



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

## YAT 203

### Insert bearing with set screws locking and narrow inner ring

Insert bearings are based on sealed deep groove ball bearings. This variant of insert bearing is suitable for applications with both constant and alternating directions of rotation. It has an inner ring extended on one side, and is locked onto the shaft by tightening two (set) screws on the inner ring.

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

## Overview

### Dimensions

|                   |         |
|-------------------|---------|
| Shaft diameter    | 17 mm   |
| Bore diameter     | 17 mm   |
| Outside diameter  | 40 mm   |
| Width, total      | 22.1 mm |
| Width, inner ring | 22.1 mm |
| Width, outer ring | 12 mm   |

### Performance

|                           |                                        |
|---------------------------|----------------------------------------|
| Basic dynamic load rating | 9.56 kN                                |
| Basic static load rating  | 4.75 kN                                |
| Limiting speed            | 9 500 r/min                            |
| Note                      | Limiting speed with shaft tolerance h6 |

### Properties

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

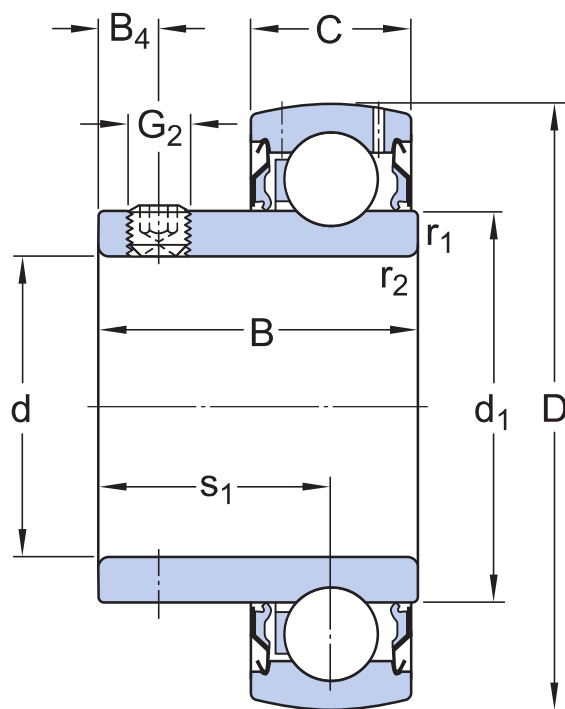
### Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 0.081 kg    |
| eClass code        | 23-05-08-02 |

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|             |          |
|-------------|----------|
| UNSPSC code | 31171536 |
|-------------|----------|

Technical specification



Dimensions

|                  |             |                                                          |
|------------------|-------------|----------------------------------------------------------|
| d                | 17 mm       | Bore diameter                                            |
| D                | 40 mm       | Outside diameter                                         |
| B                | 22.1 mm     | Width of inner ring                                      |
| C                | 12 mm       | Width of outer ring                                      |
| d <sub>1</sub>   | ≈ 24.2 mm   | Outside diameter of inner ring                           |
| B <sub>4</sub>   | 4 mm        | Distance face to thread centre                           |
| r <sub>1,2</sub> | min. 0.3 mm | Chamfer dimension of inner ring                          |
| S <sub>1</sub>   | 15.9 mm     | Distance from locking device side face to raceway centre |

Calculation data

|                           |                |                                        |
|---------------------------|----------------|----------------------------------------|
| Basic dynamic load rating | C              | 9.56 kN                                |
| Basic static load rating  | C <sub>0</sub> | 4.75 kN                                |
| Fatigue load limit        | P <sub>u</sub> | 0.2 kN                                 |
| Limiting speed            |                | 9 500 r/min                            |
|                           |                | Limiting speed with shaft tolerance h6 |

|                    |       |    |
|--------------------|-------|----|
| Calculation factor | $f_0$ | 13 |
|--------------------|-------|----|

Mounting information

|                                             |                |         |
|---------------------------------------------|----------------|---------|
| Set screw                                   | G <sub>2</sub> | 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 203 |
|---------------------|---------|

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 203](#)

More Information

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