

4205 ATN9

Deep groove ball bearings

Bearing data

Tolerances,

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

Radial internal clearance,

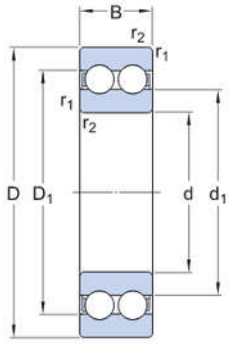
Matched bearing pairs, Stainless steel
d < 10 mm, Other bearings

Bearing interfaces

Seat tolerances for standard conditions,

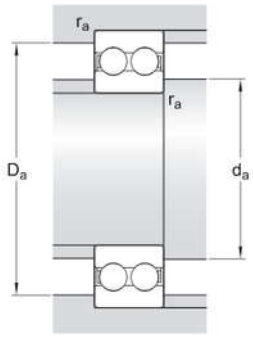
Tolerances and resultant fits

Technical specification



DIMENSIONS

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B	18 mm	Width
d_1	≈ 34.2 mm	Shoulder diameter
D_1	≈ 42.8 mm	Shoulder diameter
$r_{1,2}$	min. 1 mm	Chamfer dimension



ABUTMENT DIMENSIONS

da	min.30.6 mm	Diameter of shaft abutment
Da	max.46.4 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of shaft or housing fillet

CALCULATION DATA

Basic dynamic load rating	C	19 kN
Basic static load rating	C_0	14.6 kN
Fatigue load limit	P_u	0.62 kN
Reference speed		20 000 r/min
Limiting speed		11 000 r/min
Minimum load factor	k_r	0.05
Calculation factor	f_0	14.3

MASS

Mass bearing	0.17 kg

TOLERANCE CLASS

Dimensional tolerances	Normal
Radial run-out	Normal

More information

Product details

- Single row deep groove ball bearings
- Stainless steel deep groove ball bearings
- Single row deep groove ball bearings with filling slots
- Double row deep groove ball bearings
- Bearing data
- Loads
- Temperature limits
- Permissible speed
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing interfaces
- Seat tolerances for standard conditions
- Selecting internal clearance
- Lubrication
- Sealing, mounting and dismounting
- Bearing failure and how to prevent it

Tools

- Bearing Select
- SimPro Quick
- Engineering Calculator
- LubeSelect for SKF greases
- Heater selection tool
- Rolling bearings mounting and dismounting instructions

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