



# 4204 ATN9

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

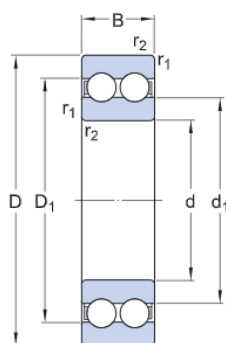
Classes C2 to C5

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

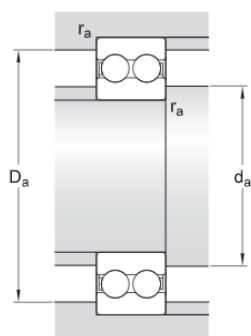
[Tolerances and resultant fits](#)

## Technical specification



### DIMENSIONS

|                  |           |                   |
|------------------|-----------|-------------------|
| d                | 20 mm     | Bore diameter     |
| D                | 47 mm     | Outside diameter  |
| B                | 18 mm     | Width             |
| d <sub>1</sub>   | ≈ 29.7 mm | Shoulder diameter |
| D <sub>1</sub>   | ≈ 38.3 mm | Shoulder diameter |
| r <sub>1,2</sub> | min. 1 mm | Chamfer dimension |



### ABUTMENT DIMENSIONS

|                             |                                   |
|-----------------------------|-----------------------------------|
| d <sub>ε</sub> min. 25.6 mm | Diameter of shaft abutment        |
| D <sub>i</sub> max. 41.4 mm | Diameter of housing abutment      |
| r <sub>a</sub> max. 1 mm    | Radius of shaft or housing fillet |

## CALCULATION DATA

|                           |                |              |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | C              | 17.8 kN      |
| Basic static load rating  | C <sub>0</sub> | 12.5 kN      |
| Fatigue load limit        | P <sub>u</sub> | 0.53 kN      |
| Reference speed           |                | 24 000 r/min |
| Limiting speed            |                | 13 000 r/min |
| Minimum load factor       | k <sub>r</sub> | 0.05         |
| Calculation factor        | f <sub>0</sub> | 13.7         |

## MASS

|              |         |
|--------------|---------|
| Mass bearing | 0.14 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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