

NJ 2218 ECP



Single row cylindrical roller bearing, NJ design

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one on the inner ring, NJ design bearings can accommodate axial displacement in one direction. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.

- High radial load carrying capacity
- Low friction
- Long service life
- Locate the shaft axially in one direction
- Separable design

Overview

Dimensions

| | |
|------------------|--------|
| Bore diameter | 90 mm |
| Outside diameter | 160 mm |
| Width | 40 mm |

Performance

| | |
|---------------------------|--------------|
| Basic dynamic load rating | 280 kN |
| Basic static load rating | 315 kN |
| Reference speed | 4 500 r/min |
| Limiting speed | 5 000 r/min |
| SKF performance class | SKF Explorer |

Properties

| | |
|--------------------------------------|------------------|
| Bearing part | Complete bearing |
| Axial displacement capability | In one direction |
| Number of rows | 1 |
| Locating feature, bearing outer ring | None |
| Bore type | Cylindrical |
| Cage | Non-metallic |
| Number of flanges, outer ring | 2 |
| Number of flanges, inner ring | 1 |
| Loose flange | None |
| Radial internal clearance | CN |
| Tolerance class | Normal |
| Coating | Without |
| Sealing | Without |
| Lubricant | None |

Relubrication feature

Without

Logistics

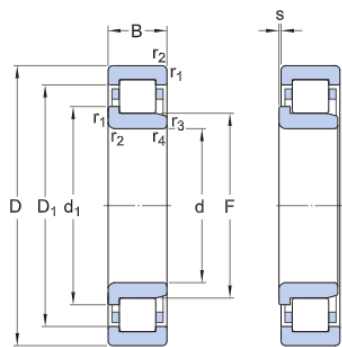
Product net weight 3.23 kg

UNSPSC code 31171505

Technical Specification

SKF performance class

SKF Explorer

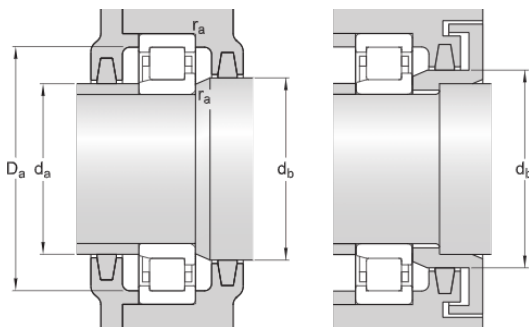


Dimensions

| | | |
|------------------|-------------|---------------------------------|
| d | 90 mm | Bore diameter |
| D | 160 mm | Outside diameter |
| B | 40 mm | Width |
| d ₁ | ≈ 114 mm | Shoulder diameter of inner ring |
| D ₁ | ≈ 138.52 mm | Shoulder diameter of outer ring |
| F | 107 mm | Raceway diameter of inner ring |
| r _{1,2} | min. 2 mm | Chamfer dimension |
| r _{3,4} | min. 2 mm | Chamfer dimension |
| s | max. 2.6 mm | Permissible axial displacement |

Abutment dimensions

| | | |
|----------------|-------------|------------------------------|
| d _a | min. 101 mm | Diameter of spacer sleeve |
| d _a | max. 104 mm | Diameter of spacer sleeve |
| d _b | min. 117 mm | Diameter of shaft abutment |
| D _a | max. 149 mm | Diameter of housing abutment |
| r _a | max. 2 mm | Radius of fillet |



Calculation data

| | | |
|---------------------------|----------------|--------|
| Basic dynamic load rating | C | 280 kN |
| Basic static load rating | C ₀ | 315 kN |

| | | |
|---------------------|-------|-------------|
| Fatigue load limit | P_u | 39 kN |
| Reference speed | | 4 500 r/min |
| Limiting speed | | 5 000 r/min |
| Minimum load factor | k_r | 0.2 |
| Limiting value | e | 0.3 |
| Calculation factor | Y | 0.4 |

Mass

| | | |
|------|--|---------|
| Mass | | 3.23 kg |
|------|--|---------|

Associated products

| | | |
|------------|--|------------|
| Angle ring | | HJ 2218 EC |
|------------|--|------------|

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