



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

## YSA 209-2FK

### Insert bearing with tapered bore and adapter sleeve locking

Insert bearings are based on sealed deep groove ball bearings. This variant, with a tapered bore, is suitable for applications with both constant and alternating directions of rotation. It is locked with an adapter sleeve, enabling quick and easy mounting onto the shaft. Adapter sleeve needs to be ordered separately.

- Quick and easy to mount onto the shaft
- Long service life
- Reduce noise and vibration levels

## Overview

### Dimensions

Bore diameter	45 mm
Outside diameter	85 mm
Width, total	35 mm
Width, inner ring	35 mm
Width, outer ring	22 mm

### Performance

Basic dynamic load rating	33.2 kN
Basic static load rating	21.6 kN
Limiting speed	4 300 r/min

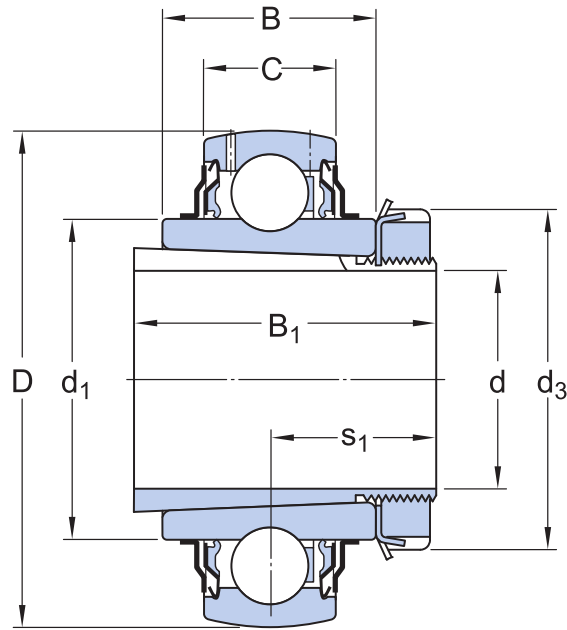
### Properties

Retaining feature, inner ring	Adapter sleeve
Bore type	Tapered
Rolling elements	Balls
Outer ring type	Spherical
Inner ring extension	Symmetrically on both sides
Cage	Non-metallic
Rubber seating ring	Without
Material, bearing	Bearing steel
Coating	Without
Sealing	Seal and flinger on both sides
Sealing type	Contact, standard
Lubricant	Grease
Relubrication feature	With

### Logistics

Product net weight	0.522 kg
eClass code	23-05-08-02
UNSPSC code	31171536

## Technical specification



## Dimensions

d	40 mm	Bore diameter of sleeve
D	85 mm	Outside diameter
B <sub>1</sub>	50 mm	Width of sleeve
B	35 mm	Width of inner ring
C	22 mm	Width of outer ring
d <sub>1</sub>	≈ 56.8 mm	Outside diameter of inner ring
d <sub>3</sub>	65 mm	Outside diameter of lock nut
s <sub>1</sub>	28.75 mm	Distance from locking device side face to raceway centre

Value specified for  $s_1$  is approximate and before the sleeve is driven into the bearing bore (sleeve and inner ring bore at starting position).

## Calculation data

Basic dynamic load rating	C	33.2 kN
Basic static load rating	C <sub>0</sub>	21.6 kN
Fatigue load limit	P <sub>u</sub>	0.915 kN
Limiting speed		4 300 r/min
Calculation factor	f <sub>0</sub>	14

## Mounting information

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Associated spanner		HN 9
Recommended tightening angle for lock nut	$\alpha$	110 °

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## Associated products

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Rubber seating ring	<input checked="" type="checkbox"/>	RIS 209 A
Adapter sleeve	<input checked="" type="checkbox"/>	H 2309

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## Tolerances and clearances

### GENERAL BEARING SPECIFICATIONS

- [Tolerances](#): table 1, table 2
- [Radial internal clearance](#): Standard inner ring, Other bearings

## BEARING INTERFACES

- [Shaft tolerances](#)

## Compatible products

### Recommended product

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Rubber seating ring for insert bearing

[RIS 209 A](#)

Adapter sleeve with KM lock nut and MB lock washer, metric dimensions

[H 2309](#)

## More Information

 <b>Product details</b>	 <b>Engineering information</b>	 <b>Tools</b>
<a href="#">Designs and variants</a>		<a href="#">SKF Product select</a>
<a href="#">Lubrication</a>	<a href="#">Principles of rolling bearing selection</a>	<a href="#">Bearing Frequency Calculator</a>
<a href="#">General bearing specifications</a>	<a href="#">General bearing knowledge</a>	<a href="#">SimPro Quick</a>
<a href="#">Loads</a>	<a href="#">Bearing selection process</a>	<a href="#">Heater selection tool</a>
<a href="#">Temperature limits</a>	<a href="#">Bearing failure and how to prevent it</a>	
<a href="#">Permissible speed</a>		
<a href="#">Design considerations</a>		
<a href="#">Mounting and dismounting</a>		
<a href="#">Designation system</a>		



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