



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

## UCF 210/H

### Square flanged ball bearing unit with set screw locking, cast iron housing, JIS

These square flanged ball bearing units are compliant with Japanese Industrial Standards (JIS). They consist of an insert bearing, with an extended inner ring and set screw locking, and are suitable for applications where the direction of rotation is constant or alternating. The bearing is mounted in a cast iron housing, which can be bolted to a machine wall or frame. Ball bearing units can accommodate moderate initial misalignment, but normally do not permit axial displacement.

- Resist high levels of contamination
- Designed for high temperatures and speeds
- Accommodate relatively heavy loads
- Cost-effective

# Overview

## Dimensions

|                                    |         |
|------------------------------------|---------|
| Shaft diameter                     | 50 mm   |
| Housing overall width              | 39.5 mm |
| Width, total                       | 54.6 mm |
| Centre distance between bolt holes | 111 mm  |
| Bearing width, total               | 51.6 mm |

## Properties

|                                    |                                |
|------------------------------------|--------------------------------|
| Housing type                       | Flanged                        |
| Flanged housing type               | Square                         |
| Number of bolt holes for fasteners | 4                              |
| Fastening bolt hole type           | Plain                          |
| Retaining feature, inner ring      | Set screws                     |
| Bore type                          | Cylindrical                    |
| Rubber seating ring                | Without                        |
| Material, housing                  | Cast iron                      |
| Material, bearing                  | Bearing steel                  |
| Coating                            | Without                        |
| Sealing, bearing                   | Seal and flinger on both sides |
| Sealing type                       | Contact, standard              |
| Sealing, unit                      | Optional end cover             |
| Lubricant                          | Grease                         |
| Relubrication hole                 | With                           |
| Grease fitting                     | With                           |

## Performance

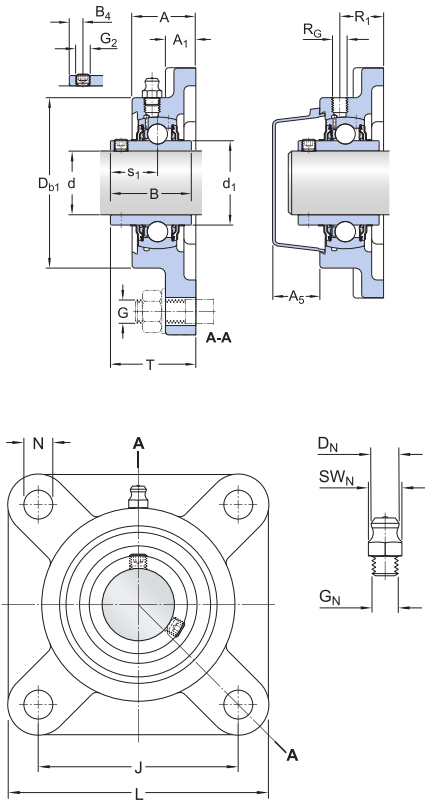
|                           |  |
|---------------------------|--|
| Basic dynamic load rating | 35.1 kN                                |
| Basic static load rating  | 23.2 kN                                |
| Limiting speed            | 3 300 r/min                            |
| Note                      | Limiting speed with shaft tolerance h6 |

## Logistics

|                    |             |
|--------------------|-------------|
| Product net weight | 2.35 kg     |
| eClass code        | 23-05-16-02 |
| UNSPSC code        | 31171536    |

Technical specification

|                          |                                    |
|--------------------------|------------------------------------|
| Compliance with standard | JIS                                |
| Purpose specific         | For material handling applications |
| Material, housing        | Cast iron                          |
| Sealing, bearing         | Seal and flinger on both sides     |
| Sealing type, bearing    | Contact, standard                  |
| Sealing, unit            | Optional end cover                 |
| Coating                  | Without                            |



Dimensions

|                 |            |  |
|-----------------|------------|--|
| d               | 50 mm      | Bore diameter  |
| d <sub>1</sub>  | ≈ 62.51 mm | Outer diameter of inner ring                             |
| A               | 39.5 mm    | Width of housing   |
| A <sub>1</sub>  | 16 mm      | Flange width   |
| A <sub>5</sub>  | 33 mm      | Standout of end cover                                    |
| B               | 51.6 mm    | Width of inner ring                                      |
| B <sub>4</sub>  | 9 mm       | Distance from locking device side face to thread centre  |
| D <sub>b1</sub> | 115 mm     | Top external diameter                                    |
| J               | 111 mm     | Distance between attachment bolts                        |
| L               | 143 mm     | Overall length   |
| N               | 16 mm      | Diameter of attachment bolt hole                         |
| s <sub>1</sub>  | 32.6 mm    | Distance from locking device side face to raceway centre |
| T               | 54.6 mm    | Overall width  |

THREADED HOLE

|                |            |                                      |
|----------------|------------|--------------------------------------|
| R <sub>G</sub> | 1/8-27 NPT | Housing thread for grease fitting    |
| R <sub>1</sub> | 25 mm      | Axial position of the housing thread |

GREASE FITTING

|                 |            |   |
|-----------------|------------|---|
| D <sub>N</sub>  | 6.589 mm   | Diameter of head sphere of grease fitting |
| SW <sub>N</sub> | 11.11 mm   | Hexagonal key size for the grease fitting |
| G <sub>N</sub>  | 1/8-27 NPT | Thread of grease fitting                  |

Calculation data

|                           |                |  |
|---------------------------|----------------|--|
| Basic dynamic load rating | C              | 35.1 kN                                |
| Basic static load rating  | C <sub>0</sub> | 23.2 kN                                |
| Fatigue load limit        | P <sub>u</sub> | 0.98 kN                                |
| Limiting speed            |                | 3 300 r/min                            |
|                           |                | Limiting speed with shaft tolerance h6 |

Mass

|                   |        |
|-------------------|--------|
| Mass bearing unit | 2.4 kg |
|-------------------|--------|

Mounting information

|   |                |           |
|---|----------------|-----------|
| Set screw                                       | G <sub>2</sub> | M10x1     |
| Hexagonal key size for set screw                |                | 5 mm      |
| Recommended tightening torque for set screw     |                | 16.5 N·m  |
| Recommended diameter for attachment bolts, mm   | G              | 14 mm     |
| Recommended diameter for attachment bolts, inch | G              | 0.5625 in |

Compatible products

Spare part

|   |                            |
|---|----------------------------|
| Insert bearing with set screw locking and extended inner ring | <a href="#">YAR 210-2F</a> |
|---|----------------------------|

Recommended product

|                             |                         |
|-----------------------------|-------------------------|
| End cover for bearing units | <a href="#">ECY 210</a> |
|-----------------------------|-------------------------|