



SKF 21316 EK

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	80 mm
Deviation limits of mid-range bore diameter	0..0.03 mm
Deviation limits of tapered slope	0..0.03 mm
Outside diameter	170 mm
Deviation limits of mid-range outside diameter	-0.025..0 mm
Width	39 mm
Deviation limits of ring width	-0.06..0 mm
Shoulder diameter of inner ring	106 mm
Shoulder/recess diameter of outer ring	141 mm
Width of lubrication groove	6 mm
Diameter of lubrication hole	3 mm
Chamfer dimension	2.1 mm
ISO tolerance class for dimensions	Normal

Abutment dimensions	
Diameter of housing abutment	158 mm
Radius of fillet	2 mm

Calculation data	
SKF performance class	SKF Explorer
Basic dynamic load rating	331 kN
Basic static load rating	375 kN
Fatigue load limit	39 kN
Reference speed	3800 r/min
Limiting speed	5300 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	13 µm
Perpendicularity of outer ring outside surface	5 µm
ISO tolerance class for geometrical tolerances	P5

Radial internal clearance	
Minimum initial clearance	70 µm
Maximum initial clearance	95 µm

Mounting information	
Recommended tightening angle for lock nut	130 °

Performance	
Basic dynamic load rating	331 kN
Basic static load rating	375 kN
Reference speed	3800 r/min
Limiting speed	5300 r/min
SKF performance class	SKF Explorer

Properties	
Number of rows	2
Locating feature, bearing outer ring	Without
Bore type	Tapered 1:12
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	16 kg CO ₂ e

Logistics	
Product net weight	4.46 kg
eClass code	23-05-09-11
UNSPSC code	31171510

SKF drawings

