



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

7204 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	20 mm
Outside diameter	47 mm
Width	14 mm
Contact angle	25 °

Performance

Basic dynamic load rating	16 kN
Basic static load rating	9.3 kN
Reference speed	20 000 r/min
Limiting speed	30 000 r/min
SKF performance class	SKF Explorer

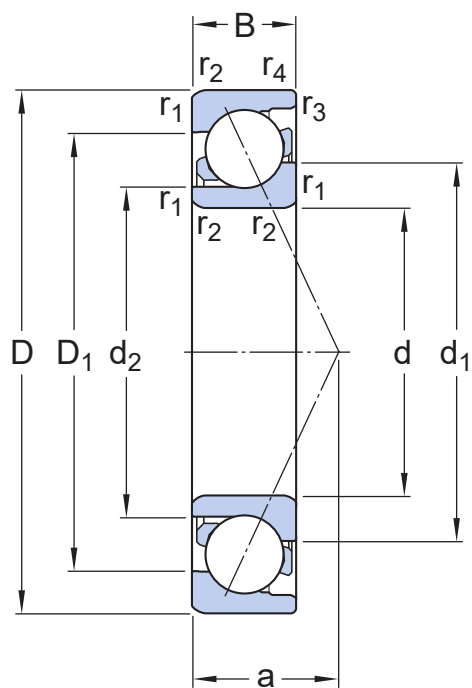
Properties

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	Machined brass
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

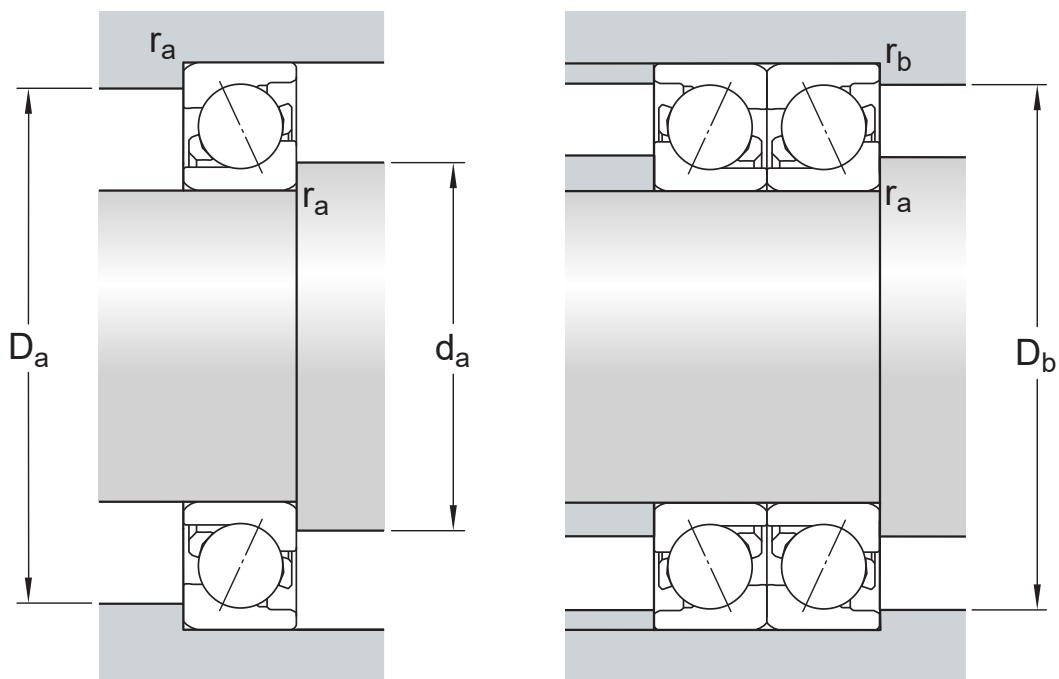
Product net weight	0.111 kg
eClass code	23-05-08-03
UNSPSC code	31171531

Technical specification



Dimensions

d	20 mm	Bore diameter
D	47 mm	Outside diameter
B	14 mm	Width
d ₁	≈ 30.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 25.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 36.66 mm	Shoulder diameter of outer ring (large side face)
a	14 mm	Distance side face to pressure point
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d_a	min. 25.6 mm	Diameter of shaft abutment
D_a	max. 41.4 mm	Abutment diameter housing
D_b	max. 42.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet
r_b	max. 0.6 mm	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	16 kN
Basic static load rating	C_0	9.3 kN
Fatigue load limit	P_U	0.39 kN
Reference speed		20 000 r/min
Limiting speed		30 000 r/min
Minimum axial load factor	A	4.61E-4
Minimum radial load factor	k_r	0.095
Limiting value	e	0.68

SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

Calculation factor (single, tandem)	X	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)	X	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)	Y_2	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

<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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