



## SKF 22310 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

<b>General</b>	
Bore type	Cylindrical
<b>Dimensions</b>	
Bore diameter	50 mm
Deviation limits of mid-range bore diameter	-0.012..0 mm
Outside diameter	110 mm
Deviation limits of mid-range outside diameter	-0.015..0 mm
Width	40 mm
Deviation limits of ring width	-0.06..0 mm
Shoulder diameter of inner ring	63.9 mm
Shoulder/recess diameter of outer ring	91.9 mm
Width of lubrication groove	6 mm
Diameter of lubrication hole	3 mm
Chamfer dimension	2 mm
ISO tolerance class for dimensions	Normal
<b>Abutment dimensions</b>	
Diameter of shaft abutment	61 mm
Diameter of housing abutment	99 mm
Radius of fillet	2 mm
<b>Calculation data</b>	
SKF performance class	SKF Explorer
Basic dynamic load rating	228 kN
Basic static load rating	224 kN
Fatigue load limit	23.6 kN
Reference speed	4800 r/min
Limiting speed	6300 r/min
Limiting value	0.37
Calculation factor	1.8
Calculation factor	2.7
Calculation factor	1.8
<b>Tolerances of run-out</b>	
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
<b>Radial internal clearance</b>	
Minimum initial clearance	35 µm
Maximum initial clearance	55 µm
<b>Performance</b>	
Basic dynamic load rating	228 kN
Basic static load rating	224 kN

Reference speed	4800 r/min
Limiting speed	6300 r/min
SKF performance class	SKF Explorer

<b>Properties</b>	
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	6.6 kg CO <sub>2</sub> e

<b>Logistics</b>	
Product net weight	1.83 kg
eClass code	23-05-09-11
UNSPSC code	31171510

SKF drawings

