



## SKF 7007 CD/P4ADBA

Matched set of two super-precision, high-capacity, D design, single row angular contact ball bearings

These matched sets of two super-precision, high-capacity, D design, single row angular contact ball bearings are available in a variety of arrangements. They are designed for high-load capacity and relatively high speed operation and, compared to the equivalent SKF B and E design high-speed bearings, are best suited for heavier loads.

### Technical specifications

General	
Universal matching bearing(s)	No
Dimensions	
Bore diameter	35 mm
Outside diameter	62 mm
Width	28 mm
Shoulder diameter of inner ring (large side face)	43.7 mm
Chamfer dimension	1 mm
Chamfer dimension	0.3 mm
Contact angle	15 °
Abutment dimensions	
Diameter of shaft abutment	39.6 mm
Diameter of housing abutment	60 mm
Radius of fillet	1 mm
Radius of fillet	0.3 mm
Position of oil nozzle	45.3 mm
Calculation data	
Basic dynamic load rating	25.5 kN
Basic static load rating	19 kN
Fatigue load limit	0.8 kN
Attainable speed for grease lubrication	To be calculated: Single bearing (24000) x speed reduction factor (see table below)
Attainable speed for oil-air lubrication	To be calculated: Single bearing (36000) x speed reduction factor (see table below)
Contact angle	15 °
Ball diameter	7.938 mm
Number of rows	2
Number of balls (per bearing)	16
Reference grease quantity (per bearing)	2 cm <sup>3</sup>
Preload class	A
Preload	60 N
Axial stiffness	36 N/μm
Correction factor dependent on bearing series and size	1.1
Correction factor dependent on contact angle	1
Correction factor, preload class A	1
Correction factor for hybrid bearings	1
Calculation factor for equivalent loads	9.7
Additional factors for equivalent loads	Refer to Notes 1 and 2 below
Performance	
Basic dynamic load rating	25.5 kN
Basic static load rating	19 kN
Note	Refer to catalogue data or contact SKF for the attainable speeds

<b>Properties</b>	
Contact type	Normal contact (two-point contact)
Number of rows	2
Ring type	One-piece inner and outer rings
Design	High-capacity D
Universal matching bearing	No
Matched arrangement	Back-to-back <>
Number of bearings in matched set	2
Matched condition (axial clearance/ preload)	Extra light preload
Tolerance class	P4A
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Indicative carbon footprint for new product	1.1 kg CO <sub>2</sub> e

<b>Logistics</b>	
Product net weight	0.3 kg
eClass code	23-05-08-04
UNSPSC code	31171531

**SKF drawings**

