



## SKF 6411 NR

### Deep groove ball bearing with snap ring

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. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings.

## Technical specifications

Dimensions	
Bore diameter	55 mm
Deviation limits of mid-range bore diameter	-0.015..0 mm
Outside diameter	140 mm
Deviation limits of mid-range outside diameter	-0.018..0 mm
Width	33 mm
Deviation limits of ring width	-0.15..0 mm
Shoulder diameter	81.58 mm
Shoulder diameter	113.15 mm
Diameter of snap ring groove	135.23 mm
Outside diameter of snap ring	149.7 mm
Width of snap ring groove	3.1 mm
Distance from outer ring side face to snap ring groove	4.9 mm
Width of snap ring	2.82 mm
Bottom radius of snap ring groove	0.6 mm
Chamfer dimension	2.1 mm
ISO tolerance class for dimensions	Normal

Abutment dimensions	
Diameter of shaft abutment	69 mm
Diameter of housing abutment	126 mm
Diameter of snap ring recess in the housing	151 mm
Width of snap ring recess in the housing	3.5 mm
Distance from outer ring side face to snap ring back face	7.72 mm
Radius of shaft or housing fillet	2 mm

Calculation data	
Basic dynamic load rating	99.5 kN
Basic static load rating	62 kN
Fatigue load limit	2.6 kN
Reference speed	11000 r/min
Limiting speed	7000 r/min
Minimum load factor	0.04
Calculation factor	12

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	20 µm
Range of section height at outer ring of assembled bearing	40 µm
ISO tolerance class for geometrical tolerances	Normal

Included products	
Snap ring	SP 140

Performance	
Basic dynamic load rating	99.5 kN
Basic static load rating	62 kN
Reference speed	11000 r/min
Limiting speed	7000 r/min

<b>Properties</b>	
Filling slots	Without
Number of rows	1
Locating feature, bearing outer ring	Snap ring (fitted)
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	8.5 kg CO <sub>2</sub>

<b>Logistics</b>	
Product net weight	2.36 kg
eClass code	23-05-08-01
UNSPSC code	31171504

**SKF drawings**

