

Overview

23024 CCK/W33



Spherical roller bearing with tapered bore and 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

Dimensions

| Bore diameter | 120 mm |
|------------------|--------|
| Outside diameter | 180 mm |
| Width | 46 mm |

Performance

| Basic dynamic load rating | 366 kN |
|---------------------------|--------------|
| Basic static load rating | 500 kN |
| Reference speed | 3 200 r/min |
| Limiting speed | 4 000 r/min |
| SKF performance class | SKF Explorer |

Properties

| Number of rows | 2 |
|--------------------------------------|--------------|
| Locating feature, bearing outer ring | Without |
| Bore type | Tapered 1:12 |
| 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 |
| Candidate for remanufacturing | Yes |



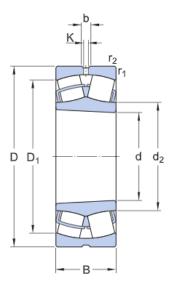
SKF Explorer

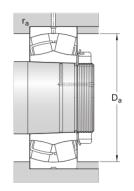
Tapered 1:12

Technical Specification

SKF performance class

Bore type





Dimensions

| d | 120 mm | Bore diameter |
|------------------|-----------|--|
| D | 180 mm | Outside diameter |
| В | 46 mm | Width |
| d_2 | ≈135 mm | Shoulder diameter of inner ring |
| D_1 | ≈163 mm | Shoulder/recess diameter of outer ring |
| b | 6 mm | Width of lubrication groove |
| Κ | 3 mm | Diameter of lubrication hole |
| r _{1,2} | min. 2 mm | Chamfer dimension |

Abutment dimensions

| ^D a max. 171 mm | Diameter of housing abutment |
|----------------------------|------------------------------|
| r _a max. 2 mm | Radius of fillet |

Calculation data

| Basic dynamic load rating | С | 366 kN |
|---------------------------|----|--------|
| Basic static load rating | CO | 500 kN |



| Fatigue load limit | Pu | 53 kN |
|--------------------|----------------|-------------|
| Reference speed | | 3 200 r/min |
| Limiting speed | | 4 000 r/min |
| Limiting value | е | 0.22 |
| Calculation factor | Y ₁ | 3 |
| Calculation factor | Y ₂ | 4.6 |
| Calculation factor | Υ ₀ | 2.8 |

Mass

| Mass | | 3.9 kg |
|------|--|--------|

Tolerance class

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



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