



SKF 308-ZNR

Deep groove ball bearing with filling slots and integral sealing

Single row deep groove ball bearings with filling slots, a snap ring, and shields on one or both sides, accommodate more balls than standard deep groove ball bearings. They are of a simple, yet versatile, design and are robust in operation, requiring little maintenance. They can accommodate radial and axial loads in both directions. They have a higher radial load carrying capacity than the corresponding bearings without filling slots but have a limited axial load carrying capacity due to the filling slots. The snap ring, fitted in an annular groove in the outer ring, facilitates axial location of the bearings within their housings. The integral sealing can significantly prolong bearing service life because it keeps lubricant in the bearings and contaminants out.

Technical specifications

Dimensions	
Bore diameter	40 mm
Outside diameter	90 mm
Width	23 mm
Shoulder diameter	56.11 mm
Recess diameter	77.7 mm
Diameter of snap ring groove	86.79 mm
Outside diameter of snap ring	96.5 mm
Width of snap ring groove	2.7 mm
Distance from outer ring side face to snap ring groove	3.28 mm
Width of snap ring	2.46 mm
Bottom radius of snap ring groove	0.6 mm
Chamfer dimension	1.5 mm

Abutment dimensions	
Diameter of shaft abutment	49 mm
Diameter of shaft abutment	56 mm
Diameter of housing abutment	81 mm
Diameter of snap ring recess in the housing	98 mm
Width of snap ring recess in the housing	3 mm
Distance from outer ring side face to snap ring back face	5.74 mm
Radius of shaft or housing fillet	1.5 mm

Calculation data	
Basic dynamic load rating	45.7 kN
Basic static load rating	36 kN
Fatigue load limit	1.53 kN
Reference speed	14000 r/min
Limiting speed	8500 r/min
Minimum load factor	0.05

Included products	
Snap ring	SP 90

Performance	
Basic dynamic load rating	45.7 kN
Basic static load rating	36 kN
Reference speed	14000 r/min
Limiting speed	8500 r/min

Properties	
Filling slots	With
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	Shield on one side
Sealing type	Non-contact
Lubricant	None
Relubrication feature	Without
Indicative carbon footprint for new product	2.5 kg CO ₂ e

Logistics	
Product net weight	0.686 kg
eClass code	23-05-08-01
UNSPSC code	31171504

SKF drawings

