



## SKF 210-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                                          | 50 mm    |
| Outside diameter                                       | 90 mm    |
| Width                                                  | 20 mm    |
| Shoulder diameter                                      | 62.51 mm |
| Recess diameter                                        | 81.61 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                                      | 1.1 mm   |

| Abutment dimensions                                       |         |
|-----------------------------------------------------------|---------|
| Diameter of shaft abutment                                | 57 mm   |
| Diameter of shaft abutment                                | 62.4 mm |
| Diameter of housing abutment                              | 83 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 mm    |

| Calculation data          |             |
|---------------------------|-------------|
| Basic dynamic load rating | 39.1 kN     |
| Basic static load rating  | 34.5 kN     |
| Fatigue load limit        | 1.46 kN     |
| Reference speed           | 13000 r/min |
| Limiting speed            | 8000 r/min  |
| Minimum load factor       | 0.04        |

| Included products |       |
|-------------------|-------|
| Snap ring         | SP 90 |

| Performance               |             |
|---------------------------|-------------|
| Basic dynamic load rating | 39.1 kN     |
| Basic static load rating  | 34.5 kN     |
| Reference speed           | 13000 r/min |
| Limiting speed            | 8000 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 | 1.9 kg CO <sub>2</sub> e |

| Logistics          |             |
|--------------------|-------------|
| Product net weight | 0.514 kg    |
| eClass code        | 23-05-08-01 |
| UNSPSC code        | 31171504    |

# SKF drawings

