



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

UC 312

Insert bearing with set screw locking and extended inner ring

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

- Designed for a constant and alternating rotation
- Quick and easy to mount onto the shaft
- Reduce noise and vibration levels

Overview

Dimensions

| | |
|-------------------|--------|
| Shaft diameter | 60 mm |
| Bore diameter | 60 mm |
| Outside diameter | 130 mm |
| Width, total | 71 mm |
| Width, inner ring | 71 mm |
| Width, outer ring | 35 mm |

Performance

| | |
|---------------------------|--|
| Basic dynamic load rating | 81.9 kN |
| Basic static load rating | 52 kN |
| Limiting speed | 2 900 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 both sides |
| Cage | Sheet metal |
| 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 |

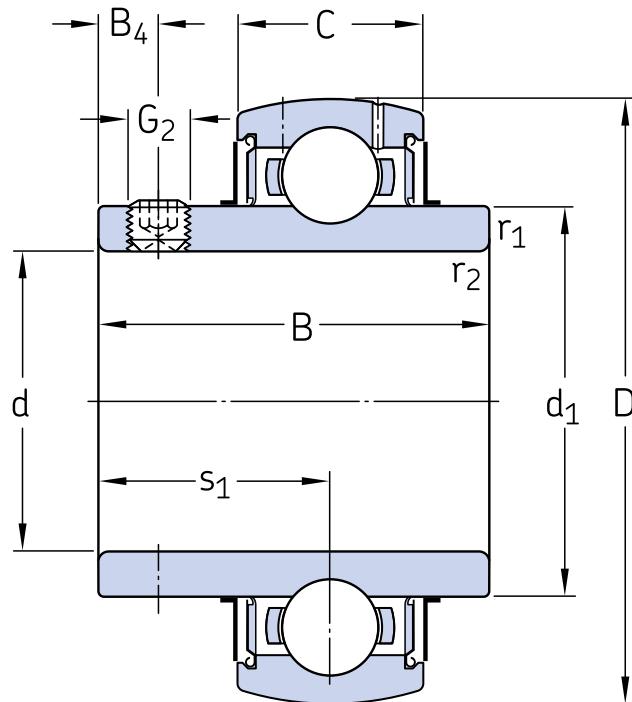
Logistics

| | |
|--------------------|-------------|
| Product net weight | 2.6 kg |
| eClass code | 23-05-16-02 |

UNSPSC code

31171536

Technical specification



Dimensions

| | | |
|------------------|-------------|--|
| d | 60 mm | Bore diameter |
| D | 130 mm | Outside diameter |
| B | 71 mm | Width of inner ring |
| C | 35 mm | Width of outer ring |
| d ₁ | ≈ 81.7 mm | Outside diameter of inner ring |
| B ₄ | 12 mm | Distance face to thread centre |
| r _{1,2} | min. 3.5 mm | Chamfer dimension of inner ring |
| s ₁ | 45 mm | Distance from locking device side face to raceway centre |

Calculation data

| | | |
|---------------------------|----------------|--|
| Basic dynamic load rating | C | 81.9 kN |
| Basic static load rating | C ₀ | 52 kN |
| Fatigue load limit | P _u | 2.2 kN |
| Limiting speed | | 2 900 r/min |
| | | Limiting speed with shaft tolerance h6 |

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

Mounting information

| | | |
|---|----------------|----------|
| Set screw | G ₂ | M12x1.5 |
| Hexagonal key size for set screw | N | 6.08 mm |
| Recommended tightening torque for set screw | | 28.5 N·m |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: table 1, table 2
- Radial internal clearance: Standard inner ring, Other bearings

BEARING INTERFACES

- Shaft tolerances



Terms of use