



## SKF 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.

### Technical specifications

Dimensions	
Bore diameter	20 mm
Deviation limits of mid-range bore diameter	-0.008..0 mm
Outside diameter	47 mm
Deviation limits of mid-range outside diameter	-0.009..0 mm
Width	14 mm
Deviation limits of ring width	-0.12..0 mm
Shoulder diameter of inner ring (large side face)	30.85 mm
Shoulder diameter of inner ring (small side face)	25.87 mm
Shoulder diameter of outer ring (large side face)	36.66 mm
Distance side face to pressure point	14 mm
Chamfer dimension	1 mm
Chamfer dimension	0.6 mm
ISO tolerance class for dimensions	P6
Contact angle	25 °

Abutment dimensions	
Diameter of shaft abutment	25.6 mm
Abutment diameter housing	41.4 mm
Diameter of housing abutment	42.8 mm
Radius of fillet	1 mm
Radius of fillet	0.6 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	16 kN
Basic static load rating	9.3 kN
Fatigue load limit	0.39 kN
Reference speed	20000 r/min
Limiting speed	30000 r/min
Minimum axial load factor	0.0005
Minimum radial load factor	0.1
Limiting value	0.68
Calculation factor (single, tandem)	0.41
Calculation factor (single, tandem)	0.38
Calculation factor (single, tandem)	0.87
Calculation factor (back-to-back, face-to-face)	0.67
Calculation factor (back-to-back, face-to-face)	0.76
Calculation factor (back-to-back, face-to-face)	0.92
Calculation factor (back-to-back, face-to-face)	1.4

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	4 µm
Maximum run-out of inner ring side face to the bore	8 µm
Range of section height at outer ring of assembled bearing	7 µm
Perpendicularity of outer ring outside surface	4 µm
ISO tolerance class for geometrical tolerances	P5

Performance	
Basic dynamic load rating	16 kN
Basic static load rating	9.3 kN
Reference speed	20000 r/min
Limiting speed	30000 r/min
SKF performance class	SKF Explorer

Properties	
Contact type	Normal contact (two-point contact)
Number of rows	1
Locating feature, bearing outer ring	Without
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
Indicative carbon footprint for new product	0.4 kg CO <sub>2</sub> e

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

SKF drawings

