



SKF 239/500 CAK/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.

Technical specifications

General	
Bore type	Tapered 1:12
Dimensions	
Bore diameter	500 mm
Deviation limits of mid-range bore diameter	0..0.063 mm
Deviation limits of tapered slope	0..0.063 mm
Outside diameter	670 mm
Deviation limits of mid-range outside diameter	-0.075..0 mm
Width	128 mm
Deviation limits of ring width	-0.45..0 mm
Shoulder diameter of inner ring	561 mm
Shoulder/recess diameter of outer ring	622 mm
Width of lubrication groove	22.3 mm
Diameter of lubrication hole	12 mm
Chamfer dimension	5 mm
ISO tolerance class for dimensions	Normal
Abutment dimensions	
Diameter of housing abutment	652 mm
Radius of fillet	4 mm
Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	2967 kN
Basic static load rating	6000 kN
Fatigue load limit	415 kN
Reference speed	530 r/min
Limiting speed	950 r/min
Limiting value	0.17
Calculation factor	4
Calculation factor	5.9
Calculation factor	4
Tolerances of run-out	
Range of section height at inner ring of assembled bearing	65 µm
Range of section height at outer ring of assembled bearing	120 µm
ISO tolerance class for geometrical tolerances	Normal
Radial internal clearance	
Minimum initial clearance	370 µm
Maximum initial clearance	490 µm
Performance	
Basic dynamic load rating	2967 kN
Basic static load rating	6000 kN
Reference speed	530 r/min
Limiting speed	950 r/min

Properties	
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
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	446 kg CO ₂ e
Indicative carbon footprint for remanufactured product	156 kg CO ₂ e

Logistics	
Product net weight	124 kg
eClass code	23-05-09-11
UNSPSC code	31171510

SKF drawings

