



# YEL 209-2F Insert bearing with an eccentric locking collar and extended inner ring

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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

Bore diameter	45 mm
Outside diameter	85 mm
Width, total	56.3 mm
Width, inner ring	42.8 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
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

## Technical Specification



### Dimensions

d	45 mm	Bore diameter
D	85 mm	Outside diameter
B <sub>1</sub>	56.3 mm	Overall bearing width
B	42.8 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>2</sub>	62 mm	Outside diameter of locking collar
B <sub>4</sub>	6.75 mm	Distance from side face to thread centre
r <sub>1,2</sub>	min. 1 mm	Chamfer dimension of inner ring
s <sub>1</sub>	34.9 mm	Distance from locking device side face to raceway centre

### 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
		Limiting speed with shaft tolerance h6
Calculation factor	f <sub>0</sub>	14

### Mass

Mass	0.79 kg
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### Mounting information

Set screw	G <sub>2</sub>	M10x1
Hexagonal key size for set screw	N	5 mm
Recommended tightening torque for set screw		16.5 N·m

## Associated products

Rubber seating ring		RIS 209 A
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