



SKF 231/560 CA/W33

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	560 mm
Deviation limits of mid-range bore diameter	-0.05..0 mm
Outside diameter	920 mm
Deviation limits of mid-range outside diameter	-0.1..0 mm
Width	280 mm
Deviation limits of ring width	-0.5..0 mm
Shoulder diameter of inner ring	675 mm
Shoulder/recess diameter of outer ring	809 mm
Width of lubrication groove	22.3 mm
Diameter of lubrication hole	12 mm
Chamfer dimension	7.5 mm
ISO tolerance class for dimensions	Normal

Abutment dimensions	
Diameter of shaft abutment	592 mm
Diameter of housing abutment	888 mm
Radius of fillet	6 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	9596 kN
Basic static load rating	16000 kN
Fatigue load limit	980 kN
Reference speed	340 r/min
Limiting speed	630 r/min
Limiting value	0.3
Calculation factor	2.3
Calculation factor	3.4
Calculation factor	2.2

Tolerances of run-out	
Range of section height at inner ring of assembled bearing	70 µm
Range of section height at outer ring of assembled bearing	140 µm
ISO tolerance class for geometrical tolerances	Normal

Radial internal clearance	
Minimum initial clearance	280 µm
Maximum initial clearance	440 µm

Performance	
Basic dynamic load rating	9596 kN
Basic static load rating	16000 kN
Reference speed	340 r/min
Limiting speed	630 r/min

Properties	
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Cylindrical
Cage	Machined brass
Radial internal clearance	CN
Tolerance class for dimensions	Normal
Tolerance class for run-out	Normal
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes
Indicative carbon footprint for new product	2671 kg CO ₂ e
Indicative carbon footprint for remanufactured product	935 kg CO ₂ e

Logistics	
Product net weight	742 kg
eClass code	23-05-09-11
UNSPSC code	31171510

SKF drawings