



7205 BEP

- Popular item

Angular contact ball bearings, single row

Bearing data

[Tolerances,](#)

Normal (metric), P6, P5, Normal (inch),

[Internal clearance,](#)

CA+CB+CC, G,

[Preload,](#)

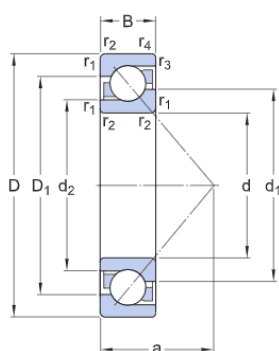
GA+GB+GC

Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

Technical specification

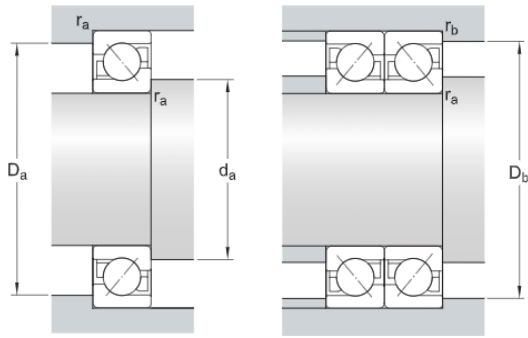


DIMENSIONS

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	15 mm	Width
d ₁	≈ 35.85 mm	Shoulder diameter of inner ring (large side face)
d ₂	≈ 30.87 mm	Shoulder diameter of inner ring (small side face)
D ₁	≈ 41.57 mm	Shoulder diameter of outer ring (large side face)
a	24 mm	Distance side face to pressure point
r ₁ , min.	1 mm	Chamfer dimension
r ₃ , min.	0.6 mm	Chamfer dimension

ABUTMENT DIMENSIONS

d _c min.	30.6 mm	Diameter of shaft abutment
D _i max.	46.4 mm	Abutment diameter housing
D _i max.	47.8 mm	Diameter of housing abutment
r _a max.	1 mm	Radius of fillet
r _b max.	0.6 mm	Radius of fillet



CALCULATION DATA

Basic dynamic load rating	C	14.8 kN
Basic static load rating	C ₀	9.3 kN
Fatigue load limit	P _u	0.4 kN
Reference speed		16 000 r/min
Limiting speed		15 000 r/min
Minimum axial load factor	A	0.002
Minimum radial load factor	k _r	0.095
Limiting value	e	1.14

SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

Radial load factor (single, tandem)	X	0.35
Axial load factor (single, tandem)	Y ₀	0.26
Axial load factor (single, tandem)	Y ₂	0.57

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

Radial load factor (back-to-back, face-to-face)	X	0.57
Axial load factor (back-to-back, face-to-face)	Y ₀	0.52
Axial load factor (back-to-back, face-to-face)	Y ₁	0.55
Axial load factor (back-to-back, face-to-face)	Y ₂	0.93

MASS

Mass	0.13 kg
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More information

<p>Product details</p> <p>Designs and variants</p> <hr/> <p>Bearing data</p> <hr/> <p>Loads</p> <hr/> <p>Temperature limits</p> <hr/> <p>Permissible speed</p> <hr/> <p>Design considerations</p> <hr/> <p>Designation system</p> <hr/>	<p>Engineering information</p> <p>Principles of rolling bearing selection</p> <hr/> <p>General bearing knowledge</p> <hr/> <p>Bearing selection process</p> <hr/> <p>Bearing interfaces</p> <hr/> <p>Seat tolerances for standard conditions</p> <hr/> <p>Selecting internal clearance or preload</p> <hr/> <p>Lubrication</p> <hr/> <p>Sealing, mounting and dismounting</p> <hr/> <p>Bearing failure and how to prevent it</p> <hr/>	<p>Tools</p> <p>Bearing Select</p> <hr/> <p>SimPro Quick</p> <hr/> <p>Engineering Calculator</p> <hr/> <p>LubeSelect for SKF greases</p> <hr/> <p>Heater selection tool</p> <hr/> <p>Rolling bearings mounting and dismounting instructions</p> <hr/>
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