



Image may differ from product. See specification for details.

23076 CCK/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.

- Accommodate misalignment
- High load carrying capacity
- Relubrication features
- Low friction and long service life
- Increased wear resistance

Overview

Dimensions

Bore diameter	14.9606 in
Outside diameter	22.0472 in
Width	5.315 in

Performance

Basic dynamic load rating	670 830 lbf
Basic static load rating	1 124 045 lbf
Reference speed	900 r/min
Limiting speed	1 200 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	Normal
Sealing	Without
Lubricant	None
Relubrication feature	With
Candidate for remanufacturing	Yes
Indicative carbon footprint for new product	852 lb CO ₂ e
Indicative carbon footprint for remanufactured product	298 lb CO ₂ e

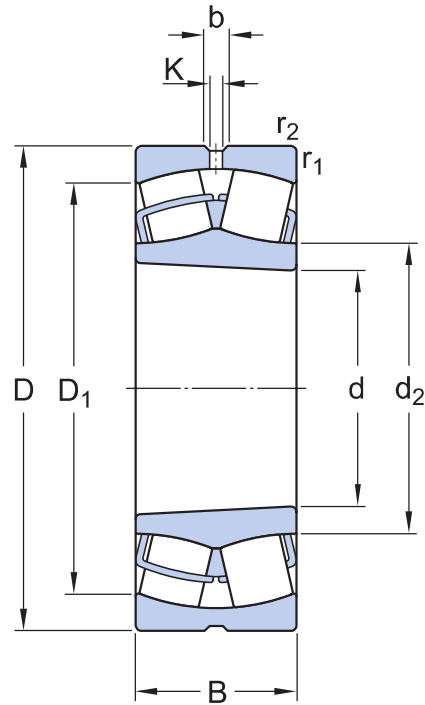
Logistics

Product net weight	237 lb
eClass code	23-05-09-11
UNSPSC code	31171510

Technical specification

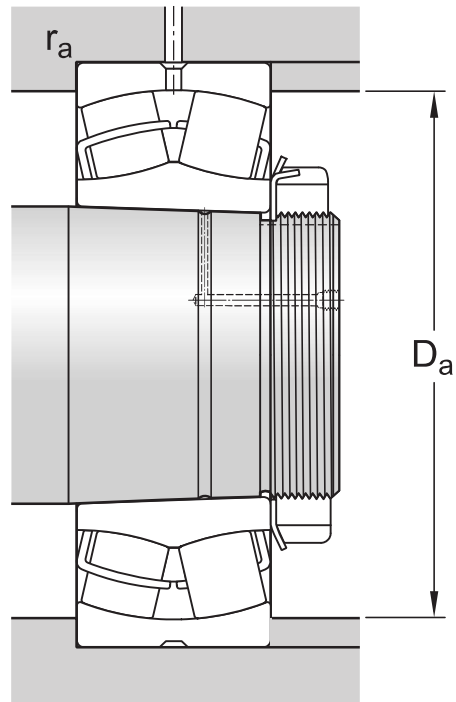
Bore type

Tapered 1:12



Dimensions

d	14.9606 in	Bore diameter
$t_{\Delta dmp}$	0 – 57 μm	Deviation limits of mid-range bore diameter
$t_{\Delta SL}$	0 – 57 μm	Deviation limits of tapered slope
D	22.0472 in	Outside diameter
$t_{\Delta Dmp}$	-50 – 0 μm	Deviation limits of mid-range outside diameter
B	5.315 in	Width
$t_{\Delta Bs}$	-400 – 0 μm	Deviation limits of ring width
d_2	≈ 16.7717 in	Shoulder diameter of inner ring
D_1	≈ 20.0394 in	Shoulder/recess diameter of outer ring
b	0.878 in	Width of lubrication groove
K	0.4724 in	Diameter of lubrication hole
$r_{1,2}$	min. 0.1969 in	Chamfer dimension
	Normal	ISO tolerance class for dimensions



Abutment dimensions

D_a	max. 21.3386 in	Diameter of housing abutment
r_a	max. 0.1575 in	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	670 830 lbf
Basic static load rating	C_0	1 124 045 lbf
Fatigue load limit	P_u	80 931 lbf
Reference speed		900 r/min
Limiting speed		1 200 r/min
Limiting value	e	0.22
Calculation factor	Y_1	3
Calculation factor	Y_2	4.6
Calculation factor	Y_0	2.8

Tolerances of run-out

Range of section height at inner ring of assembled bearing	t_{Kia}	60 μm
Range of section height at outer ring of assembled bearing	t_{Kea}	100 μm
ISO tolerance class for geometrical tolerances		Normal

Radial internal clearance

Minimum initial clearance	0.0118 in
Maximum initial clearance	0.0157 in

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5, tapered bore 1:12, tapered bore 1:30
- Radial internal clearance: cylindrical bore, tapered bore

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

Compatible products

Recommended product

Withdrawal sleeve, for oil injection, ISO standards

[AOH 3076 G](#)

Adapter sleeve for oil injection mounting with HM lock nut and MS locking clip, metric dimensions

[OH 3076 H](#)

More Information

Product details	Engineering information	Tools
Designs and variants		SimPro Quick
General bearing specifications	Principles of rolling bearing selection	SKF Product select - Select and evaluate bearing
Loads	General bearing knowledge	
Temperature limits	Bearing selection process	SKF Product select - Combine housing with bearing
Permissible speed	Bearing failure and how to prevent it	LubeSelect for SKF greases
Design considerations		Drive-up Method Program
Mounting		Heater selection tool
Designation system		Oil Injection Method Program
		Tool and Accessory Selector for sleeves and shafts



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