



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

Shaft diameter	40 mm
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

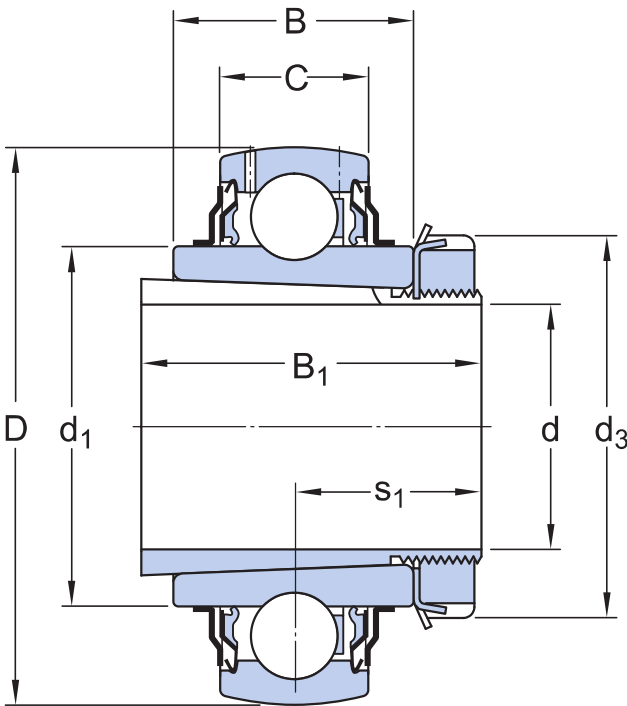
Retaining feature, inner ring	Adapter sleeve
Bore type	Tapered
Rolling elements	Balls
Outer ring type	Spherical
Inner ring extension	Symmetrically on both sides
Cage	Non-metallic
Rubber seating ring	Without
Material, bearing	Bearing steel
Coating	Without
Sealing	Seal and flinger on both sides
Sealing 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<sub>1</sub> 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	$f_0$	14
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Mounting information

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

Associated products

Rubber seating ring		RIS 209 A
Adapter sleeve		H 2309

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




Parent product

Flanged ball bearing unit with composite or cast metal housing	<a href="#">UKF 209 K/H</a>
Three-bolt bracket flanged ball bearing unit with adapter sleeve locking, cast iron housing, JIS	<a href="#">UKFB 209 K/H</a>
Flanged ball bearing unit with composite or cast metal housing	<a href="#">UKFC 209 K/H</a>
Flanged ball bearing unit with composite or cast metal housing	<a href="#">UKFL 209 K/H</a>
Pillow block bearing unit with composite or cast metal housing	<a href="#">UKP 209 K/H</a>
Pillow block bearing unit with composite or cast metal housing	<a href="#">UKPA 209 K/H</a>
Take-up cast iron unit with insert ball bearing, adapter sleeve locking, JIS	<a href="#">UKT 209 K/H</a>

Recommended product

Rubber seating ring for insert bearing	<a href="#">RIS 209 A</a>
Adapter sleeve with KM lock nut and MB lock washer, metric dimensions	<a href="#">H 2309</a>

More Information

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