

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

YEL 205-2F

Insert bearing with an eccentric locking collar and extended inner ring

Insert bearings are based on sealed deep groove ball bearings. This variant is intended for use in applications where the direction of rotation is constant. It has an inner ring extended on both sides, with an eccentric locking collar, enabling quick and easy mounting onto the shaft.

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

Overview

Dimensions

Shaft diameter	25 mm
Bore diameter	25 mm
Outside diameter	52 mm
Width, total	44.4 mm
Width, inner ring	34.9 mm
Width, outer ring	15 mm

Performance

Basic dynamic load rating	14 kN
Basic static load rating	7.8 kN
Limiting speed	7 000 r/min
Note	Limiting speed with shaft tolerance h6

Properties

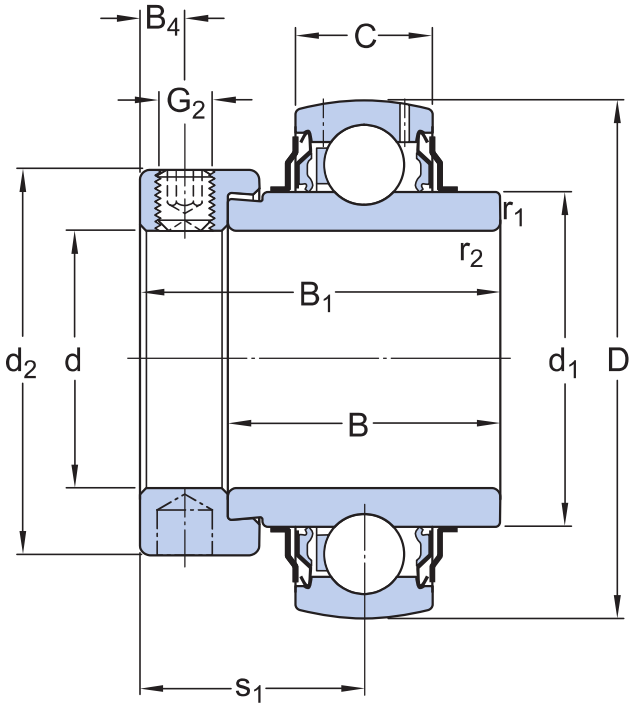
Retaining feature, inner ring	Eccentric collar
Bore type	Cylindrical
Rolling elements	Balls
Outer ring type	Spherical
Inner ring extension	On both sides
Cage	Non-metallic
Rubber seating ring	Without
Material, bearing	Bearing steel
Coating	Without
Sealing	Seal and flinger on both sides
Sealing type	Contact,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

Logistics

Product net weight	0.242 kg
eClass code	23-05-08-02

UNSPSC code	31171536

Technical specification



Dimensions

d	25 mm	Bore diameter
D	52 mm	Outside diameter
B_1	44.4 mm	Overall bearing width
B	34.9 mm	Width of inner ring
C	15 mm	Width of outer ring
d_1	≈ 33.74 mm	Outside diameter of inner ring
d_2	37.4 mm	Outside diameter of locking collar
B_4	4.75 mm	Distance from side face to thread centre
$r_{1,2}$	min. 0.6 mm	Chamfer dimension of inner ring
s_1	26.9 mm	Distance from locking device side face to raceway centre

Calculation data

Basic dynamic load rating	C	14 kN
Basic static load rating	C_0	7.8 kN
Fatigue load limit	P_u	0.335 kN

Limiting speed		7 000 r/min
		Limiting speed with shaft tolerance h6
Calculation factor	f_0	14

Mounting information

Set screw	G_2	M6x0.75
Hexagonal key size for set screw	N	3 mm
Recommended tightening torque for set screw		4 N·m

Associated products

Rubber seating ring	RIS 205

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

Rubber seating ring for insert bearing	RIS 205

More Information

Product details

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

Engineering information

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

Tools

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

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