

Image may differ from product. See technical specification for details.

AXK 6590

Needle roller and cage thrust assembly

Needle roller and cage thrust assemblies are designed to accommodate heavy axial loads and peak loads in one direction. They provide a high degree of stiffness within a minimum axial space. In applications where the faces of adjacent machine components serve as raceways, needle roller thrust bearings take up no more space than a conventional thrust washer. The bearings can also be combined with bearing washers to create complete bearings.

- High axial load carrying capacity
- High stiffness
- Long service life
- Require minimal axial space
- Can be combined with bearing washers

Overview

Dimensions

Bore diameter	65 mm
Outside diameter	90 mm
Height	3 mm

Performance

Basic dynamic load rating	39 kN
Basic static load rating	255 kN
Reference speed	2 000 r/min
Limiting speed	4 000 r/min

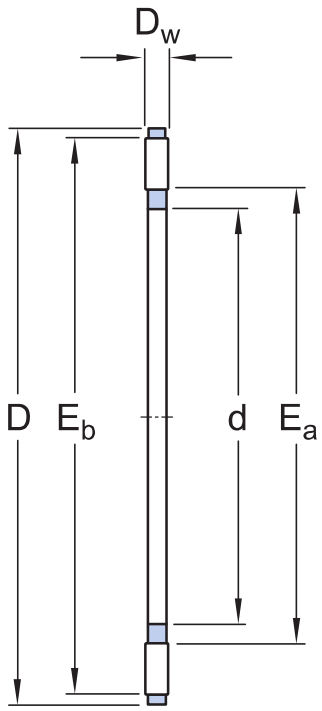
Properties

Bearing part	Needle roller and cage assembly
Cage	Sheet steel
Roller grade	G2
Material, bearing	Bearing steel
Coating	Without

Logistics

Product net weight	0.0362 kg
eClass code	23-05-09-03
UNSPSC code	31171512

Technical specification



Dimensions

d	65 mm	Bore diameter
D	90 mm	Outside diameter
D_w	3 mm	Diameter roller
E_a	min. 70 mm	Raceway diameter (min.) roller and cage thrust assembly
E_b	max. 88 mm	Raceway diameter (max.) roller and cage thrust assembly

Calculation data

Basic dynamic load rating	C	39 kN
Basic static load rating	C_0	255 kN
Fatigue load limit	P_u	31 kN
Reference speed		2 000 r/min
Limiting speed		4 000 r/min

Associated products

Universal washer	LS 6590
Thin universal washer	AS 6590
Shaft washer	WS 81113
Housing washer	GS 81113

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table, values

DESIGN CONSIDERATIONS

- table

BEARING INTERFACES

- Seat tolerances for standard conditions

Compatible products

Recommended product

LS universal washer for cylindrical and needle roller thrust bearings	LS 6590
AS thin universal washer for needle roller thrust bearings	AS 6590
WS shaft washer for cylindrical and needle roller thrust bearings	WS 81113
GS housing washer for cylindrical and needle roller thrust bearings	GS 81113

More Information

Product details

- Designs and variants
- General bearing specifications
- Loads
- Temperature limits
- Permissible speed
- Design considerations
- Designation system

Engineering information

- Principles of rolling bearing selection
- General bearing knowledge
- Bearing selection process
- Bearing failure and how to prevent it

Tools

- SimPro Quick
- SKF Product select
- Bearing Frequency Calculator
- LubeSelect for SKF greases
- Heater selection tool

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