



SKF 22211 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.

Technical specifications

| General | |
|--|--------------|
| Bore type | Cylindrical |
| Dimensions | |
| Bore diameter | 55 mm |
| Deviation limits of mid-range bore diameter | -0.015..0 mm |
| Outside diameter | 100 mm |
| Deviation limits of mid-range outside diameter | -0.015..0 mm |
| Width | 25 mm |
| Deviation limits of ring width | -0.06..0 mm |
| Shoulder diameter of inner ring | 65.3 mm |
| Shoulder/recess diameter of outer ring | 88 mm |
| Width of lubrication groove | 6 mm |
| Diameter of lubrication hole | 3 mm |
| Chamfer dimension | 1.5 mm |
| ISO tolerance class for dimensions | Normal |
| Abutment dimensions | |
| Diameter of shaft abutment | 64 mm |
| Diameter of housing abutment | 91 mm |
| Radius of fillet | 1.5 mm |
| Calculation data | |
| SKF performance class | SKF Explorer |
| Basic dynamic load rating | 129 kN |
| Basic static load rating | 127 kN |
| Fatigue load limit | 14 kN |
| Reference speed | 6300 r/min |
| Limiting speed | 8500 r/min |
| Limiting value | 0.24 |
| Calculation factor | 2.8 |
| Calculation factor | 4.2 |
| Calculation factor | 2.8 |
| Tolerances of run-out | |
| Range of section height at inner ring of assembled bearing | 5 µm |
| Maximum run-out of inner ring side face to the bore | 8 µm |
| Range of section height at outer ring of assembled bearing | 10 µm |
| Perpendicularity of outer ring outside surface | 4.5 µm |
| ISO tolerance class for geometrical tolerances | P5 |
| Radial internal clearance | |
| Minimum initial clearance | 40 µm |
| Maximum initial clearance | 65 µm |
| Performance | |
| Basic dynamic load rating | 129 kN |
| Basic static load rating | 127 kN |

| | |
|-----------------------|--------------|
| Reference speed | 6300 r/min |
| Limiting speed | 8500 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 |
| Indicative carbon footprint for new product | 2.9 kg CO ₂ e |

| Logistics | |
|--------------------|-------------|
| Product net weight | 0.816 kg |
| eClass code | 23-05-09-11 |
| UNSPSC code | 31171510 |

SKF drawings

