 20 mm |
| Contact angle | 25 ° |

Performance

| Basic dynamic load rating | 45.5 kN |
|---------------------------|--------------|
| Basic static load rating | 35.5 kN |
| Reference speed | 9 000 r/min |
| Limiting speed | 14 000 r/min |
| SKF performance class | SKF Explorer |

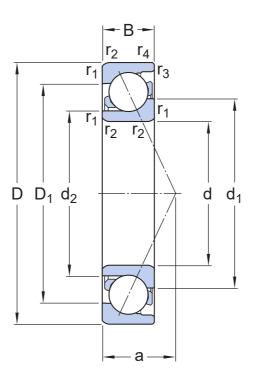
Properties

| 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) | Axial clearance CB |
| Material, bearing | Bearing steel |
| Coating | Without |
| Sealing | Without |
| Lubricant | None |
| Relubrication feature | Without |

Logistics

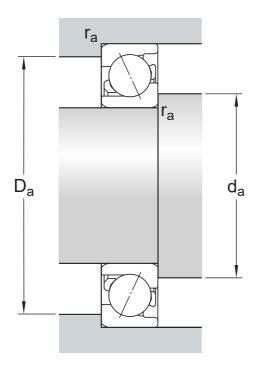
| Product net weight | 0.491 kg |
|--------------------|-------------|
| eClass code | 23-05-08-03 |
| UNSPSC code | 31171531 |

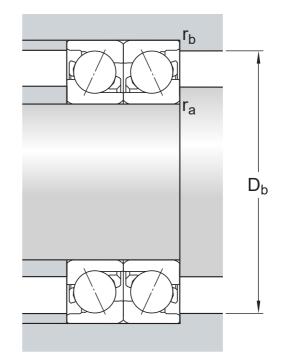
Technical specification



Dimensions

| d | 50 mm | Bore diameter |
|----------------|-------------|---|
| D | 90 mm | Outside diameter |
| В | 20 mm | Width |
| dı | ≈ 65.67 mm | Shoulder diameter of inner ring (large side face) |
| d ₂ | ≈ 57.65 mm | Shoulder diameter of inner ring (small side face) |
| D ₁ | ≈ 75.05 mm | Shoulder diameter of outer ring (large side face) |
| a | 26 mm | Distance side face to pressure point |
| ٢1,2 | min. 1.1 mm | Chamfer dimension |
| ٢3,4 | min. 0.6 mm | Chamfer dimension |





Abutment dimensions

| da | min. 57 mm | Diameter of shaft abutment |
|----------------|--------------|------------------------------|
| Da | max. 83 mm | Abutment diameter housing |
| D _b | max. 85.8 mm | Diameter of housing abutment |
| ſa | max. 1 mm | Radius of fillet |
| Гb | max. 0.6 mm | Radius of fillet |

Calculation data

| SKF performance class | | SKF Explorer |
|----------------------------|----|--------------|
| Basic dynamic load rating | C | 45.5 kN |
| Basic static load rating | Co | 35.5 kN |
| Fatigue load limit | Pu | 1.5 kN |
| Reference speed | | 9 000 r/min |
| Limiting speed | | 14 000 r/min |
| Minimum axial load factor | А | 0.00584 |
| Minimum radial load factor | kr | 0.095 |
| Limiting value | e | 0.68 |

SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

| Calculation factor (single, tandem) | Х | 0.41 |
|-------------------------------------|----------------|------|
| Calculation factor (single, tandem) | Y ₀ | 0.38 |
| Calculation factor (single, tandem) | Y ₂ | 0.87 |

BEARING PAIR ARRANGED BACK-TO-BACK OR FACE-TO-FACE

| Calculation factor (back-to-back, face-to- face) | Х | 0.67 |
|---|----------------|------|
| Calculation factor (back-to-back, face-to- face) | Y ₀ | 0.76 |
| Calculation factor (back-to-back, face-to- face) | Y ₁ | 0.92 |
| Calculation factor (back-to-back, face-to- face) | Y2 | 1.41 |

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



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