



# 4216 ATN9

## Deep groove ball bearings

### Bearing data

[Tolerances,](#)

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

[Radial internal clearance,](#)

Matched bearing pairs, Stainless steel

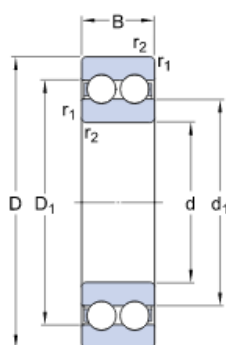
d < 10 mm, Other bearings

### Bearing interfaces

[Seat tolerances for standard conditions,](#)

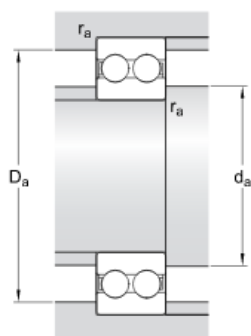
[Tolerances and resultant fits](#)

## Technical specification



### DIMENSIONS

|                  |            |
|------------------|------------|
| d                | 80 mm      |
| D                | 140 mm     |
| B                | 33 mm      |
| d <sub>1</sub>   | ≈ 102 mm   |
| D <sub>1</sub>   | ≈ 119.6 mm |
| r <sub>1,2</sub> | min. 2 mm  |



### ABUTMENT DIMENSIONS

|                |             |
|----------------|-------------|
| d <sub>a</sub> | min. 91 mm  |
| D <sub>a</sub> | max. 129 mm |
| r <sub>a</sub> | max. 2 mm   |

## CALCULATION DATA

|                           |       |            |
|---------------------------|-------|------------|
| Basic dynamic load rating | $C$   | 80.6 kN    |
| Basic static load rating  | $C_0$ | 90 kN      |
| Fatigue load limit        | $P_u$ | 3.6 kN     |
| Reference speed           |       | 7000 r/min |
| Limiting speed            |       | 3800 r/min |
| Calculation factor        | $k_r$ | 0.05       |
| Calculation factor        | $f_0$ | 16         |

## MASS

|              |      |
|--------------|------|
| Mass bearing | 2 kg |
|--------------|------|

## More information

| Product details  | Product details  | Engineering information   | Engineering information   | Tools  | Tools  |
|--|--|---|---|--|--|
| <a href="#">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</a> | <a href="#">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</a> | <a href="#">Principles of rolling bearing selection General bearing knowledge</a> | <a href="#">Principles of rolling bearing selection General bearing knowledge</a> | <a href="#">Bearing Select</a>   | <a href="#">Bearing Select</a>   |
| <a href="#">Loads</a>  | <a href="#">Loads</a>  | <a href="#">Bearing selection process</a>   | <a href="#">Bearing selection process</a>   | <a href="#">SimPro Quick</a>   | <a href="#">SimPro Quick</a>   |
| <a href="#">Temperature limits</a>   | <a href="#">Temperature limits</a>   | <a href="#">Bearing interfaces</a>  | <a href="#">Bearing interfaces</a>  | <a href="#">Engineering Calculator</a>                                 | <a href="#">Engineering Calculator</a>                                 |
| <a href="#">Permissible speed</a>  | <a href="#">Permissible speed</a>  | <a href="#">Seat tolerances for standard condition</a>                            | <a href="#">Seat tolerances for standard condition</a>                            | <a href="#">LubeSelect for SKF greases</a>                             | <a href="#">LubeSelect for SKF greases</a>                             |
| <a href="#">Designation system</a>   | <a href="#">Designation system</a>   | <a href="#">Selecting internal clearance</a>                                      | <a href="#">Selecting internal clearance</a>                                      | <a href="#">Heater selection tool</a>                                  | <a href="#">Heater selection tool</a>                                  |
|  |  | <a href="#">Lubrication</a>   | <a href="#">Lubrication</a>   | <a href="#">Rolling bearings mounting and dismounting instructions</a> | <a href="#">Rolling bearings mounting and dismounting instructions</a> |
|  |  | <a href="#">Sealing, mounting and dismounting</a>                                 | <a href="#">Sealing, mounting and dismounting</a>                                 |  |  |
|  |  | <a href="#">Bearing failure and how to prevent it</a>                             | <a href="#">Bearing failure and how to prevent it</a>                             |  |  |

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