



## SKF 6209 N

### Deep groove ball bearing with snap ring groove

Single row deep groove ball bearings with a snap ring groove are particularly versatile, have low friction and are optimized for low noise and low vibration, which enables high rotational speeds. They accommodate radial and axial loads in both directions, are easy to mount, and require less maintenance than many other bearing types. An annular groove in the outer ring enables the bearings to retain a snap ring.

## Technical specifications

Dimensions	
Bore diameter	45 mm
Deviation limits of mid-range bore diameter	-0.01..0 mm
Outside diameter	85 mm
Deviation limits of mid-range outside diameter	-0.013..0 mm
Width	19 mm
Deviation limits of ring width	-0.06..0 mm
Shoulder diameter	57.6 mm
Recess diameter	75.19 mm
Diameter of snap ring groove	81.81 mm
Width of snap ring groove	1.9 mm
Distance from outer ring side face to snap ring groove	3.28 mm
Bottom radius of snap ring groove	0.6 mm
Chamfer dimension	1.1 mm
ISO tolerance class for dimensions	P6 and tighter width tolerance

Abutment dimensions	
Diameter of shaft abutment	52 mm
Diameter of housing abutment	78 mm
Diameter of snap ring recess in the housing	93 mm
Width of snap ring recess in the housing	2.2 mm
Distance from outer ring side face to snap ring back face	4.98 mm
Radius of shaft or housing fillet	1 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	35.1 kN
Basic static load rating	21.6 kN
Fatigue load limit	0.915 kN
Reference speed	17000 r/min
Limiting speed	11000 r/min
Minimum load factor	0.03
Calculation factor	14.2

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	10 µm
Range of section height at outer ring of assembled bearing	18 µm
ISO tolerance class for geometrical tolerances	P6

Performance	
Basic dynamic load rating	35.1 kN
Basic static load rating	21.6 kN
Reference speed	17000 r/min
Limiting speed	11000 r/min
SKF performance class	SKF Explorer

Properties	
Filling slots	Without

Number of rows	1
Locating feature, bearing outer ring	Snap ring groove
Bore type	Cylindrical
Cage	Sheet metal
Matched arrangement	No
Radial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	1.4 kg CO <sub>2</sub> e

<b>Logistics</b>	
Product net weight	0.397 kg
eClass code	23-05-08-01
UNSPSC code	31171504

**SKF drawings**

