



## SKF 22220 EK/C3

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.

### Technical specifications

<b>General</b>	
Bore type	Tapered 1:12
<b>Dimensions</b>	
Bore diameter	100 mm
Deviation limits of mid-range bore diameter	0..0.035 mm
Deviation limits of tapered slope	0..0.035 mm
Outside diameter	180 mm
Deviation limits of mid-range outside diameter	-0.025..0 mm
Width	46 mm
Deviation limits of ring width	-0.08..0 mm
Shoulder diameter of inner ring	118 mm
Shoulder/recess diameter of outer ring	159 mm
Width of lubrication groove	8.3 mm
Diameter of lubrication hole	4.5 mm
Chamfer dimension	2.1 mm
ISO tolerance class for dimensions	Normal
<b>Abutment dimensions</b>	
Diameter of housing abutment	168 mm
Radius of fillet	2 mm
<b>Calculation data</b>	
SKF performance class	SKF Explorer
Basic dynamic load rating	433 kN
Basic static load rating	490 kN
Fatigue load limit	49 kN
Reference speed	3400 r/min
Limiting speed	4500 r/min
Limiting value	0.24
Calculation factor	2.8
Calculation factor	4.2
Calculation factor	2.8
<b>Tolerances of run-out</b>	
Range of section height at inner ring of assembled bearing	6 µm
Maximum run-out of inner ring side face to the bore	9 µm
Range of section height at outer ring of assembled bearing	13 µm
Perpendicularity of outer ring outside surface	5 µm
ISO tolerance class for geometrical tolerances	P5
<b>Radial internal clearance</b>	
Minimum initial clearance	110 µm
Maximum initial clearance	140 µm
<b>Performance</b>	
Basic dynamic load rating	433 kN
Basic static load rating	490 kN

Reference speed	3400 r/min
Limiting speed	4500 r/min
SKF performance class	SKF Explorer

<b>Properties</b>	
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
Cage	Sheet metal
Radial internal clearance	C3
Tolerance class for dimensions	Normal
Tolerance class for run-out	P5
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes
Indicative carbon footprint for new product	17.4 kg CO <sub>2</sub> e
Indicative carbon footprint for remanufactured product	6.1 kg CO <sub>2</sub> e

<b>Logistics</b>	
Product net weight	4.82 kg
eClass code	23-05-09-11
UNSPSC code	31171510

**SKF drawings**