



SKF 71900 CE/P4ADBB

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

These matched sets of two super-precision, high-speed, E design, single row angular contact ball bearings are available in a variety of arrangements. Compared to the equivalent SKF B design high-speed bearings, these have a slightly higher speed capability and can accommodate heavier loads.

Technical specifications

General	
Universal matching bearing(s)	No

Dimensions	
Bore diameter	10 mm
Outside diameter	22 mm
Width	12 mm
Shoulder diameter of inner ring (large side face)	14 mm
Chamfer dimension	0.3 mm
Chamfer dimension	0.15 mm
Contact angle	15 °

Abutment dimensions	
Diameter of shaft abutment	12 mm
Diameter of housing abutment	21.2 mm
Radius of fillet	0.3 mm
Radius of fillet	0.15 mm
Position of oil nozzle	14.8 mm

Calculation data	
Basic dynamic load rating	3.25 kN
Basic static load rating	1.56 kN
Fatigue load limit	0.067 kN
Attainable speed for grease lubrication	To be calculated: Single bearing (100000) x speed reduction factor (see table below)
Attainable speed for oil-air lubrication	To be calculated: Single bearing (155000) x speed reduction factor (see table below)
Contact angle	15 °
Ball diameter	3.175 mm
Number of rows	2
Number of balls (per bearing)	11
Reference grease quantity (per bearing)	0.1 cm ³
Preload class	B
Preload	32 N
Axial stiffness	16 N/μm
Correction factor dependent on bearing series and size	1
Correction factor dependent on contact angle	1
Correction factor, preload class B	1
Correction factor for hybrid bearings	1
Calculation factor for equivalent loads	7.3
Additional factors for equivalent loads	Refer to Notes 1 and 2 below

Performance	
Basic dynamic load rating	3.25 kN
Basic static load rating	1.56 kN
Note	Refer to catalogue data or contact SKF for the attainable speeds

Properties	
Contact type	Normal contact (two-point contact)
Number of rows	2
Ring type	One-piece inner and outer rings
Design	High-speed E
Universal matching bearing	No
Matched arrangement	Back-to-back <>
Number of bearings in matched set	2
Matched condition (axial clearance/ preload)	Light preload
Tolerance class	P4A
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Indicative carbon footprint for new product	0.07 kg CO ₂ e

Logistics	
Product net weight	0.019 kg
eClass code	23-05-08-04
UNSPSC code	31171531

SKF drawings



