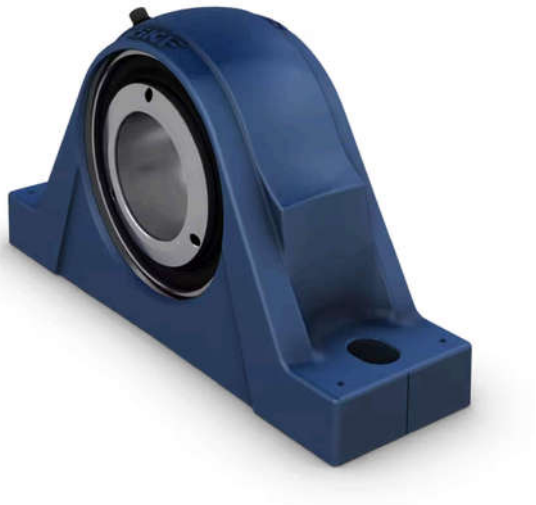


Image may differ from product. See technical specification for details.

# SYNT 65 F

## Pillow block roller bearing unit, two-bolt, SKF ConCentra locking

Pillow (plummer) block roller bearing units and take-up roller bearing units consist of a spherical or tapered roller bearing mounted in a non-split housing that can be bolted to a support surface. This variant has a spherical roller bearing, a two-bolt base and SKF ConCentra locking, creating a true concentric tight fit, and setting the correct internal

clearance within the bearing. The units are sealed and lubricated and ready to use. This bearing unit covers a wide range of requirements, in metric dimensions.

- Ready to mount
- Robust
- Factory lubricated and sealed
- Quick mounting
- Long service life

# Overview

## Dimensions

| | |
|---|---|
| Shaft diameter | 65 mm |
| Centre height (pillow block) | 80 mm |
| Housing overall width | 80 mm |
| Centre distance between bolt holes | 230 mm |
| Attachment bolt diameter | 16 mm |
| Bearing width, total | 72 mm |

## Performance

| | |
|---|---|
| Basic dynamic load rating | 193 kN |
| Basic static load rating | 216 kN |
| Limiting speed | 2 700 r/min |

## Properties

| | |
|---|---|
| Housing type | Pillow block |
| Number of bolt holes for fasteners | 2 |
| Bearing insert | Spherical roller bearing |
| Retaining feature, inner ring | SKF ConCentra |
| Bearing position | Locating |
| Bore type | Cylindrical |
| Material, housing | Cast iron |
| Material, bearing | Bearing steel |
| Coating | Without |
| Bearing housing seal type | Radial lip seal |
| Sealing, unit | Optional end cover |
| Lubricant | Grease |
| Relubrication hole | With |
| Grease fitting | With |

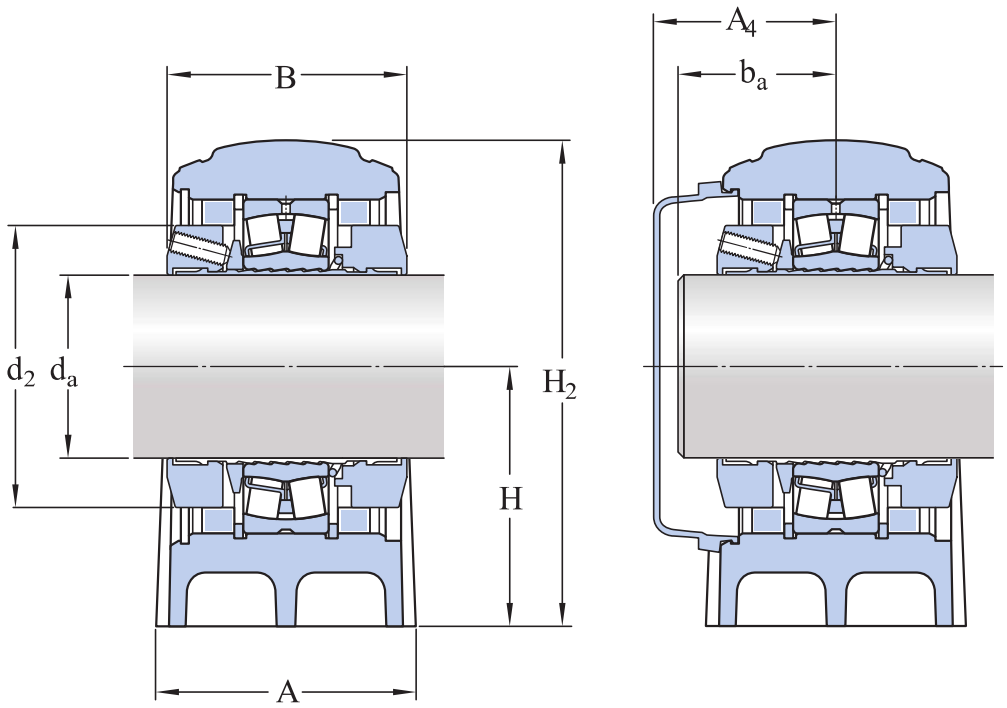
## Logistics

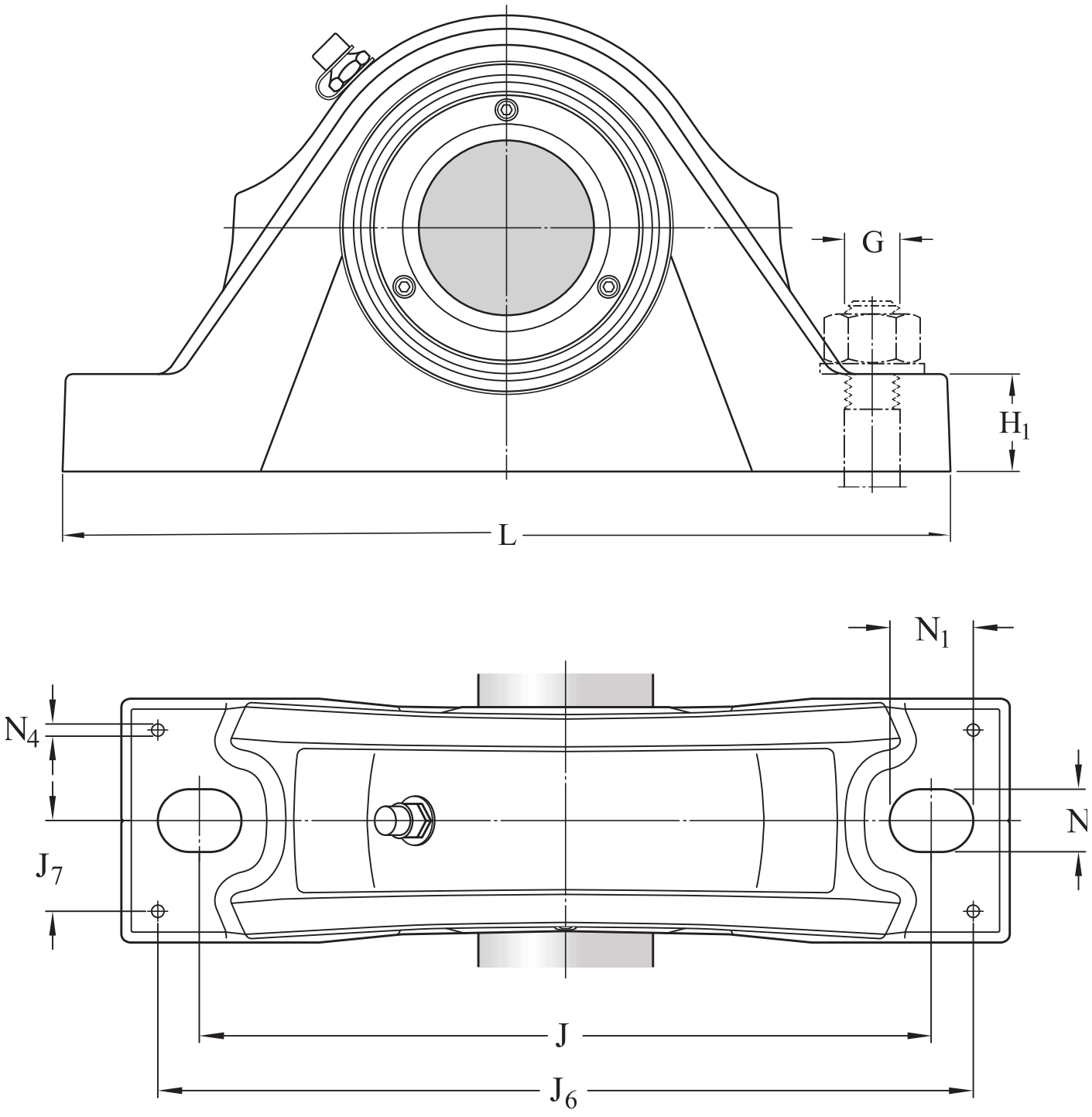
| | |
|---|---|
| Product net weight | 8.85 kg |
| eClass code | 23-05-16-90 |

| | |
|---|---|
| UNSPSC code | 31171537 |

## Technical specification

| | |
|---|---|
| Metric/inch series | Metric |
| Bearing insert | Spherical roller bearing |
| Bearing position | Locating |
| Locking method | SKF ConCentra |
| Bearing housing seal type | Radial lip seal |






## Dimensions

| | | |
|---|---|---|
| $d_a$ | 65 mm | Shaft diameter |
| $d_2$ | 91 mm | Collar outer diameter |
| A | 80 mm | Housing foot width |
| B | 72 mm | Inner ring width |

| | | |
|---|---|---|
| H | 80 mm | Height base to center |
| $H_1$ | 30 mm | Housing foot height |
| $H_2$ | 158 mm | Housing height |
| J | 230 mm | Distance of attachment bolts |
| L | 280 mm | Housing length |
| N | 18 mm | Width foot slot width |
| $N_1$ | 24 mm | Length of attachment bolt hole |

### SHAFT END

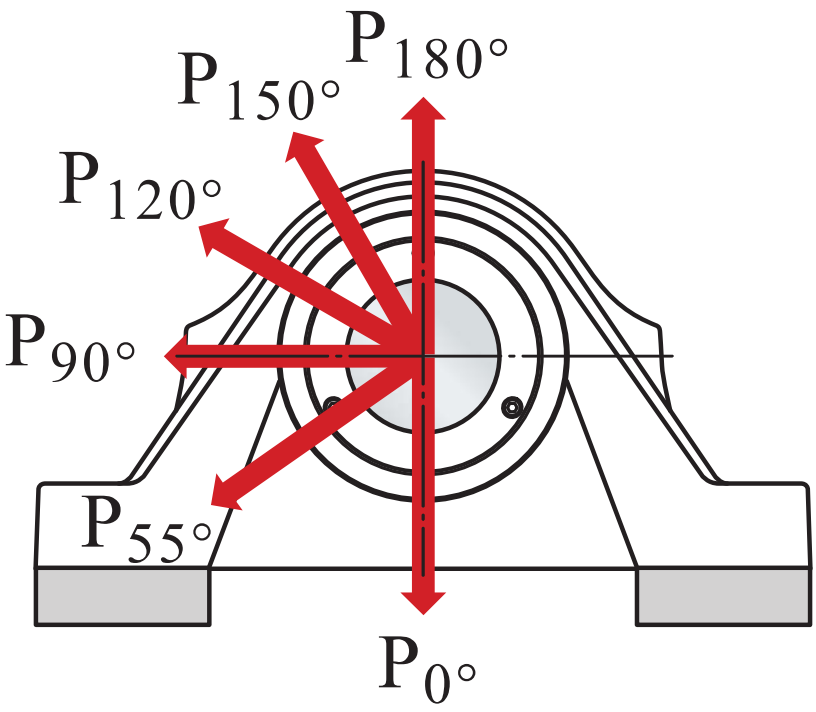
| | | |
|---|---|---|
| $A_4$ | 73 mm | Distance bearing centre line to end cover |
| $b_a$ | max. 65 mm | Distance bearing centre line to shaft end |
| $b_a$ | min. 38 mm | Distance bearing centre line to shaft end |

### DOWEL PINS

| | | |
|---|---|---|
| $J_6$ | 254 mm | Distance dowel pins |
| $J_7$ | 29 mm | Distance dowel pins |
| $N_4$ | 8 mm | Pin hole diameter |

## Calculation data

| | | |
|---|---|---|
| Basic dynamic load rating | C | 193 kN |
| Basic static load rating | $C_0$ | 216 kN |
| Fatigue load limit | $P_u$ | 24 kN |
| Limiting speed | | 2 700 r/min |
| Limiting value | e | 0.24 |
| Calculation factor | $Y_1$ | 2.8 |
| Calculation factor | $Y_2$ | 4.2 |
| Calculation factor | $Y_0$ | 2.8 |
| Bearing mean diameter | $d_m$ | 92.5 mm |
| Axial holding force of the locking mechanism | $P_a$ | 20 kN |




## Breaking loads

| | | |
|---|---|---|
| $P_{0°}$ | 290 kN | Breaking load |
| $P_{55°}$ | 380 kN | Breaking load |
| $P_{90°}$ | 230 kN | Breaking load |
| $P_{120°}$ | 155 kN | Breaking load |
| $P_{150°}$ | 140 kN | Breaking load |
| $P_{180°}$ | 210 kN | Breaking load |

## Mounting information

| | | |
|---|---|---|
| Attachment bolt diameter | G | 16 mm |
| Tightening torque for attachment bolts | | 200 N·m |
| Set screws | | M6 |
| Number of set screws | | 4 |
| Tightening torque for set screws | | 8 N·m |
| Grease quantity for relubrication | | 7 g |

# Compatible products

## Recommended product

| | |
|---|---|
| End cover for bearing units | ECY 213 |

## More Information

### Product details

- Pillow block units - metric series
- Pillow block units - inch series
- Permissible misalignment
- Locating / non-locating support
- Loads
- Temperature limits
- Permissible speed
- Lubrication
- Mounting and dismounting
- Condition Monitoring
- Associated products
- Ordering information
- Designation system for SKF Pillow block roller bearing units

### Engineering information

- Principles of selecting mounted bearing solutions
- Bearing failure and how to prevent it

### Engineering tools

- SKF Product select
- SKF mounting and dismounting instructions

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