

22312 E



Spherical roller bearing with relubrication features

Spherical roller bearings can accommodate heavy loads in both directions. They are self-aligning and accommodate misalignment and shaft deflections, with virtually no increase in friction or temperature. The design includes features to facilitate relubrication. The bearings can be used in a modular system, including housings, sleeves and nuts.

- Accommodate misalignment
- High load carrying capacity
- Relubrication features
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

| | |
|------------------|--------|
| Bore diameter | 60 mm |
| Outside diameter | 130 mm |
| Width | 46 mm |

Performance

| | |
|---------------------------|--------------|
| Basic dynamic load rating | 325 kN |
| Basic static load rating | 335 kN |
| Reference speed | 4 000 r/min |
| Limiting speed | 5 300 r/min |
| SKF performance class | SKF Explorer |

Properties

| | |
|--------------------------------------|-------------|
| Number of rows | 2 |
| Locating feature, bearing outer ring | Without |
| Bore type | Cylindrical |
| Cage | Sheet metal |
| Radial internal clearance | CN |
| Tolerance class for dimensions | Normal |
| Tolerance class for run-out | P5 |
| Sealing | Without |
| Lubricant | None |
| Relubrication feature | With |

Technical Specification

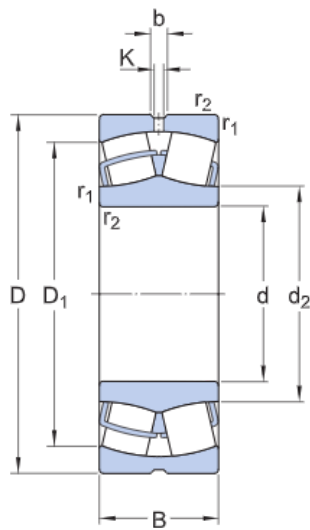
SKF performance class

SKF Explorer

Bore type

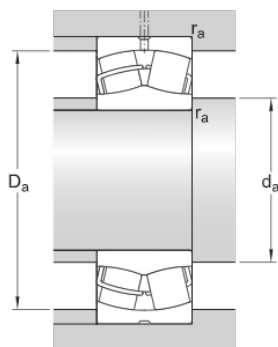
Cylindrical

Dimensions



| | | |
|-----------|-------------------|--|
| d | 60 mm | Bore diameter |
| D | 130 mm | Outside diameter |
| B | 46 mm | Width |
| d_2 | ≈ 77.9 mm | Shoulder diameter of inner ring |
| D_1 | ≈ 110 mm | Shoulder/recess diameter of outer ring |
| b | 8.3 mm | Width of lubrication groove |
| K | 4.5 mm | Diameter of lubrication hole |
| $r_{1,2}$ | min. 2.1 mm | Chamfer dimension |

Abutment dimensions



| | | |
|--------------|-------------|------------------------------|
| d_a | min. 72 mm | Diameter of shaft abutment |
| D_ϵ | max. 118 mm | Diameter of housing abutment |
| r_a | max. 2 mm | Radius of fillet |

Calculation data

| | | |
|---------------------------|-------|--------|
| Basic dynamic load rating | C | 325 kN |
| Basic static load rating | C_0 | 335 kN |

| | | |
|--------------------|-------|-------------|
| Fatigue load limit | P_u | 36 kN |
| Reference speed | | 4 000 r/min |
| Limiting speed | | 5 300 r/min |
| Limiting value | e | 0.35 |
| Calculation factor | Y_1 | 1.9 |
| Calculation factor | Y_2 | 2.9 |
| Calculation factor | Y_0 | 1.8 |

Mass

| | | |
|------|--|---------|
| Mass | | 2.95 kg |
|------|--|---------|

Tolerance class

| | | |
|------------------------|--|--------|
| Dimensional tolerances | | Normal |
| Radial run-out | | P5 |

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